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STUDENTS' COMMUNICATIVE PRACTICES AROUND WRITING AND DIGITAL TECHNOLOGIES: AN ETHNOGRAPHICAL STUDY OF AN INNER-CITY HIGH SCHOOL IN THE NORTHEAST OF BRAZIL

By

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ABSTRACT

STUDENTS' COMMUNICATIVE PRACTICES AROUND WRITING AND DIGITAL TECHNOLOGIES: AN ETHNOGRAPHICAL STUDY OF AN INNER-CITY HIGH SCHOOL IN THE NORTHEAST OF BRAZIL

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The present investigation constitutes an ethnographic study of students' enactment of a new media literacies (NML) project at an urban high school in a large city in Brazil. The study adopted a sociocultural perspective of literacies and it furthers understanding of how students enacted and made sense of NML within the context of the school in which they were situated. The findings indicate that students faced difficulties using and making sense of NML when these practices were conducted at the school computer lab. Students struggled to write on the computer and to use web tools, even when teachers interfered to support them. Students did not demonstrate communicative competence in the computer lab. The lack of students' action around writing in the lab contrasted with their abilities to write in the local cyber café and in the classroom. At the local cyber café students felt more comfortable to "mess it up" and they used a few digital technologies, particularly to exchange messages with others (Orkut, which is a version of MySpace.com; instant messaging; and email). These uses fulfilled an actual need of students to transmit information and it allowed them to participate and to gain membership in certain peer groups. Students writing in the cyber café subverted the grammar and the syntactical norms from school. Students had difficulties writing in the

classroom. These difficulties seemed to be related to their perceptions of the school enduring lack of resources, and that they disregarded as not important for their future. Students' written pieces were short, unimaginative and impersonal. Yet, they were able to think about their writing in complex ways, demonstrating a sense of audience, content, and metacognition. Students wrote non-school related materials during school and these fulfilled many of their communicative needs (e.g., to exchange brief messages with friends, to express their feelings to a loved one). Students demonstrated communicative competence both in the cyber café and in the classroom. The difficulties faced by students in the computer lab stemmed from various factors, including their struggle to make sense of the NML within their perceptions of what school is about (their perceived and enforced need to be "serious" and to be "quiet"); their lack of "intention" to act in the computer lab; the problematic skills-based instruction conducted in the lab; and their lack of interest in the NML as it was enacted at school. Study findings problematize notions that propose furthering students' communicative competence by introducing NML practices at school. While this may be true for some students in some contexts, this does not seem to hold for all students in all contexts. In the case of the students investigated in this study other literacy practices were important to them. While it seems appropriate to acknowledge students' "local" literacies, students still need to be supported in the transition to more socially validated literacy practices such as the NML. This seems to indicate the need to develop a hybrid culture of practices at school in which both students' "local" literacies and NML are negotiated and in which understanding and experience in context are mutually constitutive of learning.

I dedicate this work to my father, Luiz, and to the memory of my mother, Venância.

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INTRODUCTION

> Even though in the long run many local people do want to change their literacy practices and take on board some of those associated with Western and urban societies, a crude imposition of the latter that marginalizes and denies local experience is likely to alienate even those who were initially motivated.
>
> -- Brian V. Street (2001, p.7)

Statement of the Problem

The purpose of this study was to investigate how teachers and students enacted and how they made sense of new media literacies (related to digital technologies) when they became involved in a web based learning project. The study occurred in an inner-city public school in the northeast of Brazil. An ethnographic approach was used to investigate the complexity and the multiple layers of this contextualized experience from teachers' and students' perspectives. This chapter provides a statement of the problem, an introduction to the new media literacies project, the research questions, and a review of related literature.

"Development," Literacy, Digital Technologies

"Development" has constituted a central organizing concept in the social sciences (Cowen & Shenton, 1999). More recently, "development" has been closely associated with "digital literacy," which replaced what currently seems to be seen as the *passé* theme of traditional literacy as reading and writing on paper to corroborate a country's "development." As Lankshear pointes out, this repositioning took place "in an intriguing parallel development, [in which] the notion of a critical mass of literate people [figure as] being a crucial variable for economic take-off into industrialism ... [this notion] was still

playing out in the 'Third World', [when it] received a second generation replay for postindustrialism"(Lankshear, 1999) – this "replay" is taking place now around computer technologies.

The Genoa Plan for Africa (G8 Summit, 2001) is exemplary of the postindustrial international articulations to promote "development" for the Third World. Leaders of the eight wealthiest countries in the world met in Italy and orchestrated the creation of the Digital Opportunity Task Force (DOT Force, 2001), a coalition between government, the private sector, non-profit organizations, and international organizations. The DOT Force concluded "that, when wisely applied, ICT [Information and Communication Technologies] offer enormous opportunities to narrow social and economic inequalities and support sustainable local wealth creation, and thus help to achieve the broader development goals that the international community has set" (DOT Force, 2001, Foreword section, para.3). The report acknowledged that ICT cannot act as a panacea for the solution of all problems related to development; it can help the exchange of information which helps create powerful political and economical networks which creates the basis for further development. Among many proposals elaborated by the DOT Force covering various areas, the documents proposed to "enhance the training of teachers on ICT and the 'digital literacy' of pupils" (DOT Force, 2001, Enhance human capacity development section, para. 2) and to "give special attention to disenfranchised and illiterate people (particularly youth and women), through innovative partnerships to disseminate knowledge and skills using ICT" (DOT Force, 2001, Enhance human capacity development section, para. 4). The initiative of the DOT Force is not an isolated

attempt to promote development across countries based on the diffusion of ICT and enhancement of children and youth digital literacy[1].

As indicated by Lankshear, the pretense innovative character of these initiatives based on the diffusion of digital technologies and as ways to promote "literacy" has a close parallel with past similar experiences that advocated the diffusion of literacy for development of "poor" nations – instead of being taught how to read books, now children and youth are supposed to learn how to use computers. As proposed by Luke:

> if we go along with this traditionally dominant view of literacy within education we can say that 'literacy studies' have been going on in educational inquiry as far back as we care to go, and that it matters little whether or not the activities have been named in terms of 'literacy' or not. The contingent fact that interest in literacy as such has escalated dramatically during the past 20-25 years within countries like our own might be explained quite simply by reference to successive pronouncements of educational 'crisis' and 'falling standards'. These have attended growing awareness of the extent and speed of contemporary social, economic, technological, and demographic change, and fears of being 'overtaken' by other countries. This has been a period in which literacy has been 'rediscovered' locally as a key element of 'human capital.' (Luke, 1992, p.5)

In regards of traditional literacy and development, Street (1993) cites Jack Goody's work as representative of the framework informing those international initiatives. Goody wrote that "if we take recent moves to expand the economies of countries of the Third World, a certain rate of literacy is often seen as necessary to radical

[1] The United Nations agglomerates a vast array of initiatives around Information and Communication Technology for "development" (United Nations, 2007).

change, partly from the limited stand-point of being able to read the instructions on the seed packet, partly because of the increased autonomy (even with regard to the seed packet) of the autodidact" (p.6). These assumptions are in line with an essentialized view of Third World people – identified as the ones who deal with seeds – and these assumptions position literacy as a neutral tool used to achieve functional ends, a *sine qua non* technology to be acquired by a certain portion of the population to guarantee the functioning of a national state and its institutions.

"Development" and Traditional Literacy

Positivist notions of "development" as progressive amelioration of the moral, physical, and intellectual condition of the human race have framed most programs and policies for literacy diffusion to the Third World. These models and programs have instrumentalized a certain idea of "development" as the key element to pave the way to achieve those conditions that characterize rich societies: industrialization, urbanization, modernization. These ideas and initiatives have operated under notions of neo-colonialism, and they have not accounted for local social contexts informing what it means to be "developed" and "literate" in different countries. Positivist notions also seem to downplay the role of more pressing issues, such as hunger and violence, playing on the daily lives of people in some of these Third World countries. These perspectives make it difficult for people from Third World countries to define their own interests in their own terms. Development proceeds then by creating abnormalities, such as "the poor" and the "illiterate." By seeking to eradicate these "problems" the interventions to promote "development" actually end up multiplying them indefinitely (Escobar, 1999). As Baynham formulated:

> [I]f literacy is tied to logic, development and progress, its opposite, 'illiteracy', is tied to illogical thinking, backwardness, and underdevelopment, both at the individual and social levels. We need to unstuck the literacy variable from the progress and development variable. Literacy is necessary, but certainly not sufficient to explain key developments in the organization of knowledge and social transformations. (1995, p. 48)

To move beyond this positivist notion it seems necessary to appreciate the construction of identities and greater autonomy created by local practices and beliefs and to attend to the rhizomatic character (subverting hierarchical structures and organized systems of power and domination) (Deleuze & Guattari, 1987) of new social movements that challenge pre-conceived, foreign notions of "development." This means that development and literacy programs can assume diverse forms, establishing unexpected connections, adopting flexible structures and moving in various dimensions.

The complexity articulated by this perspective is illustrated by Bhabha's (1985) accounts of the introduction of the Bible in India and the apparent triumph of the civilizing mission. According to the author, the discovery of the Bible established a measure of mimesis and a mode of civil authority and order in India. However, the colonial presence and the diffusion of Christianity was always ambivalent, "split between its appearance as original and authoritative and its articulation as repetition and difference" (p.150). Bhabha concludes that "the place of difference and otherness is never entirely on the outside or implacably oppositional. It is a pressure, and a presence, that acts constantly ... The contour of difference is agonistic, shifting, splitting" (p.152). The case of the introduction of the Bible in India by the British colonizers analyzed by

Bhabha offers a useful parallel to the analysis of foreign literacy programs associated with the goal of "development." Given the complexity of such phenomenon (as in the case of the Bible's introduction in India) it is not possible to predict in advance if and how literacy programs transferred to other countries will evolve. Also, it is not possible to assess its "success" without taking indigenous perspectives into account.

Various studies about programs and initiatives of literacy diffusion across borders lack such theoretical perspective. Levinson and Holland have pointed out that "none of these broad-scale educational theories really tells us what happens to students confronting these changes. In other words, we learn little about the cultural production of the educated person through Western-style schooling" (Levinson & Holland, 1996, p.12). The problematic character and results of such initiatives and studies about literacy have been widely documented and analyzed (Ouane, 1999; Rogers, 2001; Street, 1993, 2001). Ahmed (1999) considers that most initiatives have failed systematically given their lack of fit with people who were supposed to benefit from them. According to Ouane (1999), literacies being introduced by campaigners fail to "take" – few people attend classes and those who do end up dropping out since they are the literacy practices of an outside and alien group (as it is seen locally). The case of Bangladesh is exemplary. According to Greaney and colleagues (as cited in Wagner and Kozma, 2005), despite various initiatives to develop the country with a focus of literacy, rates of illiteracy have remained consistently high: some 62% overall and 74% of the female population.

Enduring Assumptions

The same assumptions have permeated programs and policies for the diffusion of literacy to Third World programs to promote "development" have been redressed with

the new goal of digital technologies skills acquisition. In February of 2003 the United Nations established the "Literacy Decade" which was detailed in the "Dakar Framework for Action" that established the need to achieve a 50% improvement in adult literacy by 2015, especially for women. According to Wagner and Kozma (2005), the International Plan for implementing Resolution 56/116 of the United Nations proposed that "it has become necessary for all people to learn new literacies and develop the ability to locate, evaluate and effectively use information in multiple manners" (p.29). Wagner and Kozma argue that "the need for literacy and basic skills has grown significantly, along with the contexts in which such skills need to be deployed" (p.26).

The authors (Wagner & Kozma, 2005) cite a 2002 World Bank report that states that "a continuation of the current 'low road' strategy would mean that developing countries and transitioning economies risk being even further marginalized because their education and training systems are not equipping learners with the skills they need to be competitive in a global economic market increasingly influenced by the creation and exchange of information" (p.30). In their conclusion of their study, the authors state that "the ability to generate knowledge products and fully participate in the knowledge economy often requires high-speed two-way access to the internet, as well as access to digital cameras, video and audio recording equipment, and computers with sufficient speed and memory capacity. Resources should also include various software tools, such as productivity tools and authoring systems" (p. 97). Given the current scarcity of such technological goods in most Third World countries, the authors' perspective may lead to the problematic conclusion that such countries and the people living there have no

"ability to generate knowledge products and fully participate in the knowledge economy" and that they are "new illiterates."

Repositioning Research

While most programs and policies aim to promote "development" through digital technologies deployment, the diffusion of new media literacies has the potential to change education and reform schools in those countries. These new modalities can be welcomed by teachers and students (Anzalone, 1999; Kozma, 2003), who may react to and use new media literacies according to their own understandings and interests. This indicates the need for research about the experiences with digital technologies and schools taking place in multiple sites across the world, particularly studies that would help the field move beyond essentialized and pre-assembled definitions of what new media literacies mean to the people being exposed to them in contexts that may contrast with the ones in which policies and programs for "development" have been formulated.

Haas and Neuwirth (1994) call for research that takes into account the cultural contexts in which digital technologies are used. The authors agree that we need to understand how human purposes and contexts interfere with the ways in which people use technologies and how technologies interfere with people's uses and non-uses of theses tools. According to the authors, "research should ultimately contribute to a broader understanding of the complex interdependencies of literacy and technologies as they are manifested in cultures and in localized uses (Haas & Neuwirth, 1994, p.332). This means that an in-depth sociocultural analysis is much needed because the enactment of literacy practices is embedded in a local context and it occurs according to actors' own understandings (Dyson, 2003; Heath, 1983; Miller & Goodnow, 1995; Street, 1993).

Further investigation is necessary to illuminate these issues, particularly as they reflect and are enacted at the school level in Third World countries.

Therefore, an anthropological perspective can greatly contribute to this repositioning of studies about development and foreign literacy in Third World countries. The importance of appreciating and understanding indigenous life and its practices for the study of social movements (including school-based ones) is increasingly recognized in Latin America, as pointed out by Escobar. An ethnographic perspective that allows for consideration of local knowledge and cultural production embedded in social context is necessary. The goal is to "restore the centrality of popular practices *without reducing the* [social] *movements to something else* ... [and to adopt a] procedure [that] privileges the value of everyday practices in producing the world in which we live" (Escobar, 1999, p.217).

In the next section I will situated my professional interest in education and digital technologies within the larger context of "modernization" of public schools in Brazil deflagrated by the federal government in the 1990s. The issues around governmental policies and programs for the deployment of computers at school and for teachers' training became highly publicized in Brazilian media. They were mixed with the overall "modernizing" agenda of the government at the time (that opted for a close relationship with the World Bank and other international organizations able to invest money in Brazil). I will next present the general guidelines of the main program launched by the federal government, and I will indicate issues regarding implementation of the computer mediated intervention project which is the focus of this dissertation. The project, *RiverWalk Brasil,* is envisioned in tune with the governments' initiatives and is another

effort to put the computers deployed at school to "use." The project characteristics will also be detailed next.

Federal Programs and Digital Technologies in Brazilian Public Schools

As a Third World country Brazil more or less participates and responds to international initiatives to promote "development" through the dissemination of new media literacies to public schools. In 1997, the Brazilian federal government launched the National Educational Computing Program. The goal established by the federal government was to have 30,177 computers installed in public schools around the country (Diretrizes, 1997). The Federal Program's goals were to ensure access to "modernity codes" to a significant amount of the Brazilian population, stimulate knowledge accumulation and development of learning associated with the "dynamics of sustainable growth," and instigate the development of infrastructure to the use of computer technology systems by a significant amount of the population (Moraes, 1997). Teachers were seen as holders of a strategic role in that process. The program detailed training initiatives to prepare teachers to become acquainted with new digital technologies. It envisioned teachers as main actors to diffuse use among students by incorporating new technologies into the curriculum. However, many schools have struggled with the lack of governmental support regarding: infrastructure maintenance, renewal of machines, software acquisition, and technical expertise to put computers to effective use. The program is still under development, and while many schools have received computers, there are still various challenges to implementation.

A report issued in 2002 by the federal government presented an intriguing scenario. Although it recognized problems in the program implementation, it stressed

what the federal authorities considered to be a very important achievement in multiple areas, "some even outdoing previously stated goals" (MEC, 2002). The report was mainly based on statistical data. There were no visits to schools or interviews with teachers that would give insight into the statistics presented. The optimistic tone of the report contrasted with the state of disbelief of teachers and students that I was in contact through the *RiverWalk Brasil* project activities since 2001. Teachers reported that many schools never received any computers and that the training and workshops were very problematic and served only a very small number of teachers. Other teachers and schools that received the equipment and training complained about the lack of projects to use the computers and the low quality of equipment and the Internet connection. According to what was reported by a few teachers, these issues in the implementation made it difficult for them to use the new resources. And there were other teachers and students who were using computers in the most heterogeneous ways, based on personal experiences, contextual peculiarities or scarce opportunities to join a teaching/learning project involving ICTs (many of these programs were coordinated by international institutions). Despite the anecdotal nature of the evidence, it contrasted with the assessment from the federal government.

Another very succinct report released in 2002 offered an important contrast (MEC, 2002) with the first document. The main focus was on the statistics (see Table 1) and how the numbers related to the goals initially established for the program. Overall, the document considered the program implementation satisfactory and teachers, administration and students training positive. It also considered that the "community" associated with the project had been "very active in almost all units of the federation"

(p.26). According to the document, the programs had been positively evaluated by a federal court that inspects the correct use of public money (this institution criticized the low number of schools that received computers) and by a prestigious federal university (without providing further information about this). The document included figures showing the increment of schools with computers (41%), the number of computers (59%, although below the initial goal) and the availability of Internet connection (351%) in public schools. However, this apparent increment in Internet connection in schools means that in 1999 approximately 200 schools had the technology available. In 2001, approximately 700 schools had it available. There are 200,000 public schools in the country (MEC, 2002). That means that 0.35% of the schools had Internet in 2001, not necessarily during the whole school year.

Table 1

What was planed and what was achieved

	Established Goal	Achieved Goal
Students benefited	7,500,000	6,000,000
Schools benefited	6,000	4,629
NTEs[2] implemented	200	262
Disseminators trained	1,000	2,169
Teachers trained	25,000	137,911
Technicians trained	6,000	10,087
Administrators trained	n/a	4,036
Computers installed	105,000	53,895

The most recent developments of the federal government program have taken place among two main lines: the introduction of free, non commercial, computer software in the school system (stemming from the Linux operational system) and Brazil's

[2] NTEs are local offices established by the federal government in some cities around the country to provide educational support for public schools that have been using digital technologies.

partnership with the Massachusetts Institute of Technology (MIT) program for "popular" laptops. These two programs are closely related to the government political agenda of "modernization" and they played many times along the presidential candidates debates during the last elections in 2006. As usual, the free software and the popular laptops have been presented as a solution for the extremely unrealistic financial costs of introducing computer machines in the extensive universe of public schools in Brazil. While the Linux system already started being implemented in a few schools, the popular laptops are still under study at the federal level and at some Brazilian university labs.

The *RiverWalk Brasil* Project

RiverWalk was developed in the U.S. and later transferred to Brazil under my initiative in 2001. The project can be developed as an elective course at K-12 schools or as an after-school project, or it can be infused into the curriculum. *RiverWalk Brasil* provides a web-based learning environment and a human network that connects students and educators with their peers within the country. The project contains web tools that can help teachers and students develop narratives and communicate them to various audiences. Students work in teams and choose a river to investigate. They have the chance to take virtual tours and field trips, and later they create an electronic narrative in the form of a basic web page, with the guidance of teachers.

The narratives are developed in the project web interface through the use of four templates that provide different layouts for text and picture display on the web page. Students log in with passwords and work by clicking on buttons to add text, pictures, drawings, sound files, links and short movies, if available. The narratives are built in a sequence of topics and pages agglutinated in one file, or one main web page. This

structure resembles a powerpoint presentation (i.e., a sequence of pages with text and images). On the top of the interface page there are buttons that allow participants to manage their personal files to store texts and other objects. They can also exchange messages with other participants, and they can read the user guide and access previous work developed by other schools while developing their own projects (see Figure 1 and Figure 2 in Appendix A). Students' narratives become public through the Internet.

Purpose of the Study

The purpose of this study was to investigate the complexity of literacy practices enacted by teachers and students in a Brazilian school to further understand what it means to them to be engaged in new media literacies involving digital technologies. The study was conducted in line with Street's formulation that "ethnographic approaches to literacy in development can ... address the larger issues raised in the New Orders, while maintaining a focus upon the local meanings through which we all experience such processes" (Street, 2001, p.6). I examined closely the processes by which the participants engaged in literacy practices and how they made sense of these practices as they participated (Rogoff, Baker-Sennett, Lacasa, & Goldsmith, 1999). I investigated what these new notions of literacy meant to teachers and students as they enacted the *RiverWalk Brasil* project. This study considers the heterogeneous, contextualized character of the project's enactment in Brazil as a potential source of knowledge production that will advance theories of development and of new media literacies, particularly regarding "developing" countries. I explored the implications of their participation in light of the claims raised by international initiatives that assume a positive, causal relationship between new media literacies acquisition and

"development." The understanding of relevant aspects of the local context can shed light on new media literacies practices elsewhere.

Research Questions

My study drew on the theoretical framework of New Literacy Studies (Barton & Hamilton, 1998; Gee, 1996; Heath, 1983; Street, 1984, 1993) to analyze students' and teachers' literacy practices, particularly the ones related to the *RiverWalk Brasil* project. This means that my study was conducted under the theoretical understanding of the sociocultural and ideological character of literacy practices locally and more broadly. The study evolved in line with Erickson's proposition that "the task of interpretive research, then, is to discover the specific ways in which local and non local forms of social organization and culture relate to the activities of specific persons in making choices and conducting social action together. For classroom research this means discovering how the choices and actions of all the members constitute an enacted curriculum—a learning environment" (Erickson, 1986, p.129). The study focused in two key aspects of participants' experiences: their actions and the meanings they assigned to their literacy practices.

I conducted this dissertation project aiming to answer how teachers and students enacted and how they made sense of new media literacies to communicate. To pursue that question I started my inquiry from a broad perspective by asking what meaningful literacies were taking place in the field, and how these literacies related to the new media literacies being introduced, in particular by the enactment of the *RiverWalk Brasil* project. More specifically, I asked:

1. How were the participants' experiences around literacy and communicative practices organized in patterns of learned cultural practices?
2. How were these experiences around new media literacies in school related to their experiences with new media literacies out of school?
3. How were their literacy practices influenced by their perceptions of schooling?
4. How was the sociocultural context related to participants' expectations, understandings and enactment of new media literacies?

Literature Review

Literacies within a Sociocultural Perspective

Research on literacy as a sociocultural practice (as socially embedded reading and writing) emerged only in the 1970s (Heath, 1999) when diverse (from different cultural and linguistic backgrounds) learners' new ways with words started to become an object of inquiry. Researchers began to uncover contextual and social elements such as values, spaces, activities, socioeconomic conditions and, more recently, ethnicity and immigration that interfered with learners' responses to texts across various groups and institutions, particularly at school and outside of school. The shifting, complex and challenging uses and understandings about how these people used literacy in various contexts of their lives expanded the study and the theoretical formulations in the field. As Hymes (1994) elaborated at that point, "one cannot take linguistic code, a given code, or even speech itself, as a limiting frame of reference. One must take as context a community, or network of persons, investigating its communicative activities as a whole, so that any use of channel and code takes place as part of the resources upon which members draw" (p.11, originally published in 1972) .

One of the main theoretical turns in the study of literacy came from the emergence of Vygotsky's (1978) ideas in western societies in the 1970s. Among these major contributions are the formulations about the dynamic and developmental view of psychological processes and the social embeddeness of higher psychological functions (Newman & Holzman, 1993) which also extended researchers' perspectives about literacy beyond formal schooling. According to Heath, research started focusing also on "young children's spontaneous drawings and letterings." Cole's and Scribner's (1999) research with the Vai people in Liberia opened up a new line of inquiry about people's acquisition of literacy independently of schooling. Also, literacy came to be understood "as a phenomenon interlaced with numeral symbol systems—verbal, visual, gestural—and located within social contexts marked by differential power distribution. Scholars began to speak of literacies" (Heath, 1999, p.103).

The ethnographic work developed by Street in Iran was another landmark on studies about "literacies" from a sociocultural perspective (Lankshear, 1999) – what Street defined as the social practices and conceptions of reading and writing (Street, 1993). Street observed various other meaningful uses of literacy according to the context in which the people he observed in Iran considered meaningful. These uses observed by Street would be considered "less traditional" uses of literacies according to western standards and practices, but not for the people who were living in those specific contexts. For the people in Iran, those were the "standard" and meaningful ways of using literacies. These "differences" introduced by the context – the social and cultural practices of a group of people – allowed Street to theorize about two models of literacy.

According to Street, the autonomous model stems from the theoretical perspective developed by Jack Goody, Walter Ong and David Olson, among other authors from the 1960s that conceptualized literacy in technical terms and independent of context. This deterministic understanding is clear in Olson's work cited in Street in which Olson argues that "there is a transition from utterance to text both culturally and developmentally and that this transition can be described as one of increasing explicitness with language increasingly able to stand as an unambiguous and autonomous representation of meaning" (Street, 1993, p.5). According to Street's critique of these authors, "literacy, then, has come to be associated with crude and often ethnocentric stereotypes of 'other cultures' and represents a way of perpetuating the notion of a 'great divide' between 'modern' and traditional' society that is less acceptable when expressed in other terms"(p.7).

The ideological model formulated by Street covers many of the flaws in the autonomous model. The ideological model proposes that literacy practices are imbued with a society's cultural practices and structures of power. This means that there are various practices involving multiple literacies. These practices have different meanings according to cultural practices, and they have different values according to the power structure of society, which may be less or more related to reproducing and/or challenging certain structures of power. According to Street (1993), "the recognition of the ideological character of the processes of acquisition and of the meanings and uses of different literacies led me to characterize this approach as an 'ideological' model" (p.7). Street denies the use of the term ideology in the Marxist sense to propose the use of the term in line with contemporary anthropology and cultural studies in which "ideology is

the site of tension between authority and power on one hand and resistance and creativity on the other" (p.8). Street's model helped move the study and research about literacy beyond the confined frames of rationality, cognition and relativism to propose some important new developments in deconstructing the assumption that literacy is neutral. This opened up space for formulations sustaining "discourse analysis" (looking for meaning beyond words and sentences), literacy practices and communicative practices and the role played by the context in which these literacies take place, as it will be further detailed later on this chapter.

It seems important to acknowledge the author's claim that:

> [T]he ideological model of literacy only relativises literacy practices at an analytical level, enabling researchers and activists to recognize and describe variation where the autonomous model sees only uniformity, but it does not relativise literacy at the level of social power as the critique suggests – on the contrary, it is termed an ideological model rather than simply a cultural or pragmatic model precisely because it draws attention to the unequal and hierarchical nature of literacy in practice ... It does not suggest that they [people in Third World countries] be simply left as they are on the relativist grounds that one literacy is as good as another. But nor does it suggest that they simply be 'given' the kind of formal, schooled literacy with which policy makers are familiar and which, in fact, many of them have already rejected. 'Delivering' such formalised literacy will not lead to empowerment, will not facilitate jobs and will not create social mobility. (Street, 2001, p.13)

Other authors followed Street's paths to formulate new important constructs about literacies. Luke pointed to the local character of literacies as he proposed that "all literacies and literacy education are 'situated' – that is, 'all uses of written language can be seen as located in particular times and places' and can be linked to 'broader social structuring'" (Luke, 2002, p.189). This means that some literacies may be bounded by larger mechanisms operating in society. Although literacies are enacted within groups and communities, this enactment is connected to larger issues and they may be influenced and at the same time they may influence these larger elements in society. These formulations are closely related to Practice Theory (Ortner, 1994) that frames actors' actions within the tension between structure and agency (Bourdieu, 1977; Emirbayer & Mische, 1998; Ortner, 1996; Sewell, 1992). Other authors drawing on studies of culture and the work of M. Bakhtin pointed to the hybrid nature of literacies as situated on a web of meaning within which actors/learners enact their literacies (Ball & Freedman, 2004; Dyson, 2000, 2003). On those lines, Leander (2003) addresses people's literacies taking place within various communicative experiences, including digital technologies, to point out that "it is increasingly less tenable to hold onto a vision of culture, identity and literacy practice in which the 'offline' and the 'online' are held radically apart in the ways that they are practiced and signified" (p.392). This intertwining of literacies has been also explored from a semiotic perspective, given the understanding that digital technologies introduce new "modes" (Kress, 2003) of writing and reading (Millard, 2003; Pahl & Rowsell, 2006).

New Media Literacies and Digital Technologies

Scholars from the U.S., Great Britain and Australia have formulated most of the literature about new media literacies and education. They have claimed that the availability and use of digital and multimedia technologies has changed traditional notions of literacy – accentuating its multimodal and its hybrid characters – and also the notions of what it means to be literate. This paradigm has been defined as "new literacies" (Kist, 2005; Kress, 2003; Lankshear & Knobel, 2003; Tyner, 1998) and "multiliteracies" (The New London Group, 1996). I have used the expression "new media literacies" (NML) to identify the phenomenon. Studies in this area have been conducted mostly in "developed" countries, under the assumption that computer technologies are widely available (although not homogeneously) and that these literacies represent "modernization." Most studies conform to the expectations of development in those countries. This has led to a situation in which, according to Lankshear and Knobel, new media literacies practices "reflect a marked tendency to perpetuate the old [literacies and social practices], rather than to ... reinvent the new" (Lankshear & Knobel, 2003, p.29).

The literature about new media literacies in "developing" countries is limited. It focuses on issues and projects of the diffusion and the operational dimension of new media literacies, i.e., how people can access and learn to use them as tools to achieve some (often prescribed) goals (Blurton, 1999; Chapman & Mahlck, 2004; Hanna, Guy, & Arnold, 1995; Kozma, 2003; Wagner & Kozma, 2005; World Bank, 1998). These studies operate under the framework of an autonomous model (Street, 1984, 1993, 2001), and they have not addressed new media literacies as social practices and as immersed in society's ideologies and power structures. They do not emphasize a sociocultural perspective that includes social implications of new media literacies acquisition and its

culturally embedded character. This seems fundamental given important contextual specificities operating on the phenomenon such as the scarcity of computer technologies, endurance of traditional literacy practices, difficult economic situation and dilapidated public schools.

Theoretical Tools

This dissertation project constitutes an ethnography that focus on a sociocultural perspective of literacies. In line with this theoretical perspective, I used key concepts to guide this study (fieldwork, data analysis and the discussion of the findings). One main concept that I borrowed from social anthropology and social psychology is "Practice." According to Scribner (2001), "a practice may be considered to be the carrying out of a goal-directed sequence of activities, using particular technologies and applying particular systems of knowledge. It is a usual mode or method of doing something—playing the piano, sewing trousers" (p.195). Therefore, practice is a recurrent goal-directed sequence of activities using a particular technology – in this case, literacies – and particular systems of knowledge – based on participant's cultural practices and the context in which the circulate. More specifically, Miller, Goodnow, and Kessel propose that "cultural practices cover the specific ways in which writing is used: its implements, how it is understood, and the specific purposed it is used for in everyday life" (p.6). In sum, practices are actions that are repeated, shared with others in a social group, and invested with normative expectations and with meanings and significances that go beyond the immediate goals of action.

Another key theoretical tool that I used through the dissertation project is "Context." For Levinson (cited in Street, 1993) context includes participants' identity,

role and location, assumptions about what participants know or take for granted. Street draws on social anthropology to add that context holds kinship organization, conceptual systems, political structures and economic processes. The author cautions that when one looks at a context, "we should ask not what are the 'essential meanings' in a culture, but how specific meanings are constructed against competing ones and how are these marginalized" (Street, 1995, p.5).

"Communicative Practices" is the third theoretical tool that I utilize in the study. It has its origins in Hymes (1994) ethnography of communication. For Grilo, cited in Street, the concept of communicative practices includes "the social activities through which language and communication is produced, the way in which these activities are embedded in institutions, settings and domains which in turn are implicated in other, wider, social, economic, political and cultural processes and the ideologies which may be linguistic and others, which guide processes of communicative production" (Street 1993, p. 13). Another key theoretical tool is "Literacies" used in the plural form to indicate that people have various, multiple literacies that they use across different contexts, beyond the social legitimization of what is a "valuable' literacy. According to Dyson, literacy is "a cultural tool for taking action in the world; its power comes from its semiotic function: Members of a culture share common ways of infusing various forms (such as sounds, actions, marks on paper, and monuments in the park) with meaning. These symbols—these connections between forms and meanings—connect us to others and, at the same time, organize our own feelings, experiences, and thoughts" (Dyson, 1993, p.25).

"Literacy practices" is also a theoretical tool that handles both the events and the patterns around literacy and that connects them to broader cultural and social makings in

society. These connections give meaning to the uses of reading and/or writing. "Literacy practices incorporate not only 'literacy events', as empirical occasions to which literacy is integral, but also folk models of those events and the ideological preconceptions that underpin them ... Literacy *practices* are the general cultural ways of utilizing literacy that people draw upon in a literacy event" (Street, 1995, p.2). In line with Street, Heath (1983) proposes that "Literacy Events" are "any occasion in which a piece of writing is integral to the nature of the participants' interactions and their interpretative processes (p.50). The last theoretical tool is "Artifact," which is a representation of the material world that has been modified over the history of its incorporation into goal-directed human action (Cole, 1996). For Street (2005) an artifact can assume a material aspect and/or an ideal of conceptual aspect. These objects are constructed as part of and in relation to recognized activities taking place in society. According to the author, artifacts related to literacy include blackboards or textbooks (in the classroom), reading assessment scales, road-signs or signing ceremonies (in public space). Artifacts are social constructions or products of human activity, and they in turn may become tools engaged in process of cultural production.

Overview of Chapters

In this Chapter I presented the main theoretical issues framing my dissertation project and I situated the ethnographic nature of this study as a response to the key and problematic assumptions informing the proposition, the enactment and the study of international initiatives about literacy diffusion to the Third World to promote "development." In chapters 2 and 3 I will address the method and the methodology that I utilized in this dissertation project. I will discuss extensively the meaning and the

implications of my double persona as the *RiverWalk Brasil* coordinator and the researcher conducting this study and how I negotiated these issues while in the field. I will present and discuss the data in chapter 4, 5 and 6. In Chapter 4 I will present data about the school and the study participants, and I will present data about the complex context of scarcity of resources in which the *RiverWalk Brasil* project was enacted. I will also discuss some of these contextual implications for the "deployment" of new media literacies at the local school. In chapter 5 I will focus on participants' "traditional" literacies – mainly around writing – as a way to contrast them with participants' experiences with new media literacies at school and outside of school as discussed in Chapter 6. I will extend the discussion of the findings to Chapter 7, in which I will also address the study's limitations and the implications of the findings for theory and practice in the field.

CHAPTER 2
METHODOLOGY AND METHOD

> My work is an attempt to be empirical without being positivist; to be rigorous and systematic in investigating the slippery phenomena of everyday interaction and its connections, through the medium of subjective meaning, with the wider social world.
>
> -- Frederick Erickson (1986, p.120)

Introduction

It was almost one in the afternoon when I dropped from the bus in the dusty street after a 50 minute journey from my apartment to the outskirts of the city. I walked fast to escape from the scorching sun. It was my second day at the school. The doorman did not know where I could find the computer lab, but when I told him where I needed to go, he pointed Vera's room to me. As I walked there I saw many strange faces, both boys and girls, most of them between 13 and 18 years old holding a thick notebook in their hands. Most of them did not seem to be paying attention to me. Vera's room had a paper tag over the door saying "informatic room" in English. I first opened a heavy metal door but the wooden door behind it was locked. A student just screamed across the patio that their teacher Vera was not at school yet. So I went to the center of the patio and found a place to sit on a bench with some students. I asked them if they knew Vera but they shook their heads, some with their eyes down to the floor. The bell soon rang at 1:10. It rang again five minutes later. Since students were still out of their classrooms, the discipline coordinator came to the patio and walked most of them to their classrooms. She seemed busy and did not stop to greet me. Vera arrived at 1:25 and she apologized for being late saying she had some issues at home. After she unlocked the first door we entered a small

room with a table, four chairs and four stacks of dusty books. Then she unlocked a second door which led us into the lab.

The room had a counter around three quarters of it where seven computers were placed each with its own black office chair. The faded amber computers looked beat up and old. In one corner there was an air conditioner and the small window was covered with a blue plastic and duck tape. On the other side there was a stack of white plastic chairs. Vera looked at me and she seemed a little nervous and anxious before saying "it is a little small and old, but I can manage it quite well." She laughed, then turned on the air conditioner and disappeared through the door.

A few minutes later a noisy group of teenagers started coming into the room. They spoke loudly, laughed and screamed. The first ones chose one of the black chairs placed in front of the computers. The remaining students grabbed a white chair and sat around their peers. Each computer had now three or four students in front of it. Vera returned and she screamed in the middle of the noise that "the ones who do not know how to turn on a computer yet, just wait for my help." The room was crowded and steamy. As I reached into my purse for my notepad and my audio recorder I thought to myself: "where am I going to sit?"

Qualitative Research and Ethnography

Researchers operating in line with a phenomenological perspective "attempt to understand the meaning of events and interactions of ordinary people in particular situations" (Bogdan & Biklen, 2003, p. 23). The general aim is to provide an interpretive understanding of human interaction. Therefore, the main task posed to phenomenologists is to gain access to people's lives to understand how one constructs meaning around

events taking place in daily life. From this perspective reality is constituted by the meaning we attribute to our experiences and is necessarily a social construct.

Despite the subjective nature of phenomenological research – people living according to their view of what is taking place – qualitative researchers claim that "their rendering can be evaluated in terms of accuracy" (Bogdan & Biklen, 2003, p. 24). Phenomenologist researchers try to both document their findings and their subjective thinking about what is taking place in the field. Researchers do not claim to have produced absolutely true findings but instead claim to have developed a particular interpretation of reality that is grounded in the empirical world and their interpretation helps to explain the human condition.

A basic understanding of researchers in this tradition is that human experience is interpreted as people interact with one another. Therefore people construct meaning that is always subject to negotiation and to change. The different, situated perspectives people develop about events and the negotiations that take place as people interact are the focus of analysis of qualitative researchers. This perspective acknowledges a multiple reality which cannot be resolved by the researcher but it can be documented.

My dissertation project, an ethnographic study, is a modality of qualitative research operating under the framework of the concept of culture. According to Geertz (1973), the ethnographic process constitutes a "thick description" as it aims to describe the many layers of issues at play in order to acknowledge the complexity of social life. Specifically it refrains from essentializing the cultural production of the group under study since this meaning production takes place in a constantly evolving process. According to Bogdan and Biklen (2003):

> When culture is examined from this perspective, the ethnographer is faced with a series of interpretations of life, of commonsense understandings, that are complex and difficult to separate from each other. The ethnographer's goals are to share in the meanings that the cultural participants take for granted and then to depict the new understanding for the reader and for outsiders. The ethnographer is concerned with representations. (p. 28)

I aim to examine what it means for teachers and students to use and/or to not-use new media literacies situated in the specific context in which they are positioned. Therefore, I look at literacies as social and cultural practices based in the use of languages and tools – writing, speech, typing, paper and pen, and computers. I interpreted teachers' and students' perspectives about new media literacies by contrasting their other, "traditional" literacy practices and the context experienced by them at school and beyond it.

The Country and the City

Brazil is a developing country that holds one of the strongest unequal distribution of wealth in the world. Acute regional differences are also a serious problem in the country, since the southeast and the south have most of the jobs, universities and overall indicators of quality of life. The illiteracy rate has been declining slowly and it now accounts for 11% of the whole population ten years of age or older. However, getting to and staying in school is still a challenge for a large portion of the population. In 2005, 25% of the population ten years of age or older had no more than three years of schooling. Another 26% of the population had 11 or more years of schooling (IBGE,

2005a). The northeast region, in which the school is located, is the least privileged in the country given to historical elements and the enduring drought that led millions of local residents to migrate to the south in search of better life conditions. The per capita income in the region is almost three times less than the per capita income in the southeast region (IBGE, 2004). Windy City[3] is the capital of a state with 2.3 million people (IBGE, 2005a). It is a growing city with huge problems of infrastructure and high levels of poverty, even for Brazilian standards. The lack of jobs is closely tied with the increase in urban crimes and illegal prostitution. According to official statistics, 90.4% of the population ten years old and older are literate in Windy City, which contrasts with cities in the countryside in the state where more than 40% of the population is still illiterate[4] (IBGE, 2005a).

The Teachers and the Students

There were five teachers directly involved with *RiverWalk Brasil* at this school. All teachers and students are identified by pseudonyms:

1. Maria was the school coordinator and operates as an assistant principal. She holds a baccalaureate in History and has taught in the public schools for over ten years. At the time of this study Maria had been working at the school for one year and a half years.
2. Vera is the computer lab teacher for the afternoon school shift and only in the mornings she taught elementary Portuguese and English classes). She holds a

[3] Fictitious name.

[4] IBGE considers a person to be literate when she/he is able to sign her/his name, write and read a simple sentence describing daily habits, read or write on her/his own, take a written test and understand it at the level of 3rd grade, be able to participate in community activities in which writing and reading are involved (IBGE, 2005a).

baccalaureate in Education and has taught at this public school for over ten years.

3. Rita is the Portuguese Language and Arts teacher. She holds a baccalaureate in "Languages" with a minor in Brazilian Literature. She also holds a graduate certificate in Linguistics. Rita has taught mostly at private schools. She was hired in the tenured-stream system of the state government system one year and a half before the time of this study. She had taught at this school since then.
4. Ana is the Geography teacher. She holds a baccalaureate in Social Studies and a Law. In Brazil baccalaureate degrees are available in Law. At the time of this study she had been teaching at this school for one year and a half. She also has an appointment at a local city school. She used to work as an attorney at the state secretary of education before she was transferred to this school.
5. Gloria is the Biology teacher. She holds a baccalaureate in Social Studies and has been teaching at this school for over ten years. At the time of this study she was also enrolled in a veterinary undergraduate degree program and a graduate program in science education for science teachers offered by the federal government.

Though the class that I observed had 42 students formally enrolled it was rare to have more than 25 students in the room. Approximately half of the students at any given time were male and female.

In Brazilian public schools all students take the same courses together at the same room through out the school year (Chapter 4 addresses contextual issues about the school,

the teachers and the students in more detail). I observed one of the two second year high school classrooms. Maria, the school coordinator, chose this class to participate in *RiverWalk Brasil* this year. Her rational for choosing this class was that she "wanted to work with more mature students but the last year ones are already not very connected to school anymore. All they care about is how to get a job out there." She also chose this class as they will remain at the school for another year (to complete high school) and could therefore teach this year's new students entering the *RiverWalk Brasil* project. Among the teachers this class had a reputation of being immature and having a serious problem of lack of discipline. Rita, Ana, Gloria and Vera mentioned this many times during our informal chats. The difficulties perceived by teachers reflected on students grades. In November, with only one month until the end of the school year, at least half of the students had grades below average in two or more courses.

Through out this manuscript I will refer to male and female students I observed and that I talked with by using pseudonyms, as in the case of the participant teachers. Most of these students were 16 years old (as this is the regular age for them to be enrolled in the second year of high school). Although this did not seem to be important for the findings of this study, Patricia was 18 years old at the time of the fieldwork. Laura and Fatima, despite their young age, were already mothers. All students had various shades of "dark" skin, which in Brazil does not play as a stronger social marker as it does in the U.S. From all students, Julia was the one with the darkest skin tone, which identified her as "black" in Brazil. Wagner, Roberto, Edison, Tomas, and Wilson always chose to sit at the back of the classroom. In some situations they integrated the same group of students working in a school assignment, but in other situations they moved to different groups.

Roberto and Wagner were buddies and so were Tomas and Edison. Anderson and Alex used to sit more towards the front of the class and they were not regular members of any group in the classroom. Edison, Tomas, Alex, and Wilson played soccer together. The girls gathered around two groups most of the time, but this preference changed during the school activities. All the girls tended to sit closer to the front of the classroom. Amanda, Laura, Patricia, Valeria and Jane were usually members of a group. Patricia and Valeria were very close friends. Julia, Fátima, and Lucia were also usually in a group. Julia and Fátima were very close friends. Wilma and Carmen were also very close friends and they frequently moved around groups in the classroom. Marta and Cristine did not seem to have very close friends in the classroom and they circulated around different groups of students. The school system in Brazil is different from the school system in the U.S., meaning that all these students that I observed attended classes at the same room at all times while at school – the only exception to this pattern took place during some activities conducted in the computer lab, as it will be detailed in Chapter 6.

Researcher Role

Each element of this dissertation project has my personal imprints. When I sat down in the school classroom I thought about my own school experiences and how lucky I was that my parents could afford to enroll me in private schools. When I went to the computer lab and I saw teachers and students struggling to make sense of how the computers operated I thought about my own difficult experiences with computers. And when I talked and thought about the new media literacies *RiverWalk Brasil* project I could not forget that I was the solely responsible for it as the project coordinator for Brazil (as detailed in Chapter 3). During the fieldwork I experienced anger, confusion,

disappointment, as well as happiness, of being at ease and of having a sense of belonging to that school and to those participants who were so different and also so like myself.

My presence in a school where the participants were not used to having "strangers" around and my positioning as both the *RiverWalk Brasil* coordinator and a researcher affiliated with an international university impacted people's reactions to me and how they dealt with my intrusiveness in their school activities (i.e., the observer effect). While I could not avoid such issues, I tried to "understand this effect on the subjects through an intimate knowledge of the setting, and use this understanding to generate additional insights into the nature of social life" (Bogdan & Biklen, 2003, p.35). This process of understanding was not linear though and it varied across people. While some teachers and students felt at ease after a few weeks having me around, some teachers and students still struggled with having an audio recorder near them and many times I turned it off so I did not affect the teaching and learning opportunities of the participants. In some situations participants went out of their way to participate by talking to me about topics related to the research. In other situations, participants responded to interview questions with uncomfortable silences and pauses, with their eyes fixed on the floor. In still other situations I realized that the interview evolved to a more conversational encounter in which participants moved beyond the interview questions and taught me about aspects of their worlds and ideas I was not familiar with (researcher role is elaborated on in Chapter 3).

As I moved to data analysis and started working on open coding my personal and my scholarly experiences came into play. While my methods created spaces to see new elements and even disconfirming elements in the data, I had the task of making sense of

the messy collection of voices, notes, graphics and impressions I had collected. So I started selecting, grouping, trimming, moving around chunks of data, crossing various elements – as I tried to make sense of how the study participants made sense of their lives around literacy practices I reconstructed their own authentic perspectives.

Method

Data Collection

I visited the school on a daily basis, Monday through Friday from 1:10 PM to 5:30 PM. Teachers involved in the project taught on Mondays, Wednesdays and Fridays. I also visited the school on some Tuesdays and Thursdays either because there were activities planed or just because I wanted to go there to see what was going on and chat with people (teachers and students) informally. I planned to collect as much data as possible from students and teachers involved with *RiverWalk Brasil*. This included attending the classes of Rita (Portuguese class), Gloria (Biology class) and Ana (Geography class), even when they were not teaching specifically about the *RiverWalk Brasil* project. I also attended the computer lab sessions and any other activities developed in connection with the school and the *RiverWalk Brasil* project (e.g., after-school meetings and activities and field trips).

Most of the days I would arrive at school at 12:50, a little before the beginning of the activities at 1:10. During that time I would either sit in the teachers' lounge or I would sit right outside of it, where students from the class I was observing hung out before the bell rang. From there I would go either to the classroom, to the computer lab or to another room to attend a gathering or meeting planned for the day. In rare occasions I

went to the principal's room and the coordinator's room and in most cases I did that because they invited me to do so.

When I conducted observations I tried to both take notes and/or to record audio. In some cases, though, I was not able to take notes and/or to record audio given the particularities of the situation (e.g., walking on the streets, engaging in unexpected conversations, etc.) or because I felt that taking notes and/or recording audio would render the conversation less meaningful. For example, if someone came to talk to me using a confidential tone in their voices (e.g., speaking low, looking around for unwelcome witnesses). In some rare occasions teachers and students mentioned to me and also among themselves that "we are being [audio] recorded" indicating their acknowledgement of my presence as a researcher which may or may not have interfered with their dispositions to say some things and not others.

Inside of the classroom and in the computer lab I always sat down with my notepad and my audio recorder. I started taking general notes about the class (mostly focusing on students) and as the class progressed I used to move closer to one group of students to try to record their actions and interactions during the class period. My practice was to record these group activities once I was close enough to one of the groups. In that case I placed the recorder near some of the group members. In the lab I would also start by sitting where I could see all groups and, as activities progressed, I would move closer to one group/computer. In this case I tried to write down their actions and their interactions and also what I could see at their computer screen. I tried to install a program to capture what was on their computer screens but this would not work on the dilapidated school computers.

Most of the time I tried not to interfere with the dynamics or activities. I was there mainly to observe them, though sometimes both the teachers and students wanted to interact with me. In many cases I would either answer them briefly though at other times I posed a question to them about their issues. In a few cases I had to either say I needed to observe or I just looked at my notepad indicating I was busy doing my work. As the semester moved ahead most of them understood and accepted my positioning. Many times students would joke, saying "Eduardo is like a mummy here, he can't say much" as they looked at me with a smile on their faces.

Most of them also knew that I was available to talk to them before classes started or during the break, when I often would sit at the patio where they liked to hang out while looking at their cell phones, listening to their CD players or just talking to each other. In these situations I tried to record as much as possible of their dialogues without taking notes in front of them so as not to interfere as much with their course of actions. I considered capturing these exchanges as key to the data collection process given that "dialog conveys character traits, advances action, and provides clues to the speaker's social status, identity, personal style, and interests. Dialog allows the field researcher to capture members' terms and expressions as they are actually used in specific situations. In addition, dialog may point to key features of a cultural world view" (Emerson, Fretz, & Shaw, 1995, p.76).

I usually left the school at 5:30 PM, which is the end of the afternoon shift activities. I would arrive at home around 7:00 PM and I used to download the day's audio recordings and I used to transcribe the notes from my notepad to a word file. I wrote all my notes in English and I checked many statements and what seemed to be important

expressions and words with the audio recordings for most activities. In the beginning it was a little challenging to translate while I was writing down jottings or full notes. After one week of this intense activity it did not bother me anymore (my training as a professional journalist helped a lot). Still, in some cases, I wrote down what seemed to be very specific words and expressions particularly meaningful in Portuguese (the ones I thought would get lost in a translation). Depending on how much time I had I also started transcribing the audio recording files, which most of the time I would finish the next morning. If I was running out of time I would stop transcribing to quickly read my typed notes and try to draft some comments and ideas that came to mind as I read it. Around 11:00 AM I would call the school coordinator to ask if everything was fine at school and we would chat for a little while. Sometimes she would tell me that one teacher wasn't at school that day or the computer lab was closed for some reason. I would leave for school again around 12:00 PM. The notes represent my attempts to make sense of what was going on in the field and I was aware that at that point I only had tentative understandings about what was going on since my understandings were evolving and so were the actions taking place in the school.

Interviews

Conducting formal interviews with students and teachers was challenging given their time constraints and lack of previous experiences at being observed by an outsider. Except for the school coordinator, teachers go to the school for their teaching hours and students are not willing to stay after school hours or to arrive earlier. Since teachers miss school quite often I started using these times to try to interview groups of students, which worked some times. For teachers, I scheduled interviews when I thought I had

accumulated a substantive amount of notes and other data sources from which I could generate important questions to help me make sense of what was going on at the school. For all interviews I had a question guide that I used to write by hand the day before. Most questions were based on my observations in the field. In these cases I focused the interviews to help me make sense of some happening in the field, but I also left each interview open enough so that interviewees could bring up new issues or even suggest new topics that I had not thought about yet. I tried to give a more conversational tone to these interactions although I had the audio recorder on at all times.

Documents and other Materials

In connection with note taking and audio recording I also copied some written materials produced by the teachers and the students related to the web project. Through out the five month fieldwork period I collected many artifacts related to students' literacies practices. Some times I just borrowed their notebooks and made copies at the school secretary's office and I returned their notebooks after the break. In other situations it was more challenging since some of them would not bring it back from home or they would tell they simply lost it. I also saved computer files with students' materials. And I collected some school documents that were important to set out the context of the school in which the research was taking place. I linked students' materials with the memos I wrote for a specific day.

The Dataset

The whole dataset contains 55 electronic files, plus artifacts and documents. Most of the electronic files contain a descriptive memo of what happened in the field that day (which include from one to four topics), a brief analytical memo and the audio recording

transcription. For example, the electronic file for 09.15.06 contains the notes I took during Gloria's class (Biology), the transcription of a sound file containing a conversation I had with a group of students (who worked on one specific activity related to the *RiverWalk Brasil* project) and a third topic in which I wrote about girls instant-messaging-in-paper writing in class and boys' non-school-related writing in class. This electronic file is also connected with the hand written texts students gave to me and that I copied. On 10.05.06 the electronic file contains only one topic which I named Doing *RiverWalk Brasil* in the lab. It contains my notes for the day, the transcription of the sound file and a link to electronic materials produced by students in the computer that day. Files have from five to 40 single-spaced pages each, plus extra materials that I collected on a given day.

Participants' Selection

I started to wonder about the site for the development of this study during the process of writing the dissertation proposal. At this point I was very involved with issues of reciprocity in the field and literature in feminist ethnography that point to unequal relationships between the researcher and study participants in the field and the imbalanced relationship between them. As a way to try to move ahead with more "reasonable" criteria for site selection I decided to open up the opportunity for potential participants to invite me to go to their school to conduct my study. As the *RiverWalk Brasil* project coordinator I emailed all schools at the same time and I told them about my study plans for the next school semester. I told them I was looking for a site. A few days later I received an email back from the Windy City participants insisting that I would go to their school. That did not surprise me at that point. Over the years teachers at this

school have expressed their resentment that their state has been seen in Brazilian public education as not capable enough to deliver "good" educational experiences. While they felt unjustly stereotyped they were willing to present their work. I accepted their invitation and they were glad to participate. In a conversation right after I started the field work, the school principal told me she could not believe that I went all the way from the U.S. "just to work" at their school. I told her that it was my pleasure.

Focusing on certain participants within the site was an extremely challenging endeavor. There were many students, but the classroom was small and there was barely any free space around the desks. At the beginning of the field work I tried to sit in different locations in the room in search of a less "intrusive" location. As the days passed I realized that I would occupy the empty spaces which were either in the back of the room or on the mid-left side of it, in between the two windows. Since in the back of the room it was extremely difficult to listen to the teacher and to many students I decided to sit between the windows. In a lucky turn of events, most days the class would not have a chair for me so I started sitting on the top of a desk, which gave me a much better view of the classroom. I took this spot most of the time, although I moved around a few times to get some students' interactions that seemed to be meaningful to me as the work progressed.

From this positioning, I ended up being closer to a group of boys who usually congregated in the back of the room. These boys became one focal group. But I was worried about developing the study around the issue of gender and I thought I needed to also explore a group of girls. So in various moments, I moved to sit with a group of girls across the room. I also focused on girls in the computer lab. Unfortunately, these groups

were not cohesive throughout the school semester so in many situations I ended up having to focus on some students within these two groups (various students missed classes very frequently and a few either dropped school or moved to the night shift). Most of the time these groups would also sit together in the computer lab but there were many situations in which they either preferred to stay alone at a computer or they worked with other peers. In those cases, I focused my data collection on individuals instead of on groups.

The fieldwork that I conducted beyond the school activities was extremely challenging and students were not willing to meet with me in their homes. In some situations they promised to show up so that we could go to a cyber café. Often times the did not show up but they justified their absence. In a way that seemed to be related to their own experience of schooling since most of the time there was no action from the school side if they missed a class. Also, they seemed uncomfortable with someone perceived as being from the school taking too much interest in their lives since that was not the current practice to them (these issues are further developed in Chapter 3). The information I gathered about their personal lives was either from their conversations with peers or from their statements during semi-structured interviews. I did not visit their homes although I walked in their neighborhood and I attended a local festivity with some school teachers.

As I moved ahead with the data collection process I was guided both by "emic" and "etic" perspectives (Watson-Gegeo, 1989). While I was trying to capture life "as is" I was aware that I had brought my "etic" to the field with me. As I looked at what was going on in the field, my gaze was influenced by certain theoretical frameworks, concepts

and categories upon which I had developed some of my analytical perspectives. I was also aware that this would not be sufficient to enact an ethnographic study in the field, meaning that I also had to try to perceive as much as possible of the study participants' "emic." I had to open up space in my data collection to try to capture, as closely as I could, the "culturally based perspectives, interpretations and categories used by members of the group under study to conceptualize and encode knowledge and to guide their own behavior" (p.580).

Data Analysis

In line with the ethnographic perspective adopted for this dissertation project I developed an inductive data analysis. Open coding was conducted to develop language to describe the literacy practices of the study participants. The coding addressed questions such as: What are the participants doing? What are their concerns? How does what they are doing vary with conditions? What do they see as their constraints and their possibilities? (Emerson et al., 1995). Also, I attended to Erickson's proposition that "[w]hat the teachers [and students] do at the classroom and building level is influenced by what happens in wider spheres of social organization and cultural patterning. The wider spheres of influence must also be taken into account when investigating narrower circumstances of the local scene" (Erickson, 1986, p.122). This means that people act based on their understanding of their local social worlds (Emerson et al., 1995). I tried to make sense of the participants' communicative practices around literacies framed by the context in which these actions took place. Here I closely followed Hymes' paths:

> One cannot take linguistic code, a given code, or even speech itself, as a limiting frame of reference. One must take as context a community, or network of persons,

investigating its communicative activities as a whole, so that any use of channel and code takes place as part of the resources upon which members draw. (Hymes, 1994, p.11)

At the first stage of this work I re-read the whole data set. During that process I started selecting excerpts that seemed important to me. The criteria for "importance" I used had two main elements: it was in line with the theoretical perspectives guiding my study or it was clearly not in line with this theoretical perspective, i.e., it seemed to change my previous understanding about key issues under investigation. This way I tried to open up space for new elements to show up in the data analysis. I believe this was key in ensuring the credibility of the study and also to bring new elements at play that may challenge and/or inform current understanding in the field.

This first step generated five large files with over 30 pages, each organized around a month of my fieldwork (e.g., August, September, October, November and December). I transferred these files to Atlas, a qualitative analysis software, and I developed a list of initial codes that evolved as I started reading the data for the second time (the codes are listed in the Appendix C). Codes were developed around the following typology (Emerson et al., 1995):

1. Setting/Context codes – general statements that people make describing the subject, the setting, and how the setting fits in the community, descriptive statistics and other data describing the setting;
2. Situation codes – how the subjects define the setting or particular topics – how do they define what they do?

3. Perspectives held by subjects' codes – non-general ways of thinking shared by all or some subjects that indicate orientation towards particular aspects of the setting: shared understanding;
4. Subjects' ways of thinking about people, particularly schooling and teachers/students – their understanding of each other, outsiders and objects that make up their world;
5. Process codes – words and phrases that help categorizing sequences of events, changes over time or passages from one type or kind of status to another (turning points, benchmarks, transitions);
6. Activity codes related to reading, writing and using computer technologies – regularly occurring kinds of behavior;
7. Event codes – specific activities in subjects' lives or settings;
8. Narrative codes – structure of talk itself; the structure that informants choose to tell their stories may tell something about their beliefs; contradictions; where does the story start, what does it tell, where does it end;
9. Methods codes – research procedures, problems, dilemmas.

As I conducted coding in Atlas I started to identify common threads in the data. I registered these unifying elements in short memos in which I either highlighted what seemed to be commonalities around some units of data or some disparities in it. At that point I also raised some questions about these differences and I also wondered how I was making sense of what looked like "new" elements evolving from the data. At this point I felt a certain estrangement about some parts of the data, i.e., I realized this second reading of the data was revealing new elements in the data that I had not noticed before

(during the field and during my first general reading). This seemed to indicate some variations from emerging patterns (Emerson et al., 1995). I became even more interested in looking for contextual factors that may had interfered with these variations. By following that path I was aiming to develop a more nuanced and subtle analysis of the data.

The general coding took me three weeks. One challenge was that almost all quotations I selected could be coded in many ways since I could see various layers of meaning related to each quotation, indicating the complexity of the issues at play in the field. This made me slow down in the process of coding as I tried to see what was most meaningful in each quotation without also discarding other elements associated with it. The next step constituted the data analysis per se. By using the processing capabilities of Atlas, I crossed some codes to investigate potential strong relationships among key elements in the data. I selected what seemed to be key elements playing in the fieldwork, such as "context", "students writing" (in class and in the computer lab), students "learning" new media literacies. From there I paired these codes with all other codes I created. This generated a long list of "strong" connections (e.g., I had 38 connections between context and lack of resources and I had 34 connections between "experiencing new media literacies" and "struggling to use it"). While I was not interested in the quantitative aspect of these connections or in looking for causal relationships, these gave me a good indicative of important relations within the whole data set. In the next step I went back to the data and I looked at each of the quotations for each of the most "meaningful" crossings that were identified in Atlas. I also used this to compose longer, more detailed integrative memos. As I worked on this stage I was also looking for other

parts of the data that would challenge some of my assertions (i.e., disconfirming evidence).

At this point I started to identify a meaningful relationship between participants making sense/not-making sense and developing/not-developing literacy-related actions. This would go beyond their statements assuring that such forms of literacy were important to them. I also realized that the participants' experiences were situated in – and to a certain extent constrained by – the specific context in which they participated in school and beyond it. In short, many of them seemed to be willing to perform literacy practices that they would recognize as important, however they struggled to move ahead with their intentions since the context in which they were situated limited their possibilities to make sense of it. However, I also identified some disconfirming evidence in this direction. This perspective was in line with Miller and Goodnow's (1995) claim that "researchers explore not only the meanings that practices hold for people but also the degree of their commitment to or investment in them" (p.10) and the reasons associated with them.

I focused primarily on participants' cultural practices around literacies and, more specifically, I looked at their communicative practices around reading, writing and using computer technologies in and out of school. At school I looked primarily at their engagement with the *RiverWalk Brasil* project, which included various "new" activities that contrasted with "traditional" school activities and that contrasted also with some of their experiences in using computers at the local cyber café. I registered their writing activities both in classroom and in the computer lab around *RiverWalk Brasil* and also around other teachers' assignments. I also looked at students' initiated writing activities,

usually not directly related to school. As I observed, recorded, and copied their writing experiences I tried to also capture contextual elements framing their experiences around writing within their communicative practices.

The *RiverWalk Brasil* project constituted my initial focus in the data analysis. However, my theoretical perspective and the field observations led me to understand and to perceive that students' communicative practices also involved engaging with, developing and talking about other literacy practices beyond what was proposed initially by the *RiverWalk Brasil* project. While in the computer lab students would write on paper, they would talk among themselves, and they would express their preferences regarding literacies. One of my main goals as I analyzed the data was to see common threads in these various actions that participants indicated as constitutive of their literacy practices. Initially, I looked at these practices framed by their presence in the computer lab as they dealt with the *RiverWalk Brasil* project. Also, the opportunity to be in the lab and have Internet access prompted them to explore some of their other interests in the web, most of the time reading and publishing at Orkut (a web-based environment similar to MySpace) [5]. Because this was so frequent (mostly in the cyber café) I also incorporated these various experiences within their literacy practices although it was not directly linked to school curriculum or school activities. Later on, I extended the data analysis to other literacy related events in their classroom and also beyond school.

At that stage I was following Street's claim that:

[5] Orkut is a web interface developed by Google that became wide popular in Brazil. It is similar to MySpace.com where people of all ages post and develop their personal profiles and where they "meet" old and new friends.

> Instead of privileging the particular literacy practices familiar in their own culture, researchers now suspend judgment as to what constitutes literacy among the people they are working with until they are able to understand what it means to the people themselves, and which social context reading and writing derive from. Many of these people ... might have been labeled 'illiterate' within the autonomous model of literacy and yet, from a more culturally sensitive viewpoint, can be seen to make significant use of literacy practices for specific purposes and in specific contexts. (Street, 2001, p.9)

As my work evolved I looked at the previous short memos and the data clustered around a code or a combination of codes and I started writing longer, more detailed integrative memos in which I described some events and I tried to make sense of it in light of the literature. In some cases this worked fairly well. In other cases I ended up with what seemed to be contradictory evidence (i.e., disconfirming evidence) and that posed important questions for my reasoning as I registered in memos.

I presented a draft of some key finding at the Comparative and International Education Society (CIES) conference held in Baltimore and I incorporated some feedback provided by colleagues, including some Brazilian scholars who attended it. During the data collection I submitted a few files (with data and brief comments) to two PhD students who provided some feedback. My main question at that point was if my memos had I a "good enough" description of what was going on in the field (i.e., if an outsider would be able to follow and to make sense of my narratives about the field) and if I was not interfering "too much" with the participants' evolving actions in the field.

Summary

This chapter presented the theoretical framework informing my methodological perspectives enacted in the field. The dissertation project was conducted as an ethnographic study focusing on culture. In the field that meant that I, as a researcher, was interested in observing and registering participants' actions involving literacies in different aspects of their lives, both at school and beyond it. The ethnographic perspective sustained the main assumption guiding my observations – participants' literacy practices were framed by meaningful cultural aspects of their lives and they were enacted within multiple social interactions. I conducted long, detailed observations in an attempt to capture the various layers that their actions around literacies entailed. In doing that, I produced a "thick" (Geertz, 1973) description of participants' practices around literacies, more specifically writing. I also conducted long, open-ended formal interviews with participants. On those occasions, I tried to establish a more dialogical relationship with participants hoping that they would help me make sense of their understandings about literacy and writing and about how those understandings were framed by the context in which they enacted literacy practices.

I conducted an inductive analysis of the data in which I looked for commonalities that would indicate patterns within different elements of the whole dataset. And I also looked for elements that would contrast and challenge these patterns – i.e., disconfirming evidence – as I explored the complex enactment of participants' literacy practices around writing in the field. The patterns identified across different elements of the data generated the main assertions of this study which were later developed in integrative memos containing more detailed quotations of participants' actions, artifacts, and statements.

The analytical portions of these memos were developed into the chapters that follow. I developed the next chapters in light of the literature about literacy and writing from a sociocultural perspective as I tried to analyze participants' actions and formulations in nuanced ways. By drawing on theories and analysis I was able to indicate how participants' experiences are aligned with key understandings in the field. It also allowed me to indicate tensions between participants' actions and formulations and the current understanding in the field about key aspects of teachers' and teenagers' literacy practices enacted in an urban school in a developing country.

CHAPTER 3
RESEARCH-PARTICIPANTS RELATIONSHIPS IN THE FIELD AND BEYOND

> Will this [research] project help me get a job?
> -- Silvia, a student in the class I observed, before she signed the study participation consent forms.

Introduction

In this chapter I discuss further aspects of the method and the methodology I used in this dissertation project, in particular given the fact that as I conducted research in the field I was also acting as the *RiverWalk Brasil* project coordinator. I was aware of the issues related to having this double persona and its implications for the ethnographic fieldwork. I took measures to make it explicit and also to try to safeguard the quality and the reliability of the data as much as possible. In this chapter I address the issues of reflexivity in the field, the development of rapport and the challenges of building reciprocity with the study participants.

Reflexivity and my Professional Trajectory before the Fieldwork

My positioning as a researcher for this dissertation project began long before I stepped in the school on the outskirts of Windy City, Brazil. It started six years before my fieldwork. It was a warm and humid summer morning when I arrived in Ann Arbor, Michigan, in 2000. I had just left my job of ten years as an investigative reporter and assistant editor at the leading newsweekly magazine in Brazil. I came to the U.S. thanks to a fellowship sponsored by the Spencer Foundation to join the Michigan Journalism fellows (currently named Knight-Wallace Fellows at Michigan). During the program, I audited graduate courses in Education and I participated in projects at the School of

Education. My main goal was to explore relations between mainstream media (TV, radio and print) and K-12 education.

I soon became interested in the work developed by professors and graduate students at the Interactive Communications Simulations (ICS). I met Jeff Kupperman, then a PhD candidate (he is currently an assistant professor at the University of Michigan-Flint), who was developing a web-based learning project about rivers connecting schools from the U.S., Japan and other nations. I started volunteering in this project, named *RiverWalk,* and I suggested translating all the materials to Portuguese and inviting Brazilian schools to join it. I had little direct experience with K-12 education, despite the fact that I covered education for many years and I had taught undergraduate courses in journalism for four years. I did not know how to run an educational project; I knew how to get good headlines for magazines instead. And I did not know a lot about computer technologies, since as a journalist I always had an efficient helpdesk service at hand. I was discovering new worlds.

In 2000 I had a superficial, negative and biased view of K-12 public education in Brazil. I thought that efforts to "modernize" these schools were on demand. And I thought that there would be no better way to make that happen than by using digital technologies, better yet if that was embodied in a web-based project from an American university – which was how I perceived *RiverWalk.* I was sure that would help teachers and students "learn better" and it would help them to be more in touch with the "real" world – trespassing the "backwardness" of public schooling as I saw it at that point. As the coordinator for *RiverWalk Brasil* I enrolled 12 schools across the country in the project. I enjoyed dealing with teachers and students as an educator (no more as a

journalist) and I benefited from Vera Suguri's help (she was a retired teacher working as a consultant for the federal government). Suguri assisted me in enrolling schools and manage the project during its first years in Brazil.

As the project evolved I was eager to have teachers reporting about what I thought were two key aspects of that experience: students' use of computer technologies and students' learning. However, I started to get a sense that in most schools the work was being developed mostly by the teachers. Or, in some cases, it was being carried out by a small group of students (my perceptions were based mostly on materials published in the *RiverWalk Brasil* web environment and on email messages exchanged with teachers). Whenever I asked the teachers about this I seemed to silence them. That usually made me angry and I used to wonder why teachers would tend not to open up opportunities for students to engage with computers since I believed they would love doing that.

It was during a lunch break in a popular hot-dog place across from the School of Education building with a group of PhD students that my perceptions about that situation started to change. One of the doctoral students at the table mentioned to me a recently released book by Larry Cuban (2001). As I reported my experience with the project in Brazil, he told me that what was going on in Brazil (the lack of use and "learning" with digital technologies) seemed to be also a phenomenon talking place in many U.S. schools. I felt lost. How was that possible? Did I miss the whole point in spending all that time to make the project happen in Brazil for "nothing?" Cuban mentioned various topics and issues close to my experience with Brazilian schools but Cuban also made some claims that I was not sure I agreed. At times I felt disenchanted with the shortcomings of

my own work – and the shortcomings of digital machines to transform education. But I also started to see new ways of approaching this issue.

From that conversation in the hot-dog place I had many other opportunities to exchange ideas with professors and PhD students at the School of Education. Cuban's book led me to other books and to other articles about the issue of digital technologies at schools. I had formulated questions and I was looking for answers. At that point applying to a graduate school seemed to be a very appropriate move to me. In the following fall, I exchanged universities to pursue a PhD degree in education at Michigan State University. And I took the experience of the *RiverWalk Brasil* project with me.

My first attempt to conduct a study about the project was problematic. It indicated my struggle as a new scholar in education to formulate a meaningful academic investigative project. Since I had just recently finished my statistics courses, I decided that as my practicum I would use the pre- and post-test surveys to measure "how much" students participating in *RiverWalk Brasil* were "learning." As I talked to a professor about my plans I was also given the suggestion of doing some interviews, since I was interested in qualitative research. For the interviews I developed a structured guideline based on the pre- and post-tests as a way to make sure I was "focused on the right items" (and only on these ones) to ensure a "rigorous" pursuit of the research questions. By taking that route I expected to identify and to quantify the "extent" of learning taking place among participant students. As the fall semester progressed and I started getting back the results of the tests and the content of the interviews I realized the limitations of my methodological approach – and my superficial understanding of what learning is. Not only did the tests not show anything "meaningful" but I thought that I was the one who

was not learning much. For example, students provided many "wrong" answers to the questions I developed. While that gave me a sense that something was not going well in the field, I had very little evidence to make sense of the "data" at that point. I recognized the complexity of the issues at play, but when I analyzed the data I learned that the data captured the issue of "not learning" in a very loose, superficial way.

Despite my difficulties with the study, I was still very curious to make sense of the *RiverWalk Brasil* experience. At that point I had already enrolled for Anne H. Dyson's research seminars and I had the chance to exchange ideas about my work with most members of my committee. Since I still had some time left before the end of the school year in Brazil I decided to abandon the previous methodology. I started a more dialogical relationship with the participant teachers. Instead of having a previously structured outline for an interview, I had some ideas that I was interested in discussing further with them. Some of these questions were: What did they have to say about their experiences in the project? What was important to them? How were they making sense of it? What were their questions and their perspectives? Did they think students were participating? If not, why was that? By posing those questions I felt that I was opening many important avenues to understand their perspectives about the project. I also understood that as I navigated their experiences with them I was learning to recognize the complexity of that experience and the various elements at play in more nuanced ways.

While teachers seemed to be interested in the project – they participated on a voluntary basis – they also seemed to struggle to enact it and to make sense of it. They wanted to participate but it was difficult for them to understand issues (e.g., practices, tools, ideas) that were "different" from their context – from what they were used to do as

teachers. I was able to relate to their position. When I arrived in Ann Arbor that summer of 2000 I also struggled to make sense of that "new world" – including the digital machines spread all over the place that seemed so easy to operate for others ("the locals"). I struggled when I started working with the technological side of the *RiverWalk* project. Many times I felt incapable, and I often wanted to give up. I have never used those fancy digital machines available in the university lab and I had no idea what many of the programs available in those machines were used for. But I was willing to give it a try and some people were willing to help me with that. I never thought about giving up – and neither did most participant teachers in Brazil.

The interviews I conducted with the teachers went well and they resulted in extended exchange about what seemed to be key elements playing in the project's enactment at their schools. I felt that we had developed a new kind of relationship in which teachers were willing to share some of their perspectives and their difficulties with me while I was trying to understand them – and help them – although I did not have many answers to give to them at that point. All the data I collected and my initial analysis of the materials were discussed at length during Dyson's research seminar. I received various feedback which led me to new readings, new questions and new ideas. After that I wrote two papers based on the data that I collected and analyzed. I presented these papers for peers in small, informal groups and I also presented them in peer reviewed conferences in the U.S. and abroad. Michigan State University professors and other scholars in Brazil and in Europe provided me with valuable feedback as I progressed in my PhD academic preparation.

At that point I had reflected deeply about many issues involved with the *RiverWalk Brasil* informed by readings and exchanges engaged in during my PhD program. It was time to start preparing for the dissertation project. In the late spring of 2005 I visited Windy City a to start preparing for the fieldwork. Although I was familiar with some teachers at that school since they were participating in *RiverWalk Brasil*, it was the first time we met in person. And it was the first time that I visited a Brazilian school as a future scholar in education, not as a professional journalist. I spent time with teachers and students and we went on a field trip to get to know better sections of the river they were investigating. At that point the school had 7th grade students participating in the project. In the summer of 2006 I traveled to Windy City to start my ethnography about teachers' and students' actions related to the *RiverWalk Brasil* and about how they make sense of it within their context. Maria, the school coordinator, chose to enroll sophomore high school students in the project. Also, the "renovation" of a small room in which the computer lab was going to be set up had been finished (the lab was closed during my visit in 2005, as it will be further detailed in Chapter 4).

Dealing with Issues of Rapport, Reciprocity and Fairness in the Field

My involvement with *RiverWalk Brasil* started in 2001, briefly after I left Brazil to "learn new things" in the U.S. hoping to help change public education in my country. During the final steps of my preparation to start the fieldwork I spent some time thinking about the challenges of having to negotiate my multiple positioning as a scholar conducting academic research, as the coordinator of an international learning project, and also as a Brazilian citizen committed to helping teachers and students to develop meaningful experiences at school that, hopefully, would be useful for their future lives. I

was aware that in some situations all these three dimensions would play together at different levels as I "participated" in actions evolving in the field. Even though I could not avoid it, I knew that I had to be aware of the implications of my overlapping identities in the field and I had to make sense of how people would respond to them.

I was also aware that as the fieldwork evolved, I was going to take deliberate decisions around these issues as a way to safeguard the quality, the reliability and the richness of the data to be collected in the field. I was interested in doing that while also developing a meaningful relationship with teachers and students involved in the study. My goal was to create an experience in which all people involved could learn something and could benefit best according to their own interests. This would lead to key developments as proposed by Erickson, who states that "trust and rapport in fieldwork are not simply a matter of niceness: a noncoercitive, mutually rewarding relationship with key informants is essential if the researcher is to gain valid insights into the informant's point of view (Erickson, 1986, p.142). I also wanted to achieve a more balanced, less exploitative relationship with the study participants.

Getting Closer to the Participants

My relationship with the students was diffuse in part given to the fact of the large number of teenagers in the classroom. Many of them approached me many times with all sorts of questions. They wanted to know my age, my marital status, why I had been living in the U.S., why I chose their city and their school. My responses varied according to the setting in which we were in at the moment. If students asked me questions during the classroom most of the time I indicated to them that I had to pay attention to what was going on in the classroom, meaning that I could not talk about other issues (I had to focus

on the data collection and I did not want to seem disrespectful to the teacher). In the rare situations in which they insisted in having their questions answered I gave them very brief responses. In some cases I took the initiative to go back to their questions during the break, but this was not always possible for me to do.

In other situations I used their initial questions to open up spaces to develop a relationship with them. When they asked me about my life in the U.S. I tried to talk about other aspects of being a Brazilian living in the U.S. and how my perception of the country changed along the years. Some days they listened to me quietly and with great interest. In other situations they also brought elements to the conversation, e.g., they mentioned stories of friends and relatives who also lived abroad or they made comments about news they watched on TV about illegal immigrants in the U.S. Those events became spaces to engage in exchange with them and they seemed to help students become more comfortable with me, because in later opportunities, students talked in a more relaxed way about their experiences at school and beyond it in our interviews.

Initially I faced situations in which students resisted my gaze at some of their actions at school. While I was surprised by their resistance, I tried to accept it and later on I thought about what may had been the reasons for their reactions on those lines. During an activity in the lab at the beginning of the fieldwork I observed Julia and Lucia doing a chat and I thought that it would be important to register what they had written on that event. I asked them if I could copy the content of their chat for my records. They both seemed a little surprised and uncomfortable with my request. Julia said that it was okay and Lucia said the same. I then asked them not to close the chat window. At the end of

the activities in the morning I noticed that the computer had been turned off, so I would not be able to see the content of the girls' online chat.

Also in the computer lab, Wilma was writing a text (by hand, in paper) and Ana, the geography teacher, was helping her. The interaction evolved as follows:

Ana: Are you bothered with the recording?[6]

Wilma: No teacher, it is not possible [to finish her text][7].

Eduardo: [It is] okay Wilma, I can interrupt the recording.

Ana: My voice will show up like a child's voice.

...

(Wilma did not make a move for a while).

Eduardo: Okay Wilma, I stopped recording it.

Later on I thought about these occurrences and I developed the hypothesis that students were taking me as a "teacher" since I was always in the teachers' lounge and teachers addressed me in a very informal way. After that point I decided that I had to do some very explicit action to demonstrate to students that this was not the case. During the election of the school queen teachers were the judges and despite Maria's invitation for me to seat at the jury's table I kindly declined it. Instead, I sat in a random place among the students. Also, during a presentation to celebrate the schools' 25th anniversary, I once again moved from the front of the patio (where teachers were standing together) to the back of that area, closer to the students. In both situations the contrast signaled by the distance between the teachers and me seemed to be a strong indicator against my

[6] Data excerpts presented in this dissertation are translations from the original Portuguese.
[7] See Appendix B for conventions used in the presentation of transcripts.

affiliation as a teacher in that setting. After that I noticed that students were more relaxed around me, even approaching me to tell jokes and asking about my personal life.

Despite my apprehension to face other situations in which students would explicitly deny access to their actions and thoughts, I believe that I started to have easier access to them. In the first weeks students were very interested in asking me questions and even to know more about my hand written notes, and the recording device that I always placed over a desk near them. As the time passed these comments ended. To my surprise I witnessed conversations between students in which they explicitly said they had not realized that I was recording their interactions, as the following event that took place at the end of a writing activity in the computer lab in October.

Cristine: How about this, what is this?

Fatima: This is what Eduardo puts [on the desk] to record.

Cristine: Oh god, I was babbling.

(Laughs)

Fatima: Didn't you know?

Cristine: No, I did not notice [it].

(Laughs)

In other situations, students grabbed the recorder and left me messages. On one occasion, they used the recorder to make an announcement resembling radio commercials about their Coffee & Literature happening to take place the following week in that classroom. Patricia and the other girls talk on the microphone and said "there will be a lot of food, come with us (laughs). We invited Eduardo to participate, come with us (laughs),

Cafe Literário, Escola Maria Gonçalves, Segundo A ... it will be a wonderful afternoon with an orchestra (laughs)."

The issue of my research and teachers' reactions at the school came up during my first week in the field, while I interviewed Maria. She wanted to know what kind of research I was going to conduct. I answered her questions as follows:

> Eduardo: Qualitative. [It will be] all based in observation. So, so for example, the students are here at this table and I place the recorder here in the middle and I observe and I take notes. I imagine that teachers will be intimidated.
>
> Maria: No, no, Rita [the Portuguese teacher] is fine.
>
> Eduardo: I think that they are not used to this, right?
>
> Maria: But they already know, I told them that you will observe. Because you came here [last year] ... [you] are a very fine person [you are] not like the other doctor, [who is a] nice person [but] he looked at us and we could not say anything, it was like you did not know anything, he is not like Eduardo that I say things, if it is right or wrong, he can help me, not if it is wrong or right, but that he can help me ... it is not because you are here, but I think since you came last year you are not a person with whom we feel uncomfortable to talk with.

I believe Maria was being sincere in her accounts of how teachers would perceive my work as a researcher. Her perception about me seemed to stem from our long, lasting relationship as we interacted (mostly by email) for many years. Even though she did not use to write me email messages very frequently, I understood that she contacted me in key moments of her work with the project to ask for help. I was always able to reply to her and I got the sense that she appreciated it, since my replies helped her to deal with the

project enactment (Maria started participating in *RiverWalk Brasil* in 2003 in another school before she transferred to the one in which I conducted the fieldwork). At least from this experience it seems that the establishment of a professional relationship between the researcher and the participants much before the beginning of the fieldwork helps reduce the usual difficulties of entering the field and building rapport with participants.

During the fieldwork I did not experience any explicit resistance from teachers to opening their classroom to me or to being available to talk, once their agendas allowed some time for that. Also, they were eager to invite me for all kinds of events they were involved both inside of the school and beyond it, many not related to *RiverWalk Brasil.* I accepted many of their invitations and these opened various opportunities for informal chats about the school, the system of public education in Brazil, my experiences abroad and other aspects of their personal lives.

Looking for a Common Ground

While scholars tend to agree that ethnographic fieldwork will contribute to the overall critical project (Quants, 1992), they have questioned trade-offs among researchers and participants and have pointed to the need for a long standing working relationship that would generate meaningful experiences and that would give voice to all involved (LeCompte & Schensul, 1999). I always thought that these were valid discussions that I was willing to engage with as I conducted the fieldwork in Brazil.

One of my main goals as I entered and as I participated in the field was to indicate to teachers and students that while I expected them to let me "look over their shoulders" I was also available, whatever that meant to them – I was not positioning myself as the one

who could offer help, neither I was proposing a "pay back." I thought that assuming such positions would already position participants in essentialized ways that my ethnographic study was trying to deconstruct. In line with Weis' and Fine's (2000) claims, I was trying not to reproduce the colonizing discourse of the "Other" as the one in need of something that I had to give.

I wanted to signal to them that I was available. I walked around the school whenever it was possible, I never locked myself in any room in the school and I tried to smile at people. When I had to interrupt conversations with teachers I either gave them my email or I told them that we could talk more at another time of their convenience. I considered that these were reasonable ways to indicate that they were welcome to approach me if they would like to.

As the work in the field progressed Maria, Vera and Rita were the ones who asked for my "help" with their academic activities. They were enrolled in graduate courses and they wanted to show me some texts that they wrote for their assignment and they asked for suggestions about readings related to the topics they were studying. I helped them. Some days I stayed after school to talk to them and read their texts. I copied some book chapters for them and I also helped them find resources in the Internet. Many times they seemed pleased with my availability. In other occasions they seemed to be a little frustrated since I formulated new questions in hopes of helping them think through the assignment and to formulate their own ideas. In some situations I suspected that they just wanted me to give them the answers, or tell them which words to write in their texts. I did not do that. I told them that I simply did not know the answer. In other cases I made explicit to them the reasoning behind my pedagogy. I told them I thought it was more

useful to help them find resources and ways to develop their own understanding and their own ideas about the issues they brought to talk to me.

During a meeting not related to the *RiverWalk Brasil* project Maria made a comment that gave me a sense of how teachers were positioning me, at least in some moments. Maria said that I was "a very tough teacher." I wrote in my notes that I thought she was probably referring to the two recent experiences in which I helped her with her research questions for her monograph, and when I assisted her in learning how to use the project *RiverWalk Brasil* web interface tools. I also wrote that I was a little surprised by her comment and I said she was right, I was really tough in my class (the course I taught at Michigan State University) and students must be very committed since I give them a lot of attention.

As the time passed students also started turning to me for help with specific school related tasks either in the classroom or in the computer lab. In those occasions I also tried to engage them in some sort of exchange, instead of simply giving them the answers. Students seemed puzzled about my perspective and they wondered why I made it so "difficult" for them. In one situation I was observing a group of male students at the back of the classroom when they asked me how to write the word *conscientizacão* (consciousness). I waited for one or two seconds hoping that someone else in their group would come up with the answer. They said nothing so I told them to write it down and Wilson did it without the *s* (*concientização*). Writing this word without an *s* makes a lot of sense, since the *c* makes for the sound of the missing *s*. I did not answer them with a yes or no but I asked them what did they thought. I got silence. Then Edison decided to try and he replaced the *c* by and *s* (*consientização*). It seemed to me they were exploring

the possibilities of the language, exchanging similar letters with similar sounds to try to get it "right." I again asked what they thought. Another student wrote it with both *s* and *c*, and a silence followed. I asked what they thought about it and someone said that it looked okay. I asked them to read it aloud and they did. But they were still in doubt so I said it was correct and they laughed loudly. I then told them to notice how they how to write the word, it was just a matter of trying it for a little while. I told them to say it aloud and to pay attention to how they pronounce both the *s* and the *c* when they say it slowly, indicating that they need both letters to match the pronunciation. Wilson looked impressed and he pointed at me as he said: "What a great teacher" referring to me.

In other situations in the field I felt that I had to be more explicit in my tutoring. This happened when I perceived that a student was struggling a lot to achieve something and that by proposing further questions I was only going to make him or her even more confused. This was the case of a computer lab activity involving the *RiverWalk Brasil* web interface in mid-November. The teacher was not in the room at that moment. Alex was struggling to transfer files using a floppy disk from another computer to the one on in which he was working.

Alex: How [can I] pass it to here Eduardo?

Eduardo: Do you know how to do that?

Alex: No.

Eduardo: There are other ways [to do this]. Go to my computer, click on floppy disk and then (inaudible). Then you push it.

Alex: (inaudible)

Eduardo: See, to put the title you need to insert it, otherwise you will not find it.

I also tried a blend of the two approaches, both helping students with some straight answers and formulating some questions to try to further their own thinking.

Eduardo: Now, Julia, how do you insert a picture?

Julia: Add material.

Eduardo: But today you will insert a new picture, right?

Julia: Right.

Eduardo: So insert the picture in the backpack.

Julia: (Laughs) Backpack, right?

Eduardo: Why is that?

Julia: [Because it is] picture.

Eduardo: Which area of the web interface is this? What do you need to do?

Julia: We want to get a picture to put here. We did not do like this. Go (she inserts it).

I usually approached these interactions with participants that I had in the field as very complex events. According to Eisenhart (2001):

> Researchers working in the tradition of critical theory have also complained about conventional ethnography. The processes and products of ethnography, they claim, should do more than account for the actions of others; they should empower participants to take greater charge of their own lives ... researchers can contribute to empowerment in several ways: by exposing the power inequities that shape a situation, including the research itself; by actively participating in consciousness-raising about power inequities in one's own and others' lives; and by actively taking steps to change unequal power relations. (p.219)

Eisenhart's claims followed me through the fieldwork process. I felt guilt for not intervening in some situations to preserve my own interests as to let the participants' actions evolve "as is" so that I could record my data. I knew this was important for my project, but I also knew that there were other ways to do more than "account[ing] for the actions of others" as the author states.

One difficult aspect of being a participant in the fieldwork was to face the school's policy to send students back home for being late to class or for "lack of discipline." First, that seemed unfair from a legal perspective, since as tax payers students have the right to schooling. But the school justified that this right had to be earned by students by adhering to school norms that they, students, did not have a say about it. In many situations I saw the discipline coordinator sent students back home, both from the class I observed and from other classes. This made me uncomfortable for many reasons, but particularly because many students walked a lot to get to school under a mid-day scorching sun. And as teenagers living in dangerous neighborhoods the school ended up being a safe place for them. Also, I felt upset because I assumed that while in school these students were learning something, from the teachers, from their peers, by going to the library, or by playing soccer. But I was not sure this was taking place when they had to walk alone back home or they had to hide somewhere before it was time for them to go home.

While I thought it was important for me to intervene, I knew that I could not be confrontational with the school people because that would lead, in the last instance, to me becoming un unwelcome outsider at that institution. In one situation I met with Maria outside of the school and without mentioning names I tried to talk to her about how unfair

it was for the school to simply send students who were late back home. Maria had a nervous smile in her face and her eyes were down when she said that she also agreed with me, but there was little she could do since that decision had been assigned to the discipline coordinator by the school principal. Maria said then "I am stepping in eggs here, Eduardo. I cannot be oppositional to this people all the time otherwise they will soon find a substitute for me." I understood Maria's difficult position.

In mid-September I was around the teachers' lounge when I heard Rita telling the discipline coordinator that she would send home students who did not bring their course books to school that day. I was surprised since I did not know she would take such extreme measures. I rushed into the classroom and I talked privately with students without books so that they could go quickly to another class and borrow one from a friend. But I could not talk to all students about that. Wilma and Julia told me not to worry about it and I told her I was serious, she may wanted to get one. Later on both Wilma and Julia, with a few other male students, were sent back home. I felt sad.

While I thought that these were important decisions I had taken as I experienced issues taking place at the school, I also felt that I needed to do something else. At that point I was operating in line with Villenas (1996) claim that she "did not want only to take their [research participants'] stories and leave. I also wanted to become involved in some way with their Latino community, either through bilingual tutoring for children with their mothers or through English as a Second Language (ESL) instruction" (p.719). Villenas cites other authors to state her endorsement of an "ethnography of empowerment" that draws on Freire's philosophy to propose knowledge construction as a result of the interaction between researcher and the researched. The fundamental purpose

of this dynamic, according to her, is to improve the living communities of the community being researched.

In the very beginning of my work in Windy City a girl from the class I observed asked me if "this project would help her getting a job." One of the main challenges for teenagers and young adults in Brazil is to enter the job market. This is a difficult task not only because of the weak economy that does not generate enough jobs, but because many recent high school graduates are not perceived as being "prepared" for the demands of the job positions. Also, during a lunch at the beginning of the fieldwork with Maria and Roberta (the Media Center coordinator) they told me that parents were extremely concerned about how the school would help their children to secure job positions once they graduate. Although I considered the *RiverWalk Brasil* enactment very positive at this school, I also knew that many students would need extended periods in the lab and more direct, explicit instruction to help them develop a better sense of some digital technologies used in the project. Hopefully, I thought, this would allow them to apply these experiences in other aspects of their lives, including future jobs. On those lines I decided to offer a workshop for selected participant students that would qualify them as project assistant for the following school year. In exchange, they would receive certificates of participation and a recommendation letter written by me once they finished their work at the end of the following year. I was not very happy with the fact that they would not be paid, but I thought that I would make that clear and that they would be able to decline the invitation.

Given the time constraints to use the computer lab and the number of computers, I limited the workshop to a group of fours students, two males and two females. Their

names were chosen in a raffle conducted in the classroom – only half of the students were interested in participating in that. I conducted the workshop during six one-hour meetings after school and students developed a short narrative on their own using the *RiverWalk Brasil* web environment capabilities. At the end of the activity I helped them develop guidelines to use the *RiverWalk Brasil* web environment based on their experiences in which they emphasized what they considered to be the most difficult points of the process that needed to be addressed in a topic-based user's manual.

As I provided them the workshop on the uses of digital technologies I thought about Villenas (1996) claim that "researchers [in the qualitative tradition] are also recognizing that they are and that have been implicated in imperialist agendas"(p.713). I wondered if teaching new digital technology skills was the best thing to do for those students situated in that context. At that point, it was late in the semester and I would be concluding the fieldwork in two weeks. But I thought that I could make clear to the participants that I was open to interact with them via email or Orkut if they felt the desire to contact me for any reasons in the future. I told the teachers that if they wanted to keep the exchange about their current graduate courses they could contact me. And I told students that if they ever felt the need to talk to me they could also write me messages, any messages would be fine.

Negotiating Roles and its Implications

As I entered the field I was also aware that I was an instrument of data generation. As the project coordinator, I knew of the danger of imposing too much of my imprint on participants' experiences. I was looking for a space in between that would be both ethically justifiable and productive for the fieldwork I had to conduct during that period.

I reflected about these issues as I had in mind experiences portrayed by scholars aligned with ethnographic research in education and in anthropology and the implications of their positioning in the field. Behar (1996), Villenas (1996; 2002) and others "broke their hearts" and became "vulnerable" to create new representational spaces for the "Other" in their narratives. But in doing that they opened space to be criticized for over-imposing their fingerprints on their subjects. I did not want participants at the school to feel constrained to develop actions and make statements because I was positioned institutionally as the project coordinator. Instead, I wanted teachers and students to express themselves in ways that were most meaningful to them. Yet, I had to respond to my duties as the project coordinators as it happened many times during the fieldwork.

As it will be further detailed in Chapter 6, in mid-November I interrupted an activity in the computer lab. I did that given my understanding that as the project coordinator I was able to help both teachers and students to accomplish some tasks without having to incur so many mistakes and difficulties to make sense and to use the *RiverWalk Brasil* projects' web interface. As I wrote in my fieldnotes, I told the teachers that I would like to talk as the project coordinator at that point and I told them that I had to apologize because I did not provide a good enough training for them, and that was why they were feeling confused in the lab. They seemed to agree with me, and then we quickly scheduled a new training session for the next day.

During the workshop I laid out alternatives of how I could help them and asked which one they preferred.

Eduardo: We can do it two ways. We can start doing it and as you have doubts we can talk or I can explain basic functions in advance.

Vera (the computer lab teacher): I think it is best to explain as we have doubts.

I followed Vera's suggestion and during the workshop I opened various opportunities for the teachers to contribute their ideas about how to make sense of the web environment and how to teach it to the students.

In other situations, teachers came to me to ask specifically about tasks related to the *RiverWalk Brasil* project. Towards the end of the fieldwork Vera told me she was concerned with the opening pages of the school narrative being developed in the *RiverWalk Brasil* web environment. She said she would like to sit down with me and with Maria to talk about the final steps of the work. Vera was also interested in recording the boys' funk (see Chapter 5) to display it as sound file in their narrative page on the web. I showed her the sound recording capabilities of the computer and she said she would do a test to see how it worked. I told her that it was a great idea and that many schools did that in the past without much trouble. In some situations teachers made explicit their appreciation of my availability to answer their questions about the project development. During an informal conversation, Maria told me that she "liked what I told her to do when she asked my opinion." Maria said that "it was best to ask V to do the editing [of a short video] in the school so that other students were able to participate."

By making it explicit that I was available to talk to them and to address their issues as the project coordinator I aimed to achieve at least two important goals. First, I was fulfilling my professional duties to help the project progress within the teachers' propositions, respecting their own taking on it at that school. Also, I assumed that in playing my role as the coordinator in an explicit way in key moments, teachers would realize that if they had issues they were welcomed to make them explicit. I hoped that I

was telling them that there was no need to pretend to operate in certain ways to cover difficulties they may have had with the project.

Feelings of Abandonment

Stacey (as cited in Skeggs, 1994) argues that "the involvement and intensity of ethnography make it the most exploitative method because ethnographic methods subject the researched to great risks of exploitation, betrayal and abandonment by the researcher"(p.88). On January 18th of 2007, a month after I finished the fieldwork, I received an email from the school principal that said "Hi Eduardo, how is everything with you? It was a great surprise to find you at Orkut. I will miss you a lot at school, you became part of it, with your quiet, discrete and observing way. I wish I could have talked more to you, to hear your opinions and your ideas. It was a great pleasure to have you visiting the school. Big hugs to you." Rita emailed me three times from January to March asking for literature to help her build up the theoretical framework for her final graduate course monograph. Vera wrote a few emails telling me they wanted to finish the narrative when students returned from their vacations and she said she wanted to call me in the U.S. but until the end of March she had not done that. Maria wrote me only one short email telling me her plans to finish the school narrative in the *RiverWalk Brasil* web environment.

Many students sent me various messages through Orkut (I set up a profile web page to be in contact with them). In their messages they talked about general issues not that different from the ones they talked about with their peers. They wanted to know how my life was going and they told me about theirs. Students reported about their vacation and their plans to go back to the school in March. In my replies I used to answer their

comments in a direct way and I also used to ask them about their plans for the future. While in the field I noticed that it was difficult for them to talk about their future and I wondered if that had to do with what teachers referred to as students' low self-esteem. I assumed that the first step for them to try to engage with some new projects after they graduate from high school (at the end of 2007) was to start thinking about what they would like to do. Some students replied to me that they still had no idea about their desires for the near future. One student told me he wanted to go to college to study business administration. I told him that it was a great idea. I also told him to start looking for government scholarships as soon as possible, and to try to set up a study group with his closest friends and to ask teachers for book recommendations.

Summary

In this chapter I positioned myself in relation to the fieldwork that I conducted for this dissertation project by focusing on issues of reflexivity, rapport, reciprocity and "fairness." The discussion presented in the chapter stemmed from my double persona as the *RiverWalk Brasil* project coordinator and as a researcher conducting fieldwork in Windy City. The ultimate goal of conducting "pure" objective observation and collecting "impartial" data in the field has been long problematized given its unrealistic character – the researcher-participant will always have a partial perception of phenomena unfolding around her/him. Behar (1996) cites Geertz (1988) to remember us that ethnographies are a strange cross between author-saturated and author-evacuated texts.

Therefore, it is not the case of aiming for "complete objectivity." Instead the researcher makes explicit issues playing in the field that have the potential to "interfere" with the data collection and how such issues were negotiated. This means that it is the

researcher's obligation to come clean "at the hyphen"(Weis & Fine, 2000), which means that we interrogate who we are as we co-produce the narratives that we presume to collect and we anticipate how the public will receive and reinterpret the data.

My roles, my engagement with the study participants and my access to data evolved along the fieldwork. In the beginning I positioned myself as an observer and that meant that the study participants identified me as such. As a response, they offered some resistance in some key moments, which compromised my ability to have access to the data. This also had a positive side, since it signalized to participants that I was not interested in interfering in aspects of their experiences praised by them, in particularly their professional and personal "autonomy." As the work progressed, participants started to open up new spaces for observation and for dialogue that allowed me to get a closer look at many aspects of their actions in the field. This proximity also allowed me to get a better sense of how and when to "intervene" as the *RiverWalk Brasil* project coordinator. On those moments I tried not to silence or to obstruct participants' actions, but instead I attempted to register the complexity of the situation by also focusing on my own actions. Given the difficulties to collect information in some situations in which I was also acting as a participant, I took extra measures to register the interactions also in audio recordings.

I tried to respond to issues around "fairness" in the field raised by some scholars by making explicit my long lasting professional commitment with the study participants as I have worked with the school on a voluntary basis for many years now. I also tried to respond more directly to the students' need to prepare for entering the job market by offering them training and certificates (although to a very limited number of students).

More importantly, I believe that participants manifested their recognition for my efforts to promote "fairness," even if in a limited way.

CHAPTER 4
SCHOOL CONTEXT AND THE ENDURING SCARCITY OF RESOURCES

> [L]et's give them a thin notebook because last year there were too many empty pages.
>
> -- Maria, the school coordinator.

Introduction

The ethnographic perspective informing this dissertation focuses the field investigation and the data analysis on participants' actions around literacy practices framed by a sociocultural perspective. This approach refrains from the autonomous model (Street, 1984) which perceives literacy as being independent of specific contexts of social practice. This means that scholars operating in this tradition believe that literacies have autonomy from concrete enactments of language in social practices and that the enactment of literacies produces results that are independent of contextual social and cultural elements. Literacy is seen as a "neutral" tool, independent of social and cultural issues playing in everyday life. This study is in line with the "ideological model" (Street, 1984), which rejects the essentialized notion of literacy and proposes a theoretical formulation that takes into consideration the specific material contexts of human practice in which forms of communication among people are enacted through language. These practices change and evolve in contexts involving particular, historical relations and structures of power, values, goals, interests, economic and political conditions, and cultural understandings. This means that in order to understand literacy it is necessary also to understand further the context in which all these elements play, since they integrate the literacy practices enacted by social actors in order to communicate. This

holds given that there is no meaningful reading or meaningful writing – or meaningful new media literacies – outside of a social and cultural practice.

This chapter weaves in key aspects of the school context to shed light on a key research question (formulated in Chapter 1) that addresses how the local sociocultural context at the school relates to participants' expectations, understandings and enactment of new media literacies as they take part in the *RiverWalk Brasil* project. This chapter provides basic information about the school and it situates teachers' and also students' experiences within the enduring scarcity of resources experienced at the school. It also indicates how this scarcity of resources reflects on their perspectives about and experiences with new media literacies and digital technologies. The scarcity of general resources and of digital technologies in the participants' experiences seems to be related to what I have named the "record of other literacies" that I observed in the field. These literacies are usually paper-based, which means that they imply much lower financial costs and relatively wider availability within the experience of constrained resources at the school.

The Institution and the Participants

The School

The school in which I conducted the fieldwork for my dissertation project opened 25 years ago as a private institution. Very soon afterwards, its administration was taken over by the state to attend to the growing demand for education in the outskirts of the growing capital of the state. It has been attended mostly by migrant families escaping the enduring drought in the semi-deserted hinterlands. It started as an elementary school and it soon became a K-12 school despite very few changes in the initial infrastructure. The

result is that classrooms are small and the desks and the chairs are the same ones used by children younger than 11 years old. The building stretches in two rows of 14 classrooms with an empty space in the middle. In the center of these buildings are the administrative area, the teachers' lounge and a small kitchen where the free snack is prepared daily. There are various open, empty areas covered with sand and loose soil around the building. The school received two new additions recently. One room housed a science lab that was ready to use more than a year ago, but it still remained closed until the end of 2006. The school also received a new covered sports field where students have physical education and where most of the gatherings took place. The school operates in three shifts: in the morning, elementary school; in the afternoon middle school and high school; and adult students at night. During the fieldwork the principal struggled to decide what to do with the five thousand dollars budget for the school infrastructure: place concrete on the small parking lot so that cars do not get stuck in the mud during the rainy season or increase the height of the walls around the school so that students cannot jump it and escape during the school period. The principal seemed more inclined to use the money for the parking lot.

Supply of Teachers

In 2005, the school had 44 teachers assigned to teaching activities (at a rate of one teacher for 32.2 students). Approximately half of the teachers in the school were tenured, thus they worked 40 hours per week and they were familiar with the institution, since most of them had worked at this school for more than five years. Teachers' monthly salaries were usually no more than the equivalent of 800 dollars. These were usually the teachers that the school administration can "count on." The other half of the teachers

were hired as substitutes and because of work laws in Brazil, their contracts had to be terminated every three months and there was usually a lag between the time the contract was over and when it started again.

For the class I observed, there were days in which none of the three teachers scheduled to teach showed up. At a certain point during my fieldwork two 8th grade classes had no mathematics and science teachers and two 7th grade classes had only one teacher - all the other four teachers were on leave with no substitutes hired at that point. The positions remained empty for periods stretching from two weeks to two months. Most of the time students would come to school and they were sent back home. The lack of teachers had very serious implications not only for the actual teaching of classes, but also for all kinds of planning and pedagogical activities aimed to "improve" teaching and learning at this school. In one situation, Maria, the school coordinator, had just finished a new schedule for the computer lab, when the school assistant told her that she would need to change it to accommodate a new substitute teacher who had a very limited timeframe. At that point, Maria lost her temper and said that she would deal with the issue later. She had complained before about how difficult it was for her to hold meetings, programs and workshops when she was not sure how many and which teachers would be present at the school in the near future. The issue was further complicated by the common practice of tenured teachers going on health-related leaves, as it will be detailed later in this chapter.

Failing the Students

In 2005, there were 279 students enrolled in the afternoon high school shift (from 1:10 PM to 5:30 PM) and 260 students enrolled in the evening high school shift (from 7:00 PM to 10:15 PM). In the afternoon shift there were 59 students (21% of the total

number of students enrolled) whose age was higher than expected in the school level in which they were placed, which means that they probably failed at least one school year before. The school had 1417 students enrolled in all K-12 levels in the three shifts. Even though there were no official data about students' turnover, teachers told me that this was fairly low since they had known most students for many years. Table 2 contains statistical data about frequencies of promotion, failure and dropout for the high school.

Table 2

Students' overall academic performance for all the high school level

Year	Approved	Failed	Abandoned
2003	79,3%	9,2%	11,5%
2004	65,0%	23,6%	11,4%
2005	82,7%	5,9%	11,4%

Note. The data includes data for all students enrolled in all three years of high school for both the afternoon and for the night shifts (Gonçalves, 2006).

There were 40 students enrolled in the high school second year class that I observed. In the Portuguese class 34 students were promoted to the third year (last year) of high school, 5 student were failed and one student dropped out of the school. In 2005, there were 70 students enrolled on the two high school second year classes in the afternoon shift. In the Portuguese class, particularly, 62 students were promoted to the third year, one student failed and seven students dropped out of the school (Gonçalves, 2006). The statistics from the school reflect enduring issues in public education in Brazil, particularly student failure and student dropout. In Brazil, 20% of the teenagers between 15 and 17 years old are out of school. According to them, the main reason for their

dropout is "lack of interest" (42% of the respondents), their need to work (21%) and lack of transportation (10%) (FGV, 2007).

Most students attending the school where I conducted the fieldwork live nearby; some of their houses were built in public land and are located in a slum by a polluted river. They come from "working" class families – in fact, many parents earn a living in the informal job market. Students usually have many siblings and face scarcity of material resources as a norm. They come to school on foot or by bike under a scorching sun. At snack time (one hour and a half after school starts) most of them are hungry as they run to get the food (usually a small cup of chocolate milk or fruit juice and five crackers). Shortly before my study was conducted, students started attending a "computer course" either before or after school. Many students told me that when they were not at school they helped with home chores, watched TV, slept (even during the day) and hung out with their friends. They would go to the local cyber café and they would use the computers paying the equal of 50 cents for a one hour session (computers were fairly new, with broadband Internet connection). In the weekends, students told me that they liked to go to parties in the neighborhood and they went to watch games in the city stadium located less than one mile away from the school. In the few Sundays when the bus tickets were sold at half the price, some of them went to the beach or took time to visit relatives.

Parents' participation at school was rare. In a few cases I saw mothers at school and most of the time they came to complain about some issue related to their children or they came to ask for legal documents that were needed to enroll in government programs. I observed parents complaining to teachers, who had a very difficult time dealing with the

issues. The general atmosphere indicated that teachers thought parents should not go to the school to interfere with their work with the students. Once every two months the school held a formal meeting for parents who were asked to go to the school to sign their children's grade bulletin. I attended one of those meetings that took place on Saturday mornings and less than half of the parents of the high school students showed up. Most of them entered the room, greeted briefly some teachers, signed the paper and left the school. A few asked about how their son or daughter was doing at school and the teacher gave them a quick, brief summary that was most of the time on the positive side. There was rarely any event at the school that was open to the community since the school personnel was always extremely concerned about opening of the gate because of the "violence" that was perceived to abound outside the school walls.

The issues around students' performance and teachers' supply at this school are typical of public education in the country and they are inscribed in a larger scenario of historical difficulties to fund, manage and improve the system. These obstacles seem far from being overcome because they are inscribed in the larger, structural problems affecting Brazil's stagnating economy. At the school level, problems are part of the routine and even simple operations can be extremely challenging. This makes teachers' and students' lives difficult and it poses barriers to both teaching and learning. Some aspects of these difficulties at the local level will be detailed next to further characterize the context in which participants' literacy practices are enacted.

The Enduring Scarcity of Resources

The school difficulties symbolized by the high school students' drop out rates and lower levels of promotion were indicative of the harsh material conditions faced at the

school. One of the main issues stemming from the scarcity of resources was the lack of teachers to teach, as detailed before. The scarcity of resources was present in many other aspects of the participants' experiences. Students enrolled at the high school levels received only mathematics and Portuguese course books (in Brazil usually each student has all the course books and takes them back home). Ana, the geography teacher, walked with one book around the class and she stopped by students and explained something in the book she was holding in her hands. Since there were no books, Ana got most of her class materials from the Internet. She printed the materials at home and made enough copies of it so that students could use the handouts in groups ranging from three to six students during her classes (there were not enough funds to make copies for all students at school). She used to say to me that "thank God there is Internet now." Ana also used to give Vera, the computer lab teacher, some websites that students could look at during her class to read about issues Ana was covering in class. These sessions in the computer lab were rare and Ana could send only half of the class since the lab could not accommodate the whole group at once.

The government provided some teaching and learning resources to the school on a regular basis, but in most cases there were not enough issues or copies of a book for a teacher to use in the classroom. I observed some cases where the teacher asked two or three students to walk to the library and bring course books. Students walked back to class holding a pile of ten or more books in their arms and these were different books by different authors that they used in class at the same time. Once they were done, students had to take them back to the library. However, I did not see this happening very often.

During a formal interview Rita, the Portuguese teacher, compared her experiences with the availability of books to students at the school with her teaching at a private school.

> Eduardo: Then it is difficult to read a whole book (since there were no books for all students).
>
> Rita: Right, right, in the private school all students had a book, and I even got some public recognition because they read it, and there every month they received a book. Here you have these difficulties. And besides that there is the fact that they are immature and they do not want to read, no way, they do not have the curiosity and the desire to read.

The school personnel kept a tight control on the use of the most basic materials. I observed two students who came to Maria's desk and asked for six white, plain sheets of paper. Maria asked them what the paper was for and they answered it was for an activity in class. Maria went to the copy machine, opened one of the paper trays and took a few sheets of white paper. She counted one by one and gave them 3 sheets. She counted it again and gave the girls another set of three pieces of paper. The girls smiled and ran away. In another case, Maria told a teacher that the school should provide a paper notebook to each student participating in the *RiverWalk Brasil* project so that they could take notes as they were engaged in the activities. Then Maria added "let's give them a thin notebook because last year there were too many empty pages." These episodes provide important insights into the level of difficulties faced by teachers and the adverse developments to limiting teaching and learning opportunities given the lack of basic materials such as plain paper.

The issue of resource scarcity permeated not only teaching and learning activities, but also moments supposed to be dedicated to happiness and celebration, such as the schools' 25th anniversary. Two aspects of that night were very meaningful to me as they showed the hard lives of school teachers and administrators on multiple levels. The principal brought a small cake and she placed it on a desk during the party. The cake was never served to the guests, which is the tradition in Brazil. Instead, someone from the administrative department took the cake to the principal's office and they split it among themselves only. Also, each one of them got some apple cider bottles bought for the party to take home. They were very happy they were able to take something home.

The other issue was also indicative of the harsh conditions at the institution. The school principal rented various tables and plastics chairs for the party and the pickup people did not show up that night. Teachers had to carry over 100 chair and tables on their bare arms and place them inside the teachers' lounge. I started helping them and a school assistant told me I did not need to help. The school principal turned to us and said "let Eduardo do it for a while, it is good for him to get a sense about how things are difficult around here."

Such difficulties permeated the school activities and it made it very difficult for teachers and for students to navigate their schooling experiences. As the statistics indicate, many students simply drop out along the school year and teachers tried to escape the school stressful routine. Many teachers use benefits guaranteed in their contracts to take long leaves of absence for medical reasons and under the justification that they need to take care of a close member of their family. These leaves lasted from 2 weeks to a month and some took place more than once along the school year. During the

fieldwork Maria, who refuses to go on leaves, told me many times that she was feeling extremely burned-out and that she needed immediately to find ways to transfer to the state secretary of education. This usually requires connections with politicians that "open the door" to these highly desirable posts – jobs very distant from the harsh routines of the public school setting. At least once during the fieldwork Maria told me that she was on the edge of a nervous breakdown. On that occasion she talked about how difficult it was to change things at the school in only 4 years, that she was tired and that she wanted to move to other things (go work in the state secretary of education).

On the next topic I will detail how the general lack of resources experienced at the school also played around digital technologies and new media literacies. These are perceived both as "important" aspects of school's experience and also as "out of reach" in many situations. Such realization seemed to constrain and, in a few situations, it also seems to open up possibilities for "new," even if brief, initiatives around literacies at the school.

Difficulties with New Media Literacies at the School

Every year the school personal work many long extra hours to put together an extensive and detailed report about the school "performance" as it is required by the state secretary of education. In the 2006 report, the school personnel indicated the following as the issues that were "threatening the fulfillment of the school duties:"

1. The lack of students' perspectives regarding professional preparation to enter the job market;
2. Students' financial difficulties and instability at home;
3. Violence within students' families and in the neighborhood where they live;

4. Students' high dropout rate.

The report also contained what the school professionals considered to be the "school weaknesses" as follows:

1. The need to have after school programs to help struggling students to learn;
2. The lack of basic infra structure in the school building;
3. The lack of access to digital technologies in the computer lab.

It seems important to notice that despite all more basic, pressing issues demanding immediate and serious attention at the school (such as lack of food, books, teachers), the institution acknowledged the lack of digital technologies and teaching and learning practices associated with new media literacies. The report states that digital technologies are an "important tool for learning" and that there is a "lack of equipments and trained personal" at the school which results in "lack of access to these technologies."

When I visited the school in 2005 as preparation for my fieldwork there was no computer lab available. The machines received by the school over 10 years ago had been placed in a moldy room during the past administration and the current principal considered the place inappropriate for teachers and students. While I could not collect reliable information about the use of these machines in the past administration, I believe that their use was not connected to the school curriculum to the teaching and learning. There were accounts that a few teachers (some of them had already left the school) used the machines for personal tasks and that there was also a computers' course (skills-based) offered to the community for a fee – charging money for activities conducted inside of

public schools in Brazil in unusual and this usually positions the school administration in a suspicious position.

The school principal planned to ask for help in the community and to "manage" some funds to transfer the computer machines to an adapted classroom. The space needed at least new electrical systems and a phone line to put the computers to work. When I returned to the school in 2006 the computer lab was set and there was a teacher in charge of the afternoon shift (not for the morning and evening shifts). Maria told me that "some people in the state secretary of education do not understand that the computer lab is a classroom and it is a classroom that can provide services for a huge number of people from the school and the community ... it is just rhetoric, there is no effective action."

Despite the teacher availability during the afternoon shift, many students said they barely visited that room until I arrived at the school. Wagner told me that "before we started doing work for the river [project] we had never been in the computer lab. It is locked most of the time," which I also observed. In other occasions I saw Vera, the computer lab teacher, working alone inside the lab for long hours (in some cases doing school-related work and in some cases not). Vera had a different view of this issue. She once told me that people said there was nothing going on in the lab and that one day the principal asked her for a report to be sent to the state secretary of education and that she had a lot to write down. She seemed to be proud of her work.

The computer lab was adapted into a former classroom split into three small rooms. One room held the computers; the other room had a TV, VCR and a DVD player and 25 small chairs (designed for elementary school students). The third room had shelves full of books and a small table with fours plastic chairs for meetings. The

computer lab had 6 computers that arrived at the school almost ten years ago and that were left in a moldy room for many years before the beginning of the new administration in 2005. These computers operated with Windows 98 and they could not open movies or any program that requires video capabilities or higher processing power. Basically the machines could be used to produce word documents, powerpoint (if made with images that are not very complex) and Internet browsing (the connection speed resembled a phone line pattern). There was also a computer at the teachers' lounge, one at the school secretary's desk and one at the principal's office (this one was newer than all the other computers in the school, but it also had limited capabilities; it was not able to run movie editing programs). When I observed teachers using the computer in their lounge area I saw them checking their email messages and Orkut (a web-based environment similar to MySpace), and looking for information at the state secretary of education website.

Maria believed that the small number of computer machines limited her attempts to introduce new learning experiences at school.

Maria: In the past we worked with a small group, only 10 students, now we want to work with more students, one of our great difficulties is related to access, the issue of access,

Eduardo: Access to what?

Maria: To the computer lab, I am having trouble, for example the journals (part of the *RiverWalk Brasil* project activities), I have not been able to do it, for example, there was a week in which Vera had to be relocated to type tests [in the computer] since there was nobody to do it. Instead of teaching she typed over 70 tests so the computer lab was closed, it she can't type it then there is no written evaluation.

Difficulties around the availability and use of computers in public school constitute a novel problem (adding to many old ones) that teachers have to deal within their already challenging working routines. This is not an issue pertaining particularly to this school, much less is it restricted to the Brazilian system of public education. Initiatives to "modernize" education through the "deployment" and "use" of computer machines in developing countries usually bring with it miraculous promises of overcoming historical difficulties faced by school with teaching and learning. These initiatives also bring new problems to be faced by the people operating at the local level of the school. In most developing countries, the basic issue still remains connected to the high costs of digital technologies and the challenge to make them available in reasonable amounts at schools for their use in teaching and learning. This is the case of the school where I conducted the fieldwork and also of all the other participant schools in *RiverWalk Brasil* across the country. Even if teachers would like to start engaging in "new" teaching and learning activities with computers, the difficulties started with the lack of reliable and minimum quantities of machines to sustain such activities.

International organizations and scholars working on this field have reported similar difficulties in other countries. In South Africa, although the number of schools with computers for teaching and learning has increased from 12.3% in 1999 to 26.5% in 2002, there are still more than 19,000 schools without computers for teaching and learning (IFIP, 2007). The difficulties of these countries in funding and implementing such initiatives gave rise to various benevolent initiatives for computers donations (in many cases, refurbished or old models) lead by UNESCO (2004). This seems far from putting an end to a problem that grows bigger every day. Negroponte (from the MIT) has

coordinated an international initiative to develop a "popular" laptop initially estimated to cost 100 dollars per unit and that is now priced at around 140 dollars. In the case of Brazil, where there are 49 million students enrolled in public K-12 education (INEP-MEC, 2006) and public money for education is tight, the investment represents expenditures of the order of the 6.86 billion dollars to distribute these machines to schools with no guarantees of "improvement" in teaching and learning per se. The federal government estimated investments (besides the operational costs of the system) until 2010 in all areas of public education (the *Plano de Desenvolvimento da Educação*, PDE) for the country will not be superior to 4 billion dollars.

These challenges were present in the daily lives of teachers and students at the school. Their attempts to use the computers for slightly more sophisticated activities, such as powerpoint, usually resulted in frustration and problems for the teachers. Roberta, the library coordinator, had various difficulties with a powerpoint, mainly in dealing with pictures and file transferring. At a certain point she had to put the computer in a car and drive it to someone else to be able to transfer the powerpoint file from the computer to a disc since it was too large to be emailed or saved in other formats. Printing was also off limits for most people at school given the high costs of it. There was only a small printer at the principals' office that was rarely used.

While the expectation for new computers at the school was high among some teachers, particularly Vera and the school principal, it also indicated the levels of difficulties to be faced by teachers if the machines ever arrived. The following vignette indicates the complexities of the issues at play.

Vera: The principal told me that truck full of computers arrived in the state secretary of education ... I told her that if I will remain [working] in the lab next year I will pay someone to teach me lessons about Linux because I have no idea about it, right? That course they offered I took it without taking it (laughs)

Eduardo: If they are going to put [new] computers in many schools they will give training, they can't [forget to do that].

Vera: There (a meeting of computer teachers from various schools) everybody talks about problems, there are 30 labs with Linux (a free operational system), 29 have problems. [They] do not know how to work with Linux, 29 teachers are having trouble, so I proposed [to pay for a course], because there is a person there in the state secretary and he stays there as a volunteer and next year we will pay him to give us instruction on how to use it [Linux].

Maria: But you do not have to pay for it.

Vera: They say they will give us training, but when? When?

Maria: If they say they will give you training, we cannot take care of everything, each one has your area to take care, they will give training, they are investing in lab teachers.

Eduardo: Maria, sometimes they give training, but it is very bad.

Maria: Yes.

Eduardo: Now, as I said, Office [software] for Linux is very easy, no big deal.

Maria: And sometimes people make a drama, not even go to the lab, so in the beginning labs were closed because people said they did not know how to use it.

Vera: [they would] not even enter it.

Vera's disposition to pay (with her own money) a short term course to become more comfortable with the Linux system demonstrates both her interest in the computer novelty and her commitment with her work at the school. The government's initiative to use software that is free of charge in the context of extreme public financial difficulties in Brazil is laudatory. However, the introduction of the Linux system poses another enormous barrier to public schools, since most people in the country are not familiar with computer programs that operate with Linux. This demonstrates the complexity of the issues at play in the process of school "modernization" through digital technologies' implementation in teaching and learning. Even if the school receives the promised new machines, putting them to use will constitute another challenge.

The lack of sufficient computer machines and the limited capabilities of the technology limited activities in the lab. Yet, a few teachers took the initiative to engage in some "non-traditional" experiences at school that were heavily dependent on digital technologies. Earlier that year the school was invited to participate in an exciting project named "virtual book." Each selected school was to produce a "book" based on a certain theme and then upload these materials to the web using a program that made the final product look like a "book," with many pages that one would be able to browse online. Teachers told me how they were excited about this project and how one of the librarians was designated to be in charge of the web-related work. A Portuguese teacher worked with students in class to develop poems based on local traditional dances. Once the poems were written in paper and pencil, the teacher gave the materials to the librarian who typed them in a word processor and later on uploaded the materials to the web. Despite the fact that the librarian had basic computer skills (she could manage basic

functions of word processor and email) she struggled to use the virtual book program and almost lost the deadline. At a certain point she had to call a technology specialist at the state secretary of education for help and the specialist ended up finishing the work. The librarian told me that many schools that were also invited to participate in the project never finished uploading the "book" materials.

Other initiatives were even more ambitious – and difficult – given the scarcity of resources. During the fieldwork Maria decided to develop a video documentary project about the polluted river and the floods that took place in the local community. While this was thematically related to the *RiverWalk Brasil* project it was not required as part of the usual activities developed by participant school. Despite that, Maria wanted to make it happen. Maria said then that "this will be a very amateur movie, only using the school resources." She explained her interest in the project:

> We have the camera here, it belongs to the school, it was never used, [it was] only used to record gatherings, everybody complains that they do not have a camera, they want a camera. You see, I am in public schools since 1996 and I always heard this complaint and suddenly the school has it and they do not use it, they say they can't use it. I took a course for teachers in which they taught us how to use the camera, it was training for teachers, so sometimes the school has the material and it is not used. Now I asked for the tape and the principal already provided it, so we want to produce a 5 minute video documentary. (Interview, 10.03.06)

Once Maria and the group of volunteer students had shot the images they wanted to use in their video documentary they faced extremely difficult situations given that the

school computers could not support programs to edit the images for the documentary. Maria did not give up. She visited the state secretary of education to try to borrow a computer. She told me later that she went there and walked around asking for it. She met a lot of people "except a very important woman who was never there." Then she added that "these people are never there, they're either traveling to the countryside or out for a meeting." I asked what happened and she answered "nothing, they asked me to send a project and I told them [that] we already sent 4 projects this year and nothing happened." Maria also told me that the only computer in the secretary that burns DVDs was the one in the main boss' office. And then Maria added: "do you think she will let me take the computer from there to the school? And it is a laptop [computer]." Maria then added "but I will not give up ... We can't wait for the ideal conditions to do a work." During the lab activities Maria brought her own home-computer to the school and since it also did not work she borrowed Rita's, the Portuguese teacher, home-computer. Despite many other difficulties (see Chapter 6), Maria and the students finished the video documentary.

Maria was very disappointed that her computer was not as useful as she supposed it to be. This did not surprise me since many teachers have talked about how it was difficult for them to buy and keep reliable computers. During the fieldwork Maria told me that her home computer was always out of order and so said Vera. She laughed at the situation and said that she "told her husband that if he does not fix the machine it will be a divorce" since she needed it to work on her online course on a weekly basis. Her husband could not fix the machine soon. Many times Maria, and also Vera, locked themselves inside the lab after school hours to work on their course assignments and post the materials on the course web interface.

During a final interview as I prepared to leave the field I was talking to Maria about the issue of digital technologies at school and the fact that the new computers promised by the state government had never arrived. Maria presented her own account of the situation:

> People talk a lot about technology today focused in computers, and nobody gives us the resources to make these changes happen, teachers must change, must change, and there are no resources in the schools so it will not work. I remember early when this computer thing started. They painted the wall outside [of the] school saying "this school has Internet" and when we arrived there we turned the computer on and there was no access [to the Internet]. It was [written] on the wall, so we live in this virtual world, the propaganda comes first ... [and] everybody wanted to see this thing called Internet, where is it. And when people asked for it they blamed people in the school, nobody goes to the [state] secretary [of education] to ask about it. And people say, no, it will arrive soon, it is just a matter of a cable and that would compromise the whole work we were developing, so it was the issue of the link [for Internet service], and then it goes, and then you see the difficulties, you can't turn on all computers, the signal drops, you do your planning, you have to have a plan b, something recorded in disc to work off line. It was very difficult in the beginning, still is, so it was in the wall and when you entered in the school you could not see it (the Internet working). Maybe because it was easy to paint the wall it was the first thing they did. By the way, you can't say anything, you do not have the power ... when you find something that is wrong and you can't change it, people listen and say nothing, it

remains like that. There are some students here at night that I would like to bring them here [the lab], they never turned on a computer. (Final Interview, 12.12.06)

Until April of 2007 the school had not yet received any of the new computers that were scheduled to arrive in October of 2006. On a message sent to me via Orkut, the library coordinator mentioned the issue. She wrote: "Are you kidding? These [computers] are just promises, promises and more promises."

A Record of Multiple Literacies Being Used at the School

Although the theme of digital technologies was not a very common one among teachers in this school, it showed up in their conversations once in a while. Many times, teachers mentioned it also because they were talking to me, who they identified as someone "who knows a lot about computers." The topic showed up in a very broad perspective, as they thought about the positioning of computer technologies in the contexts in which they navigate, and also at the school where they worked.

During an informal conversation the school principal told me how she was very intrigued to hear teachers complaining that they could no longer operate ATM machines in the bank. They said that the new machines "worked too fast" for them to make sense of it. According to the principal, teachers were not used to "think and act" that fast and most of them had to go to the cashier to do tasks they were able to do before with the old, "slow" computer machines. She said that some teachers at the school are "even afraid of a computer mouse." The school principal also digressed about the fact that "we have so much poverty and then we need to have these new technologies here in the school. This shows how the times are changing. We have all these machines and we still have illiterate people."

The compelling scenario presented by the school principal provides a reasonable account of the level and the extension of the enduring scarcity of resources and its consequences for the people associated with the school. Although illiteracy has officially decreased in Brazil in the past decades (IBGE, 2005b), the government statistics have also raised suspicion since the standards about what it means to be "literate"[8] are considered to be low. Therefore, illiteracy constitutes a challenging problem that schools have to face. More recently these dilapidated schools were also placed under the burden of having to deal with new, extremely complex issues around digital technologies and unfamiliar modalities of literacy. The school principal seemed to be aware of the challenges ahead when she acknowledged the need to incorporate these digital technologies at school while she also knew she would have to deal with the reality that many teachers did not know how to hold a computer mouse.

In 2005 the state secretary of education sent questionnaires to the school to assess teachers' abilities with digital technologies. As Maria told me during the fieldwork it was a little embarrassing for her to circulate the questionnaires since she knew that many teachers (particularly the ones teaching elementary school) did not know how to hold a mouse. Only 27 teachers returned the answers to her. Most teachers (16 of them) said they only knew how to use word processor programs, they did not know how to use Powerpoint, Paint (a program for drawing) and Excel. Also, most teachers said they accessed the Internet only at school. Three teachers said they accessed the Internet daily, nine teachers said they accessed it once a week, seven teachers said they did it two or

[8] IBGE considers a person to be literate when she/he is able to sign her/his name, write and read a simple sentence describing daily habits, read or write on her/his own, take a written test and understand it at the level of 3rd grade, be able to participate in community activities in which writing and reading are involved (IBGE, 2005a).

three times per month, and three teachers did it once a month. Five teachers did not answer that question. All teachers emphasized in the survey the need to have a teacher in full charge of the computer lab and also the need of having assistants to help in the computer lab (when the questionnaires were applied the computer lab was not yet running since the room was being adapted). Despite the problematic nature of the self-reported data here, the brief results seem to be interesting as they reflect the context in which teachers are situated. The low incidence of computer use does not seem particular to these teachers, but in fact it is a characteristic of this region of the country. According to official statistics, in this region (northeast) only 8.5% of the houses have a computer (and they may not be in working condition), and only 5.5% of the houses have Internet connection (in most cases via phone line) (CETIC, 2006).

At the beginning of the school year of 2006 Maria organized a field trip for the teachers to a city park on the edge of the river that students investigated as they participated in the *RiverWalk Brasil* project. The activity was part of the pedagogical week when teachers met at school to prepare for the beginning of classes. Maria said that the field trip was very successful and teachers enjoyed walking in the woods by the water and participating in the picnic. When teachers returned to the school Maria asked them to write short essays about their experiences in the field trip and she suggested that they would go to the computer lab to take advantage of the digital technologies available at school. As Maria told me in a low key voice, most teachers refused to go to the lab. They told her that they were feeling very comfortable at the teachers' lounge and they did not want to walk to the lab. Therefore, most teachers wrote their essays about the field trip by hand.

Maria did not seem to be surprised by teachers' reactions, although she expected them to be more open to try digital technologies. Maria herself had an ambiguous relationship with computers as I witnessed repeated times in the school. In many cases, she was seated in front of the computer and something caught her attention. Her first reaction was to walk away to grab a pen and a piece of paper to take notes on the information displayed on the screen. I never saw her using the mouse to cut and paste information and send it to herself via email (since printing is not available at the school). In one situation she copied down a very long, detailed web address instead of saving it in the Favorites feature of the computer's Internet browser. Once Maria told me that she liked to write everything that was important to her in a paper notebook. Then she added that she "did not have a lot of habit to use the computer, it is too far away from me." I could not escape noticing that there were two computer machines within three meters of her desk (one in the principal's office and one in the teachers' lounge).

Although Vera seemed to be comfortable with computers and to be more interested in using some digital technologies (I observed her doing her email, using a word processor and accessing her online course web interface to read and post assigned materials) she also manifested her preference for paper in some occasions. Once I had finished giving her a training about how to use the features of the *RiverWalk Brasil* web interface, Vera looked at the quick users' guide that I had brought to the lab and she said she would like to take it to the principals' office to make a copy of it. I told her that the same information was available at the web interface and all that she had to do was to click on that icon (I showed it to her on the screen). She ignored what I said and grabbed

the piece of paper. I told her that she did not have to make copies since I had brought that copy for her. She locked it inside her drawer before she left for her break.

I observed another case in which Vera was talking to Maria and other teachers about how she was struggling to move ahead with an assignment for her online course and that she was very happy since she found an article in an educational magazine. She said she could not wait to know if her friend in the library was able to find that magazine issue for her. I then told Vera not to worry since that magazine had all its content available for free on the Internet. At that point Vera looked at me and said "well, but you know what. I like to read these things in paper because then I can read it many times, go back, read some parts, write, underline, write notes on the sides, mess around with it. That is why I need to have it in paper. I can't read this on the screen." Again, printing was not a possibility given the perceived high costs of doing that at the school.

Overall, paper literacies permeated most communicative activities at the school, both related to teaching and learning and also in less formal situations, such as among teachers' social interactions. Posters spread around the building were handwritten or contained various collages (usually using materials from old magazines and newspapers). All documents were filed in paper and teachers walked around with many other school materials inside of envelopes. At the classroom teachers copied from paper to the blackboard and students wrote it down in their paper notebooks. During their free time in their lounge, teachers browsed magazines, beauty products' catalogues and talked about family issues among themselves. The computer was turned on most of the times but rarely there was someone using the machine.

Summary

This chapter describes the context in which the school is situated. It focuses particularly on how issues of material scarcity present in the field both reflected broader difficulties in the Brazilian public system of education and interfered and constrained literacy practices around digital technologies at the school. Although teachers tend to acknowledge the importance of these new literacies within the school experience, it is extremely difficult for them to deal with this issue. This happens because the challenges are connected to a broader phenomenon that extrapolates the boundaries of the school and upon which they have little say. At the school level such reality constrains initiatives around digital technologies and it poses new challenges that teachers are not sure they will able to overcome, despite a few attempts to do so.

In line with the theoretical perspective proposed by the "ideological model" of literacy (Street, 1984) the analysis conducted in this chapter will frame and situate the data to be presented following in chapter 5 and chapter 6. The students' actions around literacies to be analyzed and described in these following chapters will take place within this institutional experience of accentuated scarcity of resources, particularly digital technologies.

CHAPTER 5
WRITING, COMMUNICATING AND MAKING SENSE OF IT

> [I]t's the breadth of the symbolic repertoire, the sense of competent agency, and the social sophistication to shift one's actions to suit local conditions, that allow children to become full participants in their presents and in their travels into their futures.
>
> -- Anne Haas Dyson (2003, p.3)

Introduction

This chapter focuses on students' actions around writing at school and beyond it. I selected the pieces below following students' criteria that identified such artifacts as examples of their writing "at school" – even if this writing was related to an "off task" activity (e.g., instant-messaging-in-paper) – and outside of school (in this case, I asked them if they could "show me anything they write outside of school"). I briefly describe their writing artifacts and I also identify some of their own thinking about them. In particular, I indicate how these students made sense of their writing and what their main intentions were as they wrote these pieces.

The theoretical perspective informing this dissertation project (as detailed in Chapter 1) frames students' writing as actions that take place within their cultural practices, which are situated in specific contexts. As proposed by Holquist, referencing Bakhtin's work, "the place from which we speak [and write] plays an important role in determining what we say [and write]" (Holquist, 1986, p. X). I am not proposing different or even separate, oppositional instances of students' writing, i.e., in schools versus out of school. Rather, exploring the various actions around writing – even if permeated by contrasting experiences – seems to account more adequately for the complexity of their practices. I observed, registered and analyzed students' actions

around writing as they permeated multiple moments of their lives (e.g., at home, during the break, at the cyber café, in classroom, and in the computer lab). I also included the various tools that students manage to write, from paper and pens to digital technologies.

These actions and tools may be more or less meaningful to students as they try to communicate. Under some circumstances, students writing will occur in tension with their own understandings and their desires to communicate, particularly within formal schooling when they must adhere to the teachers' propositions in order to receive a good grade or to have good behavior in class. These relatively decontextualized experiences with writing, less situated in their communicative purposes and social lives, manifested as students' "lack of ability" or "lack of understanding" and even as literacy "deficit."

Chapters 5 and 6 address various events that took place in the field. In line with this theoretical perspective these events seem to shed light on key research questions that guide my dissertation project. In particular, the analysis that I develop in these two chapters will indicate the continuities and the discontinuities between students' communicative practices (around writing and uses of digital technologies) in the classroom, in the computer lab and outside of school. The following chapters also examine how these students' experiences are organized in patterns of learned cultural practices around literacy and communicative practices. And finally, the chapters address the issue of how their literacy practices were influenced by their perceptions of schooling.

More broadly, these two chapters contain evidence and analysis that provide elements to discuss recurrent perspectives and practices embodied in international literacy programs that have associated "development" with literacy "acquisition" – which have now been reframed according to the new call for learning how to use digital

technologies. This discussion will be further developed towards the end of Chapter 6 and it will be extended on Chapter 7, in which the implications of these study findings will be addressed in more detail.

At School - River Related Writing

Writing a Report about a Field Trip

This event portrays two male students' "struggle" as they had to complete a writing assignment in class. Students actions in class and their reasoning about their written pieces constitute evidence that indicate the difficulties created by their requirement to participate in what did not seem to be a meaningful writing practice to them, despite their intellectual abilities to criticize and to propose "improvements" to their reports. What manifested as students' "lack of literacy skills" was in part produced by a lack of interest given the decontextualized character of the assignment, according to students' views of the event. These constituted important elements present in students' writing as I observed in the field.

As I started following focal students' writing activities in class I noticed that their written artifacts produced in classroom did not match their other communicative abilities that they reported to me or that I observed in the field. Also, it seemed that these processes were most of the time mediated by other peers and the end result seemed to be short of their manifest intellectual abilities. The contrast between students' actions (both reported by them and observed by me) and their school writing process and artifacts became an intriguing locus of investigation as I struggled to make sense of students' communicative practices and how their experiences of schooling were interfering with these practices. Also, I assumed that these communicative practices situated at school

would interfere, or at least they would be present, in their participation in the *RiverWalk Brasil* project.

At school, most students wrote very little and their writing process was "slow" and it was permeated by many "off task" actions. In many cases students would write one or two sentences before they interrupted it to go chat with friends about non-related issues. Some students would go back to writing after they finished the parallel conversation, while others used to jump to another theme in the conversation or another activity, such as browsing a magazine or looking at someone's cell phone. Some teachers would walk around the room and tell students to go back to writing. In some cases students did just that while in other situations students grabbed a friends' notebook and copied down parts of the text as their own. When I read these texts they did not seem to be written by the talkative and energetic teenagers I was observing. The sentences in their written materials were short and the structure of the sentences was basic, with few accessory terms. The vocabulary was basal and the narrative was obvious and it approached ideas in a superficial way. In many situations it took some students over an hour to write a full paragraph. Many of these writing artifacts did not seem to contain the imprint of their authors in particular. While Wagner was always talking about "cool" things he was learning outside of school, his hand written school texts looked like bureaucratic, unimaginative reports. The following event in which students were asked to write a report about their field trip along the river as it crosses the community where most of them have lived for many years is representative of their actions around writing at school and it indicates my attempt to understand their experiences with school-based literacy practices.

The Event

The event occurred one day after the whole class left school early to walk through the neighborhood along the polluted river they had been investigating for their *RiverWalk Brasil* project activities. Maria, the school coordinator, and project participant teachers participated in the field trip. The group walked to the residents' association where they talked to the organization's president. They walked around the community and they interviewed a resident couple about floods during the brief rain season. One teacher took pictures along the way. Few students wrote notes in their notebooks.

Two days before the activity Rita, the Portuguese teacher, asked them to write, in groups, three questions they thought it would be important to focus on as they conducted the field trip. She also told them to take their notebooks with them to write notes, which many of them did not do. After they got back Gloria, the biology teacher, asked them to write a report focusing on the main points they observed during the field trip. Gloria also told students she was going to walk by their desks to see the texts and that they would be asked to read it aloud to the class. She did not mention any grading related to it. This writing activity took place on Monday and, as it was usual, students were eager to tell each other the news about the weekend. So it took them a while to quiet down a little.

I was seated with an informal group of five boys in the back of the class. As they slowly wrote their reports, a few words at a time, they engaged in all sorts of parallel conversations. Some of them told jokes with sexual connotations; others talked about girls they were interested in. They also digressed about soccer and popular music. Once in a while Roberto and Wagner, the two male students sitting closer to me, stopped writing and went to look at Wagner's cell phone together (to read some text messages

sent by their buddies). They also wanted to know more about my recording device (they thought it was also a cell phone), and they expressed their surprise since I was taking notes in English. I remained in silence most of the time. After half an hour had passed Wagner had barely finished the first sentence of his report. Roberto had written two full sentences and during that process he turned to others near him for help. Roberto asked the name of the residents' association president they met, and he also asked about the names of the streets they walked by since he lived a little far away from that region. In most cases the other boy in the group, who lived nearby, knew the answers and helped him. Wagner peeked at Roberto's text once in a while (see Figure 3 and Figure 4 in Appendix A).

Gloria told them they would have another five minutes to complete the task since they had been involved with the report writing for 50 minutes already. The boys complained and she gave them another 10 minutes. At that point Wagner and Roberto had not written anything else. Gloria told them they had to finish it quickly since students would be asked to read to the class. Wagner wrote a few sentences more and he started reading his text aloud to Roberto. Roberto listened to it carefully.

Wagner to Roberto: How is it going?

Roberto: Put a period and start down there. Put a paragraph.

Wagner: No, this is just a draft.

Gloria interrupted them as she asked students to start reading their reports. Neither Wagner nor Roberto volunteered to read and the class was soon over.

During a follow up interview I conducted with these male students both Wagner and Roberto talked about how they liked some aspects of the writing activity and also

how they did not like it. They said they enjoyed doing it because "most of the time we copy things [but] in this case we had to go there, observe everything, pay attention, and then come back and write about it." Wagner said that he "did not write it as a report really, it was more as a summary with the most important things really." And then Wagner said "I liked, I like to write, but I can't write from nothing, but, like, for example, in this case of [the] report, it is good because we will say what we learned, what we saw, we saw a lot of things but we put just ours [ideas]."

I pointed to their texts written in a paper sheet from their notebooks:

Eduardo: If you could change it and do something the way you want, would you change anything?

Wagner: I would go deeper in details.

Eduardo: Would you insert more information?

Wagner: More information.

Eduardo: How about other elements?

Wagner: It depends of the audience. In this case I was writing for the teacher and we were told it would be up loaded to the Internet (he was referring to the *RiverWalk Brasil* web interface). Now if I was going to write to my friends I would write it more informally, I would not use Mr. Alberto, I would say "that guy who was there explained to us."

Eduardo: Would you use a less formal language then?

Wagner: Right.

Eduardo: Why would you do that?

Wagner: Because nowadays, as we talked about communication, we (he looks at his friends in the room) have language from Internet, we cut (by shortening and changing the traditional writing) of a lot of words.

Despite his difficulties, Roberto also elaborated on his written material:

Eduardo: So you are telling me that any person could have written this?

Roberto: Yes.

Eduardo: Why didn't you try to do this more your way then?

Roberto: Because we did not have time and we had to do it quickly so we did it in a hurry to hand this in, not much time to think.

...

Roberto: Some things are tied up with other parts here, not even finished something and then [I] already started [writing about] other things [topics].

Eduardo: For example, show me where you see that.

Roberto: Oh God, brother, I will have a heart attack here, brother.

(pause)

Roberto: Here, (he reads it aloud) we left the school and went to the association there and we asked some questions to the president, who was Mr. Alberto, and he presented some projects to us. So I say (in his report that) we are already arriving there and asking the questions and already jumped here (points to his text) talking about the projects.

Roberto had a nervous grim on his face indicating that he was making an intellectual effort to elaborate on his own writing in very thoughtful ways. He seemed to be proud of his ability to do so. It was not surprising that Roberto struggled a little since

that kind of analysis was not common at the school. Most of the time when they wrote something, they would hand it in and then they would forget about it.

A closer analysis indicates that the blunt, unimaginative texts produced by Wagner and Roberto contrasted with their lively and outspoken behavior. Despite their low socioeconomic status, they were usually very talkative and they were always looking for new things to do. Wagner was involved with a theatre group and he was a member of a team of *parkour* practitioners, a French extreme sport. He traveled often with his father, and he was eager to talk about new things he learned in these journeys. Roberto was a member of a local group that promoted parties and social encounters to talk about music and games, and he enjoyed going to the movies with his girlfriend. Yet, when they were asked to write at school they were never willing to engage in this activity. Once teachers put pressure on them, Wagner and Roberto wrote in an impersonal, non-compelling way that contrasted with their lively interactions in other moments of their schooling experiences. And they recognized "the way school writing should be" even though they were not very satisfied with that. In many situations, Wagner, Roberto and other students mentioned to me that they were doing the writing assignment only because they needed to get a pass grade at the end of the year. This resulted in the fact that they wrote very little while at school.

Wagner's and Roberto's writing practices at school were not very different from the other students I observed in class. There were even cases in which students said out loud that they did not want to write (once the teacher had given them an assignment). For the ones who were willing to write, the process was similar to Wagner's and Roberto's (i.e., it was permeated by other actions and conversations not directly related to the

topic), and the texts were short, standardized and unimaginative. Teachers' perceptions of students' writing in classroom were mixed and mostly related to the final written product, not with the process. Teachers would point out students' lack of interest in writing and in some situations they would attribute such behavior to what they considered to be a lack of self-esteem from the students – not a lack of literacy skills.

As Maria, the school coordinator, said during an interview, "someone has to convince them that they are able to do it and that they can do it, but their lives are difficult and at times they seem to loose the hope." In other situations, teachers looked for reasons that seemed to justify the "shortcoming" of the students' writing. Rosa, the school principal said in an informal conversation, that "they rarely write and now when they do it is on Orkut and it is all wrong" (she was referring to students' writing practices of cutting words and using letters based on their sounds and not on grammar rules). And yet in other circumstances teachers would demonstrate some surprise when faced with what they considered to be "good" texts written by students. During one informal meeting at the computer lab, Gloria was reading some short reports students wrote about another field trip, and she said to Maria "you know, these students are not that bad [in writing those texts]." Maria nodded her head.

Rita, the Portuguese teacher, recognized students' "difficulties" and as she told me during an interview, she struggled to find ways to help them. Rita considered that giving full feedback to each student was almost impossible since she had too many students and there was not enough time to read and reply individually to each one of them. Also, she told me that her experience had demonstrated that in many cases students did not read her comments about their written materials. As she put it, "all they want to

know is what their grade in the assignment is." In any case, she said that when giving feedback to students it was best to focus on one single aspect of the writing (e.g., vocabulary or verbal tenses). By using that strategy she said it was "easier for students to absorb something."

Students' struggle to manipulate some lexical and syntactical aspects in their writing pieces may lead one to assume that they had "poor" literacy skills and that they were unable to write. However, when Wagner and Roberto were thinking about their written artifacts they demonstrated that this was not always the case. I draw on Chang-Wells (1993) conceptualizations to formulate that students revealed their propositional knowledge (they had knowledge about the content of their narratives and they were able to use it in their texts), procedural knowledge (they knew how to adapt their messages to specific genres) and they had metacognitive knowledge as they talked about their texts from a critical perspective. As it is formulated by Applebee (2000, p.101), citing Bereiter and Scardamalia (1978), students used two different approaches to writing, "knowledge telling" (the writer efficiently tells what they know about a topic) and "knowledge transforming" (the writer develops new ideas within the process of composing). Wagner stated that he would provide more details as a way to "improve" his text and he also said that the kind of details he would insert would be dependent of the kind of audience he was aiming to address. Roberto identified abrupt moves from one topic to another in his text, demonstrating his ability to formulate parameters for a more coherent narrative.

In many situations students' interactions during writing assignments in the classroom were unfocused and non-related to the proposed topic, as it was the case of Roberto and Wagner in many moments of their report writing. In other cases, however,

the apparently "messy" interaction among students had some elements that constituted what seemed to be their "tactics" (de Certeau, 1984) to try to overcome difficulties with writing and to "improve" their writing materials. The following topic will describe one event in which these "tactics" were manifested during a Portuguese class held at the beginning of the fieldwork. These issues and concepts will be addressed once again in this chapter in a more integrative way after I provide analysis of the other students' activities, which will be detailed next.

Team Work in the Co-Construction of a Funk

While in some situations students "struggled" to write given the decontextualized character of the school assignment, in other situations students were able to make sense of the assignment and they were able to draw on their meaningful communicative practices to fulfill school writing requirements. Yet, they struggled with some aspects of these writing activities. The event to be analyzed next depicts students writing again about the same theme of the river and the community in which they live. But in this case instead of having to write a report to the teacher, students were given the opportunity to choose a narrative genre that they seemed to be more familiar with and they were told by the teacher that their written artifact was to be presented to their classmates. The event reveals students' actions to initiate writing in meaningful ways and their engagement with the task. I indicate how peer support played as "tactics"(de Certeau, 1984) to overcome their difficulties with writing. This refers to students being able to use the constraining context of the classroom in that school to take advantage of the constraints instead of being subjugated by them.

The Event

Rita had recently started a new curriculum-mandated unit about different narrative genres. She explained, in a lecture, the main characteristics of each genre and she used some activities from the course book to get students thinking about the genres. On the following class meeting she told students they would work in groups to develop a narrative based in one of the genres discussed in class. She also told them that the theme of the narrative would be the river they had been investigating. At that point she did not mention to them that these materials would later on constitute the narratives of their pages within the *RiverWalk Brasil* project web interface. Rita passed along a list of genres that included poetry, music parody, comics, short story, news report, rap music, cartoon and *cordel* (a local form of spoken short narrative with music background). I was seated at the back of the room, and I started following a group of male students closest to me. They chose to develop a rap.

As soon as students signed up for rap music they started singing rap songs they knew and many of them had smiles in their faces, which was not a common scene at the school. Soon the bell rang and they rushed out of the classroom. A few days later they arrived for the Portuguese class with a draft of their song. They had changed it from rap to funk music because when they "tried to do the rhymes with rap it was too difficult to keep the rhythm we wanted to do and we also like funk a lot" said Tomas during a follow up interview. They told me they met at Tomas' house during the weekend to listen to "cool" music. Some of these songs are in a CD compilation put out by their soccer team organization. It is a collection of songs that the team fans sing when they go to the stadium to watch games; many of these are funk songs. They told me this inspired them and "it was very easy to write the lyrics from there." As Tomas told me in a follow up

interview: "I chose the music and with their help we started doing like a rhyme and I tried to tie it with the song and then make rhythm, and after that we listened to more music and we saw the rhythm of funk adapted better, everybody here agreed, we went to my house, we rehearsed." While Tomas wrote most of it, the other team members also contributed with some words and sentences.

When Tomas and his "funk" group arrived in class they were not sure about the chorus and also about two sentences that they thought were not very well tied to the rhythm so they started revisions. Wilson took care of the writing while all the other team members engaged in a lively exchange. The two passages below show the process in which they worked together and negotiated words to improve the song lyrics.

Wilson (says part of the lyrics): "[It] will get better."

Tomas: "[It] will get better."

Wilson: "Our river will get better."

Wilson: "Our river gets better" (they take away the one verb from the sentence).

Tomas (singing): "So let's help, with everybody together we can help, our river will get better."

Wilson: Now [let's try] without it (the last verb).

Wilson: "So let's help, with everybody together we can help our river get better."

Tomas: It is complete (with the verb).

Wilson: I don't think so, I think instead of "our river will get better," [let's put]"our river gets better" (without the verb) is more unified, more complete.

After a brief pause they move ahead.

Male student: This is better.

Male student: "With everybody together our life will get better."

Male student: Insert a dash there, the rhyme.

Male student: "With everybody together our life, I think that our life will get better."

Wilson: "Our river."

Tomas: We need to get used to it.

Wilson: Get used, it is all about training.

Girl (from another team) to Tomas: Haven't you put "all together our river gets better" or "will change" or just "get better" it is best to sing, don't you think?

Wilson: Change it.

Girl (singing): "With everybody together to change our river" or "our river will get better."

Wilson: Leave "get better" since it goes with this here, "will get better, our life gets better" and now "the river gets better."

Tomas and Wilson were the ones making the final decision to incorporate some suggestions into the lyrics. After they inserted new words they would sing it again and again to make sure the words would match the song rhythm. Once they agreed with everything, Wilson started writing down "a clean copy to hand it to the teacher" (see figure 5 in Appendix A).

As the class progressed they evaluated their work against the rest of the class members and they expressed what seemed to be their ultimate goal with the activity.

Tomas: I heard all projects are good.

Wilson: Only ours, ours is cool, ours is best.

Tomas: Not everybody is excellent, [you] have to do your best.

Edison: We did our best.

Tomas: Everybody wants a good grade, of course.

Wilson: From eight to ten (grade point).

They also commented about their team work. Wilson said that "[it is] interesting, when each one wants to help each other the work improves. Now, when it is each one for each one [then] no, [if it is] just you then it is not so good. Remember that guy's sister? (Her assignment was supposed to be done) in team and she did it on her own and she got a bad grade and the teacher said it was going to give a bad grade because she did it on her own, the biology teacher." A group of girls worked on a song parody in similar lines for this assignment. They chose a song that "was very popular in the radio" and they developed their narrative in their team using peer support as they negotiated words, sentences and ideas to find a better fit with the rhythm of the original song that they were parodying.

As formulated by Moll and Whitmore (as cited in Dyson, 2000), in this event students explored a "collective" zone, formulated by diverse turns in "varied units of oral and written language to make decisions about topics for study, resources to consult, and issues to analyze, as well as more text-focused decisions involving planning, encoding, and evaluating text" (p.53) as they constructed and "improved" their funk.

When Rita arrived to work with this group at the back of the room it was the end of the class period (she had been working with other groups before) and the boys had already finished working in the funk lyrics. At that point they were writing short materials also required in which they talked about why they chose the funk as a narrative

genre, what funk means and what they learned as they worked on that assignment. As they told Rita that they were done working with the funk she only provided them with brief orientations about the other short texts and soon the class was over. Rita collected the clean copy students prepared to hand in for grading.

Contrasting with Wagner's and Roberto's disengagement with school writing – despite their elaborations about their own writing and about what writing is about – this group of male students took advantage of the Portuguese class assignment to write something they "liked." While the assignment opened up this possibility as it offered various narrative genres, students jumped to the one they liked the most (rap and then funk music) and then they worked together to improve it and get a good grade. It was "easy" to them since they were able to make sense of it based on a way of expression close to them – soccer stadium songs. Yet, they knew this was "school work" and they tried to keep on task, to produce quality work to get a good grade, and they handed in a "clean" and well organized final copy of the song lyric. Students' imprint in the writing artifact was clear in many aspects (e.g., the genre that they sing when they go to the soccer stadium, the vocabulary they use among themselves, including some non-standard orthography and verb conjugation, the connections with issues present in their neighborhood, domestic garbage on the edge of the river).

While I focused my attention mostly on this boys' group during this event, I got a sense that other groups (although not all of them) were proceeding in similar ways with the assignment. Overall, there was a lot of "noise" in the classroom and most of the time I took that as students exchanging ideas and trying to move ahead with the assignment. Based on parallel comments that I heard from other students at that time and that I

registered in writing in my notepad, I understood that they were both concerned about writing something really "cool" that they would later "have to present to the whole class." Students were also concerned about getting a good grade in the assignment.

During that activity, another group of boys (in which Wagner and Roberto were members) did not seem to be much into the activity. However, it is difficult to establish a parallel or a contrast between this group and the other ones since they opted to work on a cartoon in which they decided not to use written text. While I got a sense that they were disengaged, that may have been due to the fact that at a certain point the actual drawing had to be done by a single team member. Throughout the fieldwork I observed various groups engaged in peer support as a way to overcome "difficulties" and "improve" their writing, particularly during their preparation to a simulated jury about a movie based on a Portuguese classic novel and for their final year book presentation assignment. In those events students also seemed to be drawing on peer support as "tactics" to overcome writing difficulties and to achieve their communicative goals and also to achieve the teacher proposed goals for the assignment. As de Certeau (1984) theorized in relation to workers in France, "they introduce into it [workplace constraints] a way of turning it to their advantage that obeys other rules and constitutes something like a second level interwoven into the first" (p.30). Students transformed their usually informal off-topic chatting during class assignments into focused exchanges that helped them access each other's abilities with language use to move ahead in their writing. This took place despite individual difficulties with some aspects of the language and, in this case in particular, their struggle to make the written text fit "well" with the funk rhythm.

Non School-Related Writing

As I conducted my study I assumed that many students used writing in situations in which written text was "appropriate" within communicative practices they engaged in their daily lives beyond the practices they were exposed to at school. I also assumed that in those situations (in which students wrote about off-school topics or when they wrote outside of school) students were drawing also on some school practices. The two next topics address these experiences to indicate the continuities and the discontinuities between students' writing within the frame of formal schooling and students' writing within other contexts in which they considered writing to be meaningful to their communicative practices and to their lives.

Instant-Messenger-in-Paper: Inside the Classroom

In depicting the next event I explore further the complexity of students' writing by introducing two additional aspects of their practices. First, the evidence shows that students' off task writing in the classroom was recurrent, indicating their ability and their desire to write. Students made sense of their actions around writing in very complex, sophisticated ways as they incorporated features and language from their practices with digital technologies to describe their actions and also to indicate new features of their writing on paper not afforded by digital technologies as they experienced it in the local cyber café. Students' practices and their reasoning about such practices are evidence of their frequent and complex uses and understanding of literacy writing tools to communicate, despite the off task character of the activity in the classroom.

The Event

As I began to get more used to the messy environment of the classroom I spotted a group of four girls and a boy across the room that seemed to be into passing paper

messages between themselves during the classes I observed. They circulated paper balls between them with various frantically written short notes on it. During the break I approached Laura, one of the girls in the informal group, and I told her that since my dissertation project was about their various experiences with writing I was interested in reading what was written on their paper ball messages. She was very surprised and told me she would have to go ask her other friends about it. Less then five minutes later she returned with a few pieces of paper in her hand. She told me that Marta would also give me some papers later, which happened right after the break.

In the paper balls that I collected students wrote about their love lives and about small fights among them. In the first set of papers they all wrote to a boy in whom one of the girls was interested. The other girls seemed to be trying to learn if the boy had serious feelings for their girlfriend or if the romance would be just a passing thing. On the other set of notes one of the girls was very upset with her friends who had told some of her secrets to another boy (see figure 6 in Appendix A). While the girls argued that they did that with their best intentions to help her, she argued that they did not have the right to release that information without her consent.

I conducted a formal open-ended interview in September to learn more about these girls' communicative practices and how they would make sense of these practices within their social and cultural context. They were talking about using Orkut, as I transcribe below:

Eduardo: Is it very different writing there [in the cyber café] in Orkut and in class?

Patricia: Yes, yes.

Ruth: More practical, get less tired (doing Orkut).

Eduardo: Which [one]?

Valeria: I prefer to write in class, write in class.

(Laughs)

At this point I was surprised by what Valeria meant because she always refused to "write" in class as I had observed her.

Valeria: It is more exciting in class, we see what the guy is saying, like with Alex (laughs) we see what the guy is doing.

Valeria was talking about writing the paper ball notes when we were talking about things they would do in the cyber café (my first statement in the previous quotation). Valeria associated the paper ball messages with the same type of communication she engaged in when she would use instant-messaging on the Internet. I then tried to clarify it:

Eduardo (still not sure what they meant): How is that? Does it look like [instant] messaging when you are doing the paper ball in class, back and forth?

(Laughs)

Patricia: It is like that.

Eduardo: But there is no computer.

Valeria: And in the MSN (instant-messenger) we do not see the [other] person, here [in paper balls] we see the person, we know if he liked it or not.

Eduardo: What can you see?

Patricia: The person reads it, right? And the person laughs, [then] we know if he did not like it.

Amanda: When we send [a message] from Orkut to another person we do not see the reaction [of the recipient].

When I observed the girls doing writing in paper balls they were identifying other possibilities for writing in class, even while they were working on a formal writing assignment, which usually happened. In fact, in those cases it was common for Valeria to ask another friend to work on her class assignment while she would coordinate the paper ball exchange. Also, they established a clear association with the tool they used in the cyber café to "get to know new boys" and its use in class around the theme of love and friendship despite the absence of digital technologies in the room. And they pointed to some advantages they experienced when they used the paper version of it. They told me that this version of it gives them more clues about the recipient reactions so that they can readjust their messages as the exchange dialogue goes on.

As demonstrated by the evidence provided by Wagner and Roberto during their formal interviews, the girls' analysis on this topic (as quoted in excerpts from their interviews) demonstrate their sophisticated intellectual abilities to write and to make sense of their writing and the tools they use to write. Once again, as Wagner and Roberto did about their reports, the girls demonstrated propositional knowledge, procedural knowledge (Chang-Wells & Wells, 1993) and metacognitive knowledge about their texts. The girls' hybrid formulation of the instant-messenger-in-paper incorporates oral-written-digital modes in a single artifact and seems to be related to mechanisms defined by Bakhtin as secondary (complex) speech genres, e.g., novels, dramas "during the process of their formation, they absorb and digest various primary (simple) genres that have taken

form in unintended speech communion. These primary genres are altered and assume a special character when they enter into the complex ones" (Bakhtin, 1986, p.62).

Dyson follows Bakhtin's proposition to formulate that "most written genres have been formed by 'absorb[ing] and digest[ing]' simpler, usually oral, genres such as dialogue. Thus, our written voices are quite literally linked to the oral voices of others (Dyson, 2000, p.58). The girls' formulation also seems to be in line with Fairclough's proposition of cultural hybridity, meaning "shifting boundaries and flows between orders of discourse" (Fairclough, 2000, p.173). The case of the instant-messenger-in-paper also indicates the agglomeration of the three instances in one: that modality of writing has its origins in oral conversation (a dialogue that is realized through writing in paper) but that is also connected to a way of writing and communicating by using digital technologies, in this case an instant-messaging program to exchange messages through the Internet.

The girls promoted re-interpretations of their uses of digital technologies on the level of their traditional writing (in paper, since that is what is meaningful to them) to get a sense about the other's reactions as they exchange messages. They re-adjusted the messages to ensure they managed the dialogue to produce desired results – in this case, to find out if the boy's intentions with a dear friend were trustworthy. And they did all this in the absence of digital technologies that inspired such approach while recognizing improved features in their practice – they said they could get a better sense of the recipient's reactions and that this allowed them to reformulate their own messages to be more on target. This evidence shows students' complex use and understanding of literacy tools to write and to communicate according to their context and to achieve their goals while accounting for the hybrid character of the communicative practice – affordances

from paper and from digital technologies agglomerated in a single artifact. Although this took place inside the classroom and in the presence of a teacher, students clearly identified this event as non-school related.

Manly Poems: Inside and Outside of the Classroom

The girls' complex uses and formulations about the hybrid character of their writing in light of their experiences with digital technologies is certainly not an isolated occurrence in the field. Other events that I observed also contain evidence that students are open to and in fact engage with literacy practices that do not seem to be usually associated with current stereotypes about their "limited" experience with literacy. That took place despite the hard financial conditions in which they live, their perceived low self-esteem, and despite the difficulties faced at school. On this topic I describe two males' experiences with poetry and, more specifically, their engagement with poetry as a way to exercise their writing abilities and as a way to express their private feelings to the girls they felt in love with.

Poetry is not emphasized in the second year curriculum as Rita reminded me. Because she is required to cover Brazilian literature styles that are not particularly fertile with poetry she does not find many opportunities to bring these texts to class or to talk about this genre with students. She told me that the curriculum focuses more extensively on poetry in the third year of high school. Yet, Edison told me that he liked to go to the library to borrow poetry books. He added that he preferred the poems that contained a narrative instead of the more modern ones in which it was "difficult" to identify a narrative thread. Edison enjoyed reading poems and he had borrowed a few books from the library at that point, some of which he shared with his buddy Tomas. Using similar

"tactics" to that they used to move ahead with the writing of their funk, Edison and Tomas also used to share the writing of poems, although in some situations they preserved some of their own particularities into the text, such as choosing to end the poem in different ways.

The Event

Edison and Tomas talked at length about this topic when I conducted a formal, open-ended interview with a group of boys to learn more about their communicative practices and to gain insight into how they made sense of these practices. At a certain point of the interview Tomas said that his girlfriend was the one who insisted the most for him to read (he had said that he was not much into reading for school although he loved to read the sports section of the local newspaper). That comment led Edison to say that he thought women are the ones who really like to study (implying that studying is not really for men). After the boys expressed their position I remembered that Edison had told me he liked to read poetry. I thought it was appropriate to bring that into the conversation. It followed like this:

Eduardo: What kind of poetry do you like to read Edison?

Edison: Love.

Tomas: Edison and I, we read a lot of verses, here in class, he brings his, I bring mine, we write [other verses].

Edison: The notebook I have at home, there is one section only with verses.

Tomas: I created a whole poem to my girlfriend myself.

Once the interview was over I asked Tomas and Edison if they could bring the poems they wrote for me to read. And so they did. At the end of the semester I formally

interviewed Edison and Tomas again. We talked about what they meant when they wrote a poem to their girlfriends (see Figure 7 in Appendix A):

Tomas: I wanted to say how much she is important to me, what she means to me and [that] she is important to me, not only her beauty but also her [other] qualities.

Eduardo: And why did you want to do [write the poem] with two colors (blue and red ink)?

Tomas: Like, this part, it was like one part starting and the other finishing, making the rhyme.

...

Tomas: This way it is easier to find the point of the rhyme, the blue is the beginning and the red is the end of the rhyme.

Eduardo: For example, here, where is the point of rhyme (I point to a sentence in the poem).

Tomas: Here start with "*louco*" (crazy) and then rhyme here with "*ouro*" (gold).

Edison: Usually it is the end, we try to rhyme the last word.

Tomas: Because if you put the last [word] and then another one in the middle it will be too long and with no sense then in the end.

Edison and Tomas also talked about how they enjoyed the moments they shared writing poems together for their girlfriends. And they pointed that sometimes they inserted their individual perspectives to poems they started writing together.

Tomas: Most recently Edison and I are doing it together, more like that.

Eduardo: But then you both give it to your girlfriends.

Edison: The one we started here in class I finished it at home and I sent it to her, I do not know if Tomas finished his.

Tomas: Right, I got the one we did together and then I complemented it with the rest, like my way, different.

Edison to Tomas: Do you remember the beginning of that one we were creating?

Tomas: It is here in my notebook. The beginning is like his but the end, this part here, I did it on my own, this part here (he shows in his notebook's last page).

Despite gendered notions that led Tomas and Edison to associate "reading" and "studying" as female attributions they could also easily associate themselves with poetry (which could also be perceived as a female, "romantic" style). In their conversation they expressed knowledge about rhyme construction and they used multimodal representational forms (different ink colors) to highlight what to them seemed to be one of the key aspects of their poetry – the rhymes. While they liked to write poetry together, in a way similar to the funk music lyrics, they also assumed independence in this "personal" writing to their girlfriends by adding an end to the poem on their own. And they talked about the message delivered by their poems in a clear, thoughtful way.

Complex Literacy Practices

While ethnographic studies have played an extremely important role in demonstrating that people situated in different contexts may have different uses and different understanding of literacy for their own lives, many of these studies have adopted what seem to be a more romanticized view about these people's literacy practices (Street, 2001). Authors have emphasized these people's literacies as crafted within less "powerful" uses of literacy, such as literacies present in the exchange of products in a

street fair, or literacies enacted in religious ceremonies in remote villages. While these accounts claim and may do justice to meaningful literacies in these people's contexts, it also seems to distance some people from literacy practices that are more socially praised such as reading pieces of classic literature, or writing in an argumentative style and enjoying poetry as either leisure or as a communicative strategy. The essentialization of these people's literacies may reaffirm some stereotypes, and it also may circumscribe their access and chances to navigate through other circles of social life in which other forms of literacy are usually at play.

Edison's and Tomas' experiences with poems beyond school requirements and despite the hardship of their personal lives extends Street's critique as it demonstrate that members of lower social classes also use and make sense of literacy practices usually associated with higher social classes and with more academic, less customary uses of literacy to communicate. While these students' use of poetry seems to be circumscribed to certain specific themes and goals, it nevertheless demonstrates their abilities to write in what is usually considered a more complex genre. It also provides evidence about their dispositions to overcome conventions and stereotypes that would seem to challenge their male, soccer-lovers' identities as they engage in certain literacy practices associated with female behaviors. As it was the case with the previous events, the boys' writing of poetry seems to demonstrate that students' use of writing and literacy tools is closely related to their perceptions of their communicative goals – in this case, to express their love for their girlfriends. These actions are goal directed and socially embedded – writing poems as perceived as a more valuable written artifact – even though they do it together to make

it "easier' but also more enjoyable as they construct ideas together and spend time in each others' company.

The boys' written artifact demonstrated that they extended the representational shortcomings of their poem written in paper by incorporating other symbolic elements to convey meaning. They used the image of game score (as it is displayed in stadium) with the couples' names in the place of the soccer team names. The use of these images and the use of different ink colors seem to be related also to their very recent experiences with digital technologies in the local cyber café (most people use different colors to identify themselves – the text they are typing – as they participate in online chats). This characteristic also points to the hybrid character of the boys' writing and indicates their ability to explore other levels of complexity in the poem. As in the case of the girls using instant-messaging-in-paper, Edison's and Tomas' experiences demonstrate their interest and their ability to write and to make sense of their literacy practices as a way to achieve important goals, even if not directly related to school.

The data analysis revealed that most students in the classroom I observed liked to write as they liked to talk, to sing, to play games, and to watch TV. And most of them were able to make sense of their writings on various levels. The events described on the topics below are representative of their literacy abilities. In some situations, students engaged in writing for the school. These practices were perceived by them as "serious" writing. In other situations, they faked school writing while they used that time to do things they thought were more "interesting." This was demonstrated by the event in which Wagner and Roberto diverted their attention to other "cool" activities and subjects – which resulted in short, unimaginative, standard texts. And it was demonstrated also by

the girls' instant-messaging-in-paper writing during class activities. Wagner and Roberto were aware of their lack of focus in the assigned writing activity, and they had some ideas about how to "improve" it, although they rarely did it. The girls were also aware of their disdain for school writing and they thought that their parallel writing in paper balls was important and it helped them to achieve goals related to their friendship.

Many of students' writing artifacts produced for school demonstrate their syntactical and lexical difficulties (orthography, punctuation, verb tenses, and prepositions). When they wrote, they struggled to attain to formal grammar rules, they did not demonstrate a very extensive vocabulary and in many occasions they spelled words as they say it (based on the sound of the word). Students also wrote beyond the classroom space. In these occasions, as presented in the last two events detailed previously, they demonstrated certain abilities to manage writing that was situated in their contexts and that embodied some of their communicative practices – in these cases, by exploring various narrative forms about love.

In line with the concept of literacy practices proposed by Street, students writing that seemed to "matter" to them was usually connected to cultural and social aspects of their experiences although this was not necessarily to promote writing, as illustrated by the case of Wagner's and Roberto's reports. This close connection made it "work" for other students and it made writing meaningful. In most cases, students' literacy practices were not only about "writing" but it was about connecting to the place they live, helping a friend, expanding the joy of a soccer game, and expressing love. Students had the sense they could do that to achieve their goals both in terms of getting a message across and producing results beyond the written artifact per se, e.g., getting a good grade, helping a

friend. Teachers accepted their writing as a good enough literacy artifacts. Teachers perceived students as having low self-esteem. And they attributed this as a factor interfering and justifying students' activities related to writing assignments at the school.

Students' propositional knowledge expressed in their writing pieces came from the local context in which they navigate (their neighborhood, their friends, their loved ones, themselves). They felt at ease to write about these issues. Their procedural knowledge was demonstrated as the male students switched from rap to funk music to achieve a better fit between the message (lyrics) and the song (rhythm), which was based on their previous knowledge of soccer stadium forms of expression. The girls demonstrated procedural knowledge when they not only made sense of the instant-message-in-paper experience but they also understood other positive factors in using such communicative practice since they "can see the recipient's reaction." Based on that insight they were able to reformulate the ongoing dialogue based on those clues from body movements and facial expressions not present at full in Internet instant-messaging. Wagner's and Roberto's statement positioning their writing in relation to various audiences demonstrate their abilities to see writing as a way to convey crafted messages to subsets of a public. In those lines they demonstrated understanding that some words, codes and styles will produce a "better" impact on some audiences in some circumstances. They not only knew some of the rules and the communicative impact of promoting "code switching" (Gumperz, 1982) but they could demonstrate, based on their own experience as they navigate across different literate communities, how to modulate writing styles to achieve specific communicative goals when addressing different audiences.

On the next chapter I extend students' experiences with literacies by focusing on events more directly related to their uses of digital literacies. While in this chapter their actions around writing contain traces of their experiences with those technologies as they introduce a hybrid character to their writing and to their uses of literacy, in the next chapter the central element will become the presence of the digital literacies in their actions around writing. The chapter will identify events in which writing was the main proposed task and I will analyze how students acted in those circumstances, both at school and beyond school and how they made sense of their actions.

Summary

The written materials analyzed in this chapter indicate that, despite many difficulties, most students wrote often, and for them writing was a meaningful practice both at school and outside of it (when it was not directly related to school assignments). They used writing as a way to express themselves and to communicate what "mattered" to them, i.e., students wrote to achieve perceived goals and to connect with perceived audiences. Students also recognized that various writing tasks at school were important to them to "be able to get a job in the future" even though in some situations they were not willing to focus and to finish the assignment. In most cases students did not refer to writing at school as being fun, but they recognized that some activities in which writing was involved (e.g., genres narrative activity) was fun. Their perceptions seem to be related to their continuous struggle to follow formal rules of writing and grammar expected by the school and also to teachers' difficulties to respond to their needs. Since they did not have to face these formal, decontextualized parameters when dealing with non-school artifacts, students wrote quite often. They enjoyed writing and they got the

sense they were successful in their communicative practices. They presented me with many of these writing artifacts with a mix of joy and pride and some of them asked me to go sit down with them so that they could walk me through their pieces. In all these cases it seems that they were able to finish the task with very little teacher intervention, if any, despite many "issues" present in their written artifacts. As students made sense of it in light of their local contexts, writing became "easy" and was enacted in complex and meaningful ways.

CHAPTER 6
THE ELUSIVE EXPERIENCE OF NEW MEDIA LITERACIES AT SCHOOL

> As teachers and researchers, we are currently confronted with the need to observe and learn from our students while making critical decisions about the kinds of old an new literacies that could make schooling meaningful to their life trajectories beyond it.
>
> -- Kevin Leander (2003, p.393)

> WHY do we need to put this (a hand written text) on the computer?
>
> -- Julia, a student, as she stared at the blank computer screen in the school's computer lab.

Introduction

This chapter focuses primarily on school literacy events in which students struggled to take actions related to the uses of new media literacies at the school's computer lab – in particular, to write in the *RiverWalk Brasil* project web interface. This struggle was related to four main elements: students' previous experiences with new media literacies in the local cyber café, skills-based instruction at school, the positioning of digital technology practices within the institution of schooling and students' contextualization of the project's computer lab activities. In terms of instruction, the skills-based training provided to students was not conducive to "meaningful learning." Students' perceived abilities to use the web tools did not hold as they were asked to act along the project activities held in the computer lab. The element that played in this experience was students' "estrangement" with the new uses given to new media literacies in the school context. The way teachers positioned the "work" in the computer lab contrasted with students' own experiences with digital technologies in the local cyber café, where they perceived themselves as "successful." Teachers' approach to the use of

new media literacies in a "serious" school-fashion way interfered with students' capabilities of making sense of these "new" experiences with new media literacies. This interfered with students' possibilities of applying their knowledge to use digital technologies gained among friends in the cyber café to the school's use of similar tools and similar communicative practices around new media literacies, despite the skills-based instruction provided to them. This made it difficult for students to write in the project's web interface. When students attempted to make sense of the experiences they were engaged with in the computer lab, they framed it within meaningful elements of their local context, which downplayed the importance of digital technologies within the projects' enactment. Students focused on other activities such as taking fieldtrips and writing in teams in the classroom as most meaningful aspects of their involvement in the project.

Following I will present students' experiences with digital technologies outside of school (in the local cyber café; none of them had computers at home) and at school (in the computer lab) as they attempted to use digital technology tools and as they attempted to write. I present data in this chapter to contrast students' experiences in these two spaces (the cyber café and the computer lab) and to contrast their actions around new media literacies with their actions related to "traditional" literacies around writing presented in Chapter 5.

This chapter furthers understanding about students' relationship with school-based and non-school based literacies as they enacted their communicative practices. The evidence to be presented and the analysis framing this evidence aims to address key research questions formulated in Chapter 1. In particular, this chapter sheds light on the

communicative practices (around writing and uses of digital technologies) in the cyber café and in the classroom. It also indicates how students' experiences at school conflicted with some of their previously learned cultural practices around literacy and communicative practices and the implications of this struggle for the actions taken place in the computer lab. Finally this chapter also indicates how students used elements of their local context to make sense of their experiences with school-based literacy practices around their assignment to take action and use the tools available at the *RiverWalk Brasil* web environment to write and to produce their electronic narratives about the river they investigated.

Students' Experiences with Digital Technologies and Writing

Out of School: A Place to be Cool and to be Smart

In order to provide a better understanding of students' struggle to take action and to use web tools in the school's computer lab it seems necessary to first understand their actions around similar web tools in the local cyber café. In this case, students had varied levels of familiarity with such tools, but that aspect of their experiences did not seem to have impeded them from taking desired actions to enact their communicative practices.

My observations in the field revealed that despite their financial constraints students found ways to use some digital technologies to communicate. In most cases, these digital technologies were shared, i.e., two or three students used one CD player (with one end of the headphones speaker in each person's ear), or one cell phone (in some situations two students talked at the same time in one cell phone with someone else on the other side of the "line"). While some students could manage to buy a cell phone (in Brazil it is very rare to get such equipment for free from the phone companies) they

still struggled to buy minutes (pre-paid is the most common system among them) into their phones. As we talked during a formal, open-ended interview about how they communicate, students explained it to me as follows.

Julia: I live there [and] I prefer [cell] phone [than using the Internet].

...

Wagner: Currently you have 3 seconds, I think [the] most powerful way to communicate is the cell [phone].

Julia: So you call and you only talk 3 seconds, you talk very quickly, and [you] do not pay.

Wagner asked to borrow my cell phone and he demonstrated the procedure to me by calling another girl in the room. He said a very short sentence, such as "I love you" and he hung up. Then Julia called him back and she said "I will stop by your house tonight" and hung up. They told me they used to continue like that for entire hours with no cost for the calls. After they were done with the short demonstration, the conversation continued:

Wagner: Today here in this state this is the second way of communicating.

Eduardo: What is the first?

Wagner: Orkut.

...

Roberto: I communicate by Internet because there is not another way unless I am very close to the person so I use my mouth, otherwise [I use] Internet.

Students also used to share one computer station at the local cyber café (paying approximately 50 cents of a dollar per hour, with no printing privileges). During the

various situations in which I went to the cyber café with them, most students seemed to be very comfortable in using the Internet for some very specific purposes. As I observed them I saw students using it to read and to post messages in Orkut and to participate in chats (usually to "meet" a new "friend"). They also used instant-messaging to talk to their new "friends" (some of them they had just met in the chat) or to reach someone they already knew (a friend, a member of their extend families). They also used email, although this was not very frequent. I saw that once they opened their email accounts there were not many new messages in their inboxes. A few students liked to go to pop music websites to listen to American songs while they were doing Orkut or chats. At least one or two students accessed websites to read about soap operas and teens' TV shows.

In Orkut, students usually read new messages sent by their friends, they "wrote" them back – sometimes they copied messages from someone else and pasted those at many of their friends' pages – and they searched for new "friends." In these cases, they followed the web links to see pages of friends of their friends and most of the time they would look first at the friends' pictures posted on Orkut. They wrote messages to the new friends, usually to introduce themselves. In these cases they mentioned their friendship with someone that was a common acquaintance and they invited the person to become a friend. In some situations, writing served other purposes; some of them were very pragmatic as it replaced the need of a phone call to transmit some information. Students wrote a message to tell a friend he or she would visit the next day. Other messages contained an invitation to a birthday party or they contained information about things that happened in the soccer stadium the day before.

Students' writing was composed of very short notes (usually from one to three short sentences) and the writing itself in most cases was very far from standard written Portuguese. Most words were cut short and the students explored the sound of letters to make new words (e.g., the word ex would become *x* and the word see would become *c*). Students referred to this "writing" during interviews as a "cool" way of writing and also as a "way to save time" since they were paying to use the Internet by the hour (see figure 8 in Appendix A with a sample of these texts in Portuguese and an English translation to it). Students' approach to writing in this case seems to be in line with de Certeau's elaboration that "whereas grammar watches over the 'propriety' of terms, rhetorical alterations (metaphorical drifts, elliptical condensations, metonymic miniaturization, etc.) point to the use of language by speakers in particular situations of ritual or actual linguistic combat. They are the indexes of consumption" (de Certeau, 1984, p.39) which gave them a sense of belonging to certain communities. Common friendships established among them through Orkut were a common theme in the conversations I observed at school.

Students performed these cyber café activities in a very lively way. In many occasions, I observed Valeria talking loudly to Patricia (who was sitting across the café) that a boy had just posted a new message for her. Patricia walked to Valeria's computer and they briefly talked about it and Patricia gave her some suggestions about how to reply to him. Valeria started typing her message frantically.

I also observed how friends sat in at the same room would post messages to each other on Orkut and shouted at them "Hey, I just sent you a message." Usually these were short sentences reaffirming their friendship, such as "hi, I love being your friend." While

students were clearly having fun in doing that, this also seemed to be related to their attempts to use the messages to get and/or to reaffirm membership in certain "communities." In an interview Roberto made this explicit when he explained that he needed to send text messages to a specific chat room where buddies from his neighborhood used to "meet" to plan parties and other meetings for the coming weekend. Students also talked about how they could finally do email since they had set up an account. When I had a chance to see their inboxes on the computer screen they had received messages mostly from their close friends who they would see almost every day at school or in small gatherings in the neighborhood.

Connecting with School

While students' experiences at the cyber café seemed mostly related to their attempts to construct themselves as "cool and smart" by engaging in a peer activity, students also used the cyber café – although not as frequently – as an extension of schooling. In all occasions in which I observed this taking place students' actions were related to their need to find content on the Internet to complete a school assignment. On one occasion I also followed two students trying to collect materials related to a Portuguese class assignment while using the Internet in the cyber cafe. Anderson and Ruth were seated side by side on two computers. While Anderson was doing instant-messaging with a cousin and other friends and listening to pop American music, Ruth suggested they should look for the song they needed to work on for the Portuguese class. Anderson told her to start searching for it on Google and so she did.

Ruth was able to move the mouse slowly, demonstrating that she was not yet very familiar with its mechanics (coordinating the mouse movements with the moves of the

arrow in the computer screen) but she could do it. She managed to open the Google web page and started to search. At first she could not find the song she needed because she was using too many key words in her search – she got too many hits, many of them were not directly related to what she needed. She again asked for Anderson's help and he told her to use fewer key words. At this point she typed only the title of the song in the search field, which led her to links with the lyrics song and also to some texts that were quoting that song. However, in some hits the song was associated with the singer. In other hits the song was associated with the lyrics' author, despite the fact that it was the same song. Ruth did not figure that out and neither did Anderson, after she asked for his help for the third time during that brief activity. Anderson looked at the screen, quickly clicked on some other hits below the first one and they both looked confused and disappointed. Anderson just said "well, I don't know, we can see this later." Ruth remained in silence. Anderson went back to his computer station and Ruth started looking at how she could open an email account.

In at least three other opportunities students told me they had used the cyber café Internet capabilities to find content related to a class assignment. In these cases, students were focused on finding information directly related to the topic they were asked to cover. Students were not concerned about the quality (in terms of accuracy and reliability) of the information they would get on the Internet. Edison printed a two-page encyclopedia topic about birds for a biology group presentation. Wilson had four handwritten pages in his notebook based on materials he found on the Internet describing a book plot assigned for a group presentation in the Portuguese class. Amanda printed a two page biography of the author of another book assigned in the Portuguese class. When

I talked to these three students they told me they thought the Internet helped them complete their assignments. For all these cases students had the alternative to look for the content they needed in paper books. The school library had a few encyclopedias and a few text books that would have helped them. The Portuguese teacher brought from home a copy of the book that Wilson needed but he told me he only read "two chapters" of the book and he could not find out how one of the main characters died (he could not find that information on the Internet either).

A Sense of Being Successful

The evidence presented on this section demonstrates that students were willing to use digital technologies and in most cases they could achieve certain goals by using them without the help of a teacher. Students' uses were "limited" by what they perceived to be meaningful within their peer groups' interactions – "written" communication embodying interactions around the theme of friendship – and by what they felt comfortable doing (e.g., Orkut, email, instant-messaging). These uses were situated and they became meaningful to these students within their context. Their uses of digital technologies in the cyber café usually took place among peers as they shared and they re-positioned the ongoing actions based on multiple feedbacks generated within the group of friends. Their uses fulfilled tangent needs to communicate with some one who was physically distant from them (e.g., they sent a message telling a friend they would visit next weekend). This fulfilled students' lack of access to more traditional forms of communication (e.g., most of them did not have a phone line at home).

Students tried to use these technologies to bridge their perceived lack of content to work on school assignments. Students were not always successful in achieving their

goals in this case. This was not related only to their abilities to use the technologies' features, in many cases, but in fact it was due to their difficulties in making sense of the materials generated from their use of the technologies. Although they were able to read the text displayed on the computer screen resulting from the search that they performed, students were not able to make sense of implicit elements presented in the materials displayed on the screen and they gave up the activity. This indicated that the acquisition of skills related to how to use digital technologies was not enough to sustain its uses. This finding problematizes the false polarity between the "technical" and "cultural" aspects of literacy "acquisition" (Street, 1993) which will become more explicit as I discuss students' experience with the *RiverWalk Brasil* web interface at the school's computer lab in the following sections.

Students' uses of digital technologies at the cyber café also fulfilled symbolic aspects of their cultural and social lives, such as presenting themselves to various audiences of current and potential friends and gaining membership to some communities, particularly youth related ones. These activities performed by students in the cyber café contain similarities to and also differences from previous accounts of youth using digital technologies to communicate outside of schools. The use of these tools has constituted the object of study of many scholars, particularly in the U.S., Europe and Australia. Studies conducted in other countries with affluent teenagers and also with lower social class youth have pointed to similar aspects of these experiences in terms of creative uses of instant-messaging around identity and exchange with peers inside school and beyond (Alexander, 2006; Braun, 2007; Burnett & Wilkinson, 2005; Enk, Dagenais, & Toohey, 2005; Evard, 1996; Lam, 2000; Lankshear, 1997; Lewis & Fabos, 2000; Seiter, 2005;

Tobin, 1998). Most of these studies have not addressed the economical constrains faced by students I observed nor have they extensively considered the collective use of these technologies – which constituted students' "tactics" (de Certeau, 1984) for facing the scarcity of resources (e.g., money and computer availability). These particularities seem to be related to the scarcity of digital technologies experienced by these students in their context – they did not have computers at home neither did their relatives and closest friends.

At School – A Place to be Serious and to be Quiet

This topic establishes a contrast with students' experiences in the local cyber café and the school-based enactment of the *RiverWalk Brasil* project activities in the computer lab. The narrative will be developed around evidence and analysis organized in line with three key constructs that originated from the data analysis: the implications of the project being situated as a "school task," the shortcomings of the skills-based instruction provided to students, and students' contextualization of new media literacies.

New Media Literacies the School-Way in the Lab

The experience of going to the computer lab to engage with new media literacies brought up mixed feelings for many students. Some days they were happy to leave what they thought to be the monotony and the boredom of the classroom to do something "different." On other occasions some students refused to leave the classroom to go to the lab, sometimes because the classroom teacher was lecturing on new content and students were afraid that missing that class would affect their chances of getting a good grade in the tests. However, in other situations there was nothing "new" going on in class (the teacher told them it was okay to leave) and still some students refused to go to the

computer lab. Also, some students went to the lab and after 10 minutes they left it, either to go back to their classroom or to hang out at the sports court (which was not allowed by the school).

Students' participation in a video documentary production seems to be representative of that experience. I followed a group of students engaged in the development of a short video documentary about the pollution in the river and their struggle to move ahead with this project. Initially this seemed to be related primarily to the fact that it was a new activity for them and that the school did not have the digital equipment required for that activity. Despite the difficulties, they produced a short narrative in video.

After they had "finished" their documentary (Maria, the school coordinator, told them they still would need to put more work into it) I conducted a formal, open-ended interview with the students. I noticed that most activities took place inside the computer lab and that during that period students expressed positive and negative attitudes towards being in the computer lab. When I asked them what they thought about their experiences in the lab, they first talked about the frustration of not having "good," up to date digital technologies "like the ones in the cyber café" and how disappointed they were to find that out. As I moved ahead with the interview I noticed that their talk was permeated by some silences, as if it was difficult for students to tell me what they thought about doing the video documentary. This contrasted with previous interviews in which they were very talkative. I then decided to insist on this topic. I told them that I also recognized the issues with digital technology availability but that I thought that their expressions of mixed feelings in the lab meant something else. Students had their eyes down and they

seemed uncomfortable to say what was going on in their minds. The conversation went as follows:

> Lucia: [There were] some things I did not want to learn, but Maria was giving more importance to some roles than others, of course Wagner's work was the most important and she required the most of him, [to] film and all but just because I was cleaning someone's face (doing make up for the shootings), because if Wagner had to do all he would go crazy so I think she (Maria) should had give more attention to all of us.
>
> Julia: All she (Maria) did was fight, she only saw what we were not doing, when we did she did not care and she asked are you doing something related to the project?
>
> Eduardo: (to Wagner) Do you think you did all, most of it, what do you think?
>
> Wagner: Me, me, I think I did a lot, but Amanda also filmed, you (looking at Lucia and Julia) researched the Internet, you did text, I did more [regarding] assembling the final work, but you also worked.
>
> Eduardo: (to Lucia and Julia) Do you agree?
>
> (Silence)
>
> Roberto: I think that if Maria had not participated.
>
> (Laughs)
>
> Roberto: Seriously.
>
> Eduardo: Why?
>
> Roberto: She should have let us do it on our own.
>
> Lucia: She should have just told us a deadline to hand in the video.

Julia: [Then] we would just ask her what we needed.

Wagner: But we depend on her, to move around, to get a computer.

Lucia: That is true.

Eduardo: (to Carmen) What do you think?

Carmen: (Laugh) Nothing to declare.

The contrast with the cyber café experiences. What seems meaningful in the students' exchange reproduced here is their expectations of performing a school activity within conditions similar to the ones they experienced in the cyber café – where they experienced "more modern" digital technologies, peer support (instead of one student performing most tasks, as Wagner did) and no teacher interference. Students struggled to operate in the computer lab given their views of schooling as an institution (represented by the teacher and the out of date computers) that "constrained" their perceived sense of freedom, autonomy and even friendship and sharing. Because it was a school activity, the very nature of the video documentary was in tension with students' expectations. Students wanted to do it on their "own," and they felt that the teacher's participation was not necessary since it limited their "freedom" to develop the video. It also generated tension with the ways they usually use digital technologies in the cyber cafe. Despite their engagement in the video project in a voluntary basis, many times they left the lab for long periods of time, and they complained that they did not like what they were asked to do. In other times they went off task to do what they usually did in the cyber café. Repeatedly Maria told them to go back to work; it was school time after all.

This experience with the video production illustrates the fact that students did not seem to enjoy many activities in the computer lab. And this experience seems to be

located beyond the fact that the lab was constituted by just a few out of date computers with a slow Internet connection. The following subtopics also contain evidence that will illuminate two main aspects of students' experiences in the lab that contributed to their perceptions of the lab as a place to be "serious" and to be "quiet" which contrasted with their experiences with digital technologies in the cyber café.

School task 1: Typing handwritten materials. During my first week at the school I was told by the school coordinator that participant students went to the computer lab during the first school semester and that they were introduced to the *RiverWalk Brasil* website. Maria told me that students browsed some of the pages and they read the materials (narratives about other rivers) posted by participant schools. When I first observed students conducting lab activities directly related to the *RiverWalk Brasil* project I noticed that most of them were uncomfortable. It was difficult for them to get the correct spelling of the project web address (www.riversproject.org). Some students struggled with the plural of "river," others had a hard time getting "projects" right (in Portuguese the word *projeto* has no *c* letter) and they also typed ".com" instead of ".org" since they were not familiar with the later terminology. And there were students who did not know where to type the web address on the computer screen. As the class moved ahead the teacher stopped by and helped some of them. Others got help from their friends in the lab, who would retype it, to correct their initial mistakes with the web address. For that session, students were asked to read any narrative posted by other schools.

Students only returned to the lab to develop activities directly related to the *RiverWalk Brasil* project two months later – meanwhile they had been working in the classroom developing the genre narratives, such as the funk song analyzed in Chapter 5.

Students started this project phase by having to type their genre-based narratives in teams (each team produced a poem, funk music, parody, short story, chronicle, comics or cartoon). Besides the artifact, students were asked to type their texts presented in class in which they explained characteristics of the chosen genre, how the process of developing the narrative evolved and what they learned as they developed it. Maria told them that the typed texts should have no "mistakes" and that this was important since they would be made public in the Internet.

Maria organized this activity in the computer lab parallel to other class activities since there was not free time in the class schedule to take students to the computer lab either during or after the school hours. On most days, Maria asked the teacher to let some students go to the lab to type the materials, if teachers were not planning to give new content in class. In the first day of this activity she brought one member of each group and told them that it was going to be mostly about typing at that point. Many students demonstrated disappointment, and two male students managed to leave the lab at the middle of the activity. Since that episode it became difficult to bring students to the lab. Typing was done by a few members of each group. For example, when typing was on demand, Julia told her friends that since she had already written the text (in paper and pen) she would not do more work by typing it. She never showed up in the lab for that activity. Instead, two other girls (Cristine and Fatima) took the lead on typing it for their group. It was similar with the other groups; in general a few members typed while the others left the lab or even refused to go to the lab.

Cristine and Fatima seemed to be comfortable using basic functions of the word processor, and they started typing Julia's text promptly, with no need of teachers' help.

At a certain point, Fatima stopped and made comments to Cristine about the text structure, indicating the need to revise some parts. Cristine usually agreed with her, and they started making changes. The task was to type it in a word file and save it to be uploaded later to the *RiverWalk Brasil* project website. They worked together for over an hour making "improvements" in the text, which for them meant cutting repeated words and changing the structure of a few sentences (to make them "clearer"). While they did that, they tackled with word morphology and sometimes they did not know how to use the word processor capabilities to "correct" something in the writing. Other students also faced these issues. There were words underlined in red on the screen, and once students clicked on that word the program gave them various options that they had difficulty making sense of. Also, when they got a block of words underlined in green it was usually because they made mistakes in using punctuation or in typing punctuation. Again, students got confused, not knowing which of the computers' options to chose from. Other students typed what was written in the paper and they did not care much about making changes to it. They seemed to be in a hurry and once they finished some of them asked Vera, the computer teacher, for permission to look at their Orkut – Vera denied it most of the time – or they simply left the lab in a rush after they were done typing.

During these typing activities, students also struggled to use the computer tools, from how to use the mouse to select a portion of the text to how to make sense of parts of the text automatically underlined in green by the word processor program features. Students expressed mixed feelings about these occurrences. Sometimes they were curious to make sense of the tools, and in other situations they got frustrated because their inabilities to cope with the program features slowed their typing and that made an already

not very pleasant activity for them into a very stressful one. Many times they complained in a loud voice, and some students simply left the lab.

The experience of typing was a common one in the computer lab within the *RiverWalk Brasil* activities, and it contrasted with students' writing in the cyber cafe. This was prominent because none of the students would write directly on the computer while in the lab. In at least one case I observed a student who had to copy down in her notebook what she was reading on the screen. Once she was done copying she turned the page in her notebook and wrote a short text by hand. She browsed at times what she had copied down despite that the same text was available on the screen in front of her. And only after she did that she started typing it in a word file in the computer. Students viewed this activity as monotonous and complained about having to do it. The teachers always told them to "just do it" since it was part of their school assignment. At the cyber café, students always wrote on the computer, but that writing consisted by short, brief sentences , it was supported by other peers and it was perceived as meaningful (i.e., to communicate with a friend) and fun (i.e., using words in a non-conventional way, focusing on various topics such as TV shows, pop music).

In the next subsection I present related evidence that also indicates students' difficulties with some features of the *RiverWalk Brasil* web interface that seemed to have produced similar reactions to the ones students had while typing materials in a word file – they struggled with the activity and that influenced their manifest abilities to write using the interface capabilities. This seemed to be related in part to their difficulties making sense of the web tools within the context of schooling, and also it seemed to be related to students' perceptions of the web environment activities as "school work" which operated

as barriers for their communicative practices as students envisioned them. This issue will be further detailed next.

School task 2: Writing in the web interface. As I observed students I noticed a pattern towards their dispositions and abilities to write in the web interface more specifically, and on the computer, more generally. When working in the web interface to develop their narratives first students had to write a title for their "page" (one topic within the whole narrative produced by the class, which would constitute a small web site). Also, once students moved a picture from the computer into the web interface they had to give this picture a title (to locate it later inside the environment) and a subtitle (explaining to their audience what that picture was about once it was displayed on the web page).

These activities usually took place half way into the instruction session. When the teacher told them to write the page title and the descriptors for the picture (usually one or two sentences) there was no action for a while. As students did not type anything in the empty field for the picture title and subtitle, Vera looked at the clock ticking and made suggestions as she looked at the picture students had chosen. Most of the time, students wrote down exactly what she had said to them. When Edison and Wagner were working on this phase they decided they wanted a "cool" title for their picture and for their page.

Vera: Which is the title [that] you will give?

(pause, silence for a few minutes)

Vera: To this page, it is the first page of your work.

(pause)

Vera: Something people see and know right away what they will read, like "Music and Funk about the Cocó River." It is something people already know,

let's go, if you want to put this it is okay (what she just said). Or "Funk and Cocó River," something like that.

(Edison leaves the lab)

Vera: [to Tomas] Where did he go?

Tomas: He got a cold.

Vera: Let's go [type the title].

Tomas: Funk and Cocó River.

Vera: Fine, type it there. Do you want large or small caps? Put just the first one in large caps. Let's go, type it.

Later on Tomas and Edison had to write subtitles for the pictures. When they faced the empty field to type the subtitle Edison turned his head, he looked at me and asked for a suggestion. Vera was not at their station at that moment, I said it was up to them, and Edison got slightly angry and said "but I am asking that to you." I replied "but this is your work and I think you should think a little more." Vera came to their station.

Vera: Done, image. You will become experts. Again, ready? [then write a sub] title, "Funk. Flowing water" (laughs).

...

Vera: [If] to choose the title you are like that (taking no action), imagine [when] doing the subtitle.

Edison: I think the subtitle is easier [to write].

Vera: This picture shows an abandoned side of the river.

Tomas: We only know how to make songs.

Vera: You know how to make songs and [you] do not know how to make a title? Let's go (with an encouraging tone).

During another of these training sessions the girls were in the lab doing a similar activity. I wrote the following in my notes:

> While I observed Patricia's words being ignored and replaced by the ones from the teacher and Valeria's absolute silence (as she had her head and half body down on the desk) I thought about their energy and assertiveness as they wrote their personal narratives. First, Patricia did not even want to come to the lab ... after the break she came to the lab ... and she sat 1 ½ meters away from the computer. Throughout the activities she remained in silence most of the time. (Fieldnotes' memo, 11.20.06)

This passage about Patricia's attitude in the lab contrasts with another event in which I was alone with Vera in the computer lab and Patricia showed up with Valeria. Patricia told Vera she had asked for and received the principal's permission to use the lab to create a new community in Orkut about a school group named *Os Contadores de Histórias* (Story Tellers). This was an extra-class activity developed by the Portuguese teacher. Patricia wanted to set up a community in Orkut so that people could get to know the group's work. Vera said it was fine, and Patricia started working promptly. Valeria was helping her. As they started filling in the field to create the on line community in the computer screen Patricia struggled to write the text explaining the purposes of the group. At a certain point she said "Oh, I wish the Portuguese teacher were here, she knows all those beautiful words." Patricia stopped for a while, she looked around the room and started typing it again. She wrote a brief summary of the group activities and said that

later she would include a picture of the group. This took no more than half an hour to be done.

Once students came back in later November to work on the final version of their narratives that would be published in the Internet I decided to intervene – as little as possible – in the ongoing activities as I had been doing on those last weeks of the fieldwork. Before I did that I consulted with Vera and I told her that doing the picture subtitles was a good way to help students develop their narratives and write in the lab. She agreed that they could try a little harder to work the on subtitles on their own. The following vignette is representative of my participation and students' reactions to it.

> Eduardo: (As Julia and Alex looked at the picture in the computer screen and hesitated about what to write) is this rain season or dry [season]? What does winter in Windy City mean? If I am from São Paulo I do not know what winter means [here].
>
> Alex: Rain.
>
> Eduardo: So put this there.
>
> Alex: Put what, "Is it winter?"
>
> Eduardo: When she [Julia] looked at the picture she said that.
>
> Julia: We are in the winter season, the river is full, it is rain season (laughs).
>
> (Alex types it)
>
> Julia: Is.
>
> Alex: Is this winter? What else do I put?
>
> Julia: Eduardo is good.
>
> Julia: You can't miss not even a period, you can't miss not even a period.

(Laughs)

Julia: It is winter.

Eduardo: Let's look at it again.

I read it with them, they slowly started typing words that developed into short sentences as the picture subtitle. On this occasion, students' final subtitle (see figure 9 in Appendix A) for the picture was "Antigo aterro sanitário Janguruçu que fica próximo ao rio Cocó que é localizado no Bairro São Cristovão (name of the city and state). Está no inverno época de muita chuva." (Old garbage deposit of Jangurucu which is close to the Cocó river that is located in the São Cristovão neighborhood in (name of the city and state). It is winter time of a lot of rain).

Students' difficulties with writing happened despite the fact that they were dealing with content that was very close to the daily lives of many of them – the river runs a few blocks from their homes, and they themselves do or they know people who help pollute the river near where they live. Their struggle occurred even though they said they liked the theme (the local river and the community) and that they enjoyed learning further about it. This means that the images portrayed in the pictures they were asked to write about were not entirely new to them. The sense of contextualized familiarity was enough to provide them the resources based on which they were able to develop their written narrative inside and outside of classroom in some occasions (as discussed in Chapter 5). This was not the case in the computer lab.

I was particularly intrigued by students' difficulties writing in the web interface since I had observed them writing in the cyber café in a very spontaneous, natural way, besides their writing in the traditional classroom. I was also intrigued by Patricia's

experience in which her writing in Orkut represented a mid-ground between writing in the cyber café and writing in the computer lab. Patricia's experience with the Orkut community had elements of both activities, and she felt successful in doing that despite it being conducted inside the school's computer lab. As an attempt to make sense of their hardship I asked students in a formal, open-ended interview to compare and contrast the two experiences, i.e., how was it about writing in Orkut and then writing in the web interface of the *RiverWalk Brasil* project. We had the web page they developed open on the computer screen in front of us as we talked.

> Eduardo: For example, this is one page (pointing to the screen), and then [there is] Orkut, right? This is a page in the Internet ... soon anyone will be able to see your page and today anyone who has Orkut can see your page. Do you think this (the *RiverWalk Brasil* web interface) is very different?
>
> Amanda: I think it is different.
>
> Patricia: Everybody can see, everybody can go there and see the gossip about other people (in Orkut).
>
> Amanda: This (*RiverWalk Brasil* project) is school work, we did it here. Orkut was easier. It was okay, we started using it, this is okay, we had to learn [it, the project's web interface], because of the work, the project, right?
>
> Patricia: Because this is the project, we do not have the intention, is this the way we say [it]?, to create, is it like this we say? Because in Orkut we mess around with everything (she uses various available tools and buttons). Orkut, oh God, everything I need I do. Not here [at school], only once in a while.

Valeria: Nope (she seemed to be upset and or bored) here no, it is about the project, this thing of project.

Amanda: Here [it is about] to do something.

Patricia: In the project, any little thing we can erase [it] all, we can do things to others (Laughs).

When I asked students to contrast their writing in the cyber café with their writing in the Portuguese class they told me that for the later it "needs to be right" and "it needs to be the whole word, it cannot be abbreviated." I told them that when I observed them in the cyber café I saw that they would "sit down and just start typing" but that was not the case at school. Anderson, a male student said that at school he "sat down and had to think." Amanda continued by saying that "we think a lot [to write at school], we think how we will start, after we start it is easy to develop but to start it is so bad. This part it is not easy." Then they laughed. Students also stressed they thought doing Orkut was "more fun" than school and that doing *RiverWalk Brasil* related activities was "school work. We need to deal with obligations, it is working." Marta complemented by saying that "we need to be approved."

These vignettes demonstrate Amanda's and other students' perceptions of the *RiverWalk Brasil* web interface activities in the lab as "school work" as something different from the writing in Orkut that took place in the cyber café. Other students expressed the same opinions in informal chats or during formal interviews. Patricia's reply to Amanda's utterance indicates how students proceeded as they perceived the project's activities as "school work": they did not have the "intention ...to create" indicating that students' "desire to communicate"(Vygotsky, 1978) was compromised.

According to Dyson (2003) "[l]earning, and specially learning a symbol system, requires the constructive mental action of an intentional human being anxious to take some control , to exercise some will in a world of others" (p. 211). Once again Patricia explained her perception by contrasting the school-based new media literacies experience with how they "mess around" with Orkut. She quickly added that such "messing" – taking ownership of literacy practices – was not "allowed" at school. Students accepted that instead of rebelling against it as they did sometimes in the traditional classroom.

Skill-based Instruction and the Web Environment Tools

Students' difficulties making sense of the web environment tools were strongly connected to teachers' struggle to deliver "needed" instruction. Despite the fact that Vera knew how to use the web environment tools, she grappled with the need to help students make sense of it. When faced with students "inability to act" to perform certain tasks by using the web tools, Vera held the mouse herself and performed functions while students followed (or tried to follow) her movements. She also told them what to write when they got caught in their "inability" of making a move and writing something to describe the pictures chosen for their narratives. While this is an important aspect of this experience as it indicates Vera's trouble adapting her instruction to the new media literacies in the lab, this was not an isolated "problem" related to instruction at this school. Many teachers struggled to deliver their content in ways that students could make sense of it, even in the presence of traditional materials such as book and ink pens, as indicated in Chapter 4.

The school coordinator had been involved with the project for three years when I conducted the fieldwork. The school teacher was new to it, but one month earlier (in September) I had showed her how to use the web interface tools needed to get the job

done during an informal hands-on session in the lab. Once students from all groups finished typing their materials in a word file – this phase took over a month – it was time to move ahead and start uploading materials to the *RiverWalk Brasil* project website. At the beginning, the school coordinator and the lab teacher decided to bring members of different groups to the lab. I observed the second round of this activity, when teachers brought students who had already started uploading materials from the computer to the web environment and students who were going to try it for the first time.

As the activity progressed students were not sure about how to use some tools – and neither were some of the teachers. Maria left the lab many times to do other things – which was not rare since she had to take responsibility for many activities at the school – and the computer lab teacher also struggled to make sense and to give instruction about the web tools. At a certain point, Edison and Tomas asked Maria what to do from that point on and Maria got a little irritated and told them she would not teach them again – she mistakenly assumed they had already had the chance to learn it and hadn't taken advantage of that.

No peer support. Students tried to face what they experienced as the lack of teacher support by drawing on their tactic of peer support to achieve certain tasks, which would take place both in the traditional classroom (as detailed also in Chapter 5) and in the cyber café usually in successful ways. Jane, who was seated on her own at another computer, volunteered to help the boys. She seemed very proud of herself and kept saying "oh, I know it, I know it." She tried to upload a picture from the computer to the web environment and then place it in the page being assembled in the screen. But once

they attempted to transfer the peer support tactic to the computer lab it did not play as expected, as follows:

Jane: Put it again (the picture).

Tomas: (inaudible) To pass it to here, uh? (to the web).

Jane: This one?

Tomas: Right.

Jane: It is good, go (click a button to upload it).

(...)

Jane: Click there again, look there, search, go there, open, below there, done (she told them to click the wrong button/function, but she did not realize it).

NI (a student, non-identified): Go there in the middle.

NI: Go there in the middle.

NI: In the middle.

(...)

Jane: It [the web interface] is giving an error, do it again.

(...)

Jane: It is not working (she did not realize she had made a mistake by telling them to click on the wrong button).

At this point I looked around the room and the computer teacher was working on her own computer station, apparently unaware of the situation. As soon as Maria came back into the lab I told her we should cancel that session since things were not going very well. She was surprised but she agreed. Students were sent back to the classroom. At that point I became very concerned about students' struggle, and I thought that it was unfair to

expose them to that kind of situation. In the heat of the moment I though that I, as the project coordinator, and Vera and Maria, as school teachers, had to provide them a "better" instruction so that they could at least get the necessary skills to manage the available tools to be able to perform the assigned tasks. Therefore, I was assuming that it was primarily a pedagogical issue; it was about how I could teach the teachers to teach students how to use those tools to make promote learning. I was operating within the dichotomist opposition towards "literacy acquisition" criticized by Street (1993) but it took me a while to realize that.

Right after I interrupted the activities in the lab I met with Maria and the Vera and I told them that, as the project coordinator, I thought we needed to change the dynamics with students because they were struggling to work on the web interface. Vera was quick to say that she agreed and that she thought there were too many students in the lab at once and it was difficult for her to give attention to them. The meeting lasted 50 minutes and we developed together a methodology to work with students in the lab. We also agreed that I would give training to both Maria and Vera the next day on how to use the web interface functions and so I did. At that training Vera developed a whole narrative on her own, which made her feel very proud of herself (she showed it to the students many times) while Maria struggled to learn the functions and left the lab many times. Maria's hardship concerned me, but at that point I was not too worried about it since we agreed during the meeting that Vera would take the lead in the students' instruction in the lab.

Students' activities in the lab resumed. Vera went to the classroom and invited all members of one team (based on one narrative genre) to go to the lab. In the lab Vera helped students navigate through all the main functions they would need to know in order

to be able to post materials in the web interface. Students had to do a test tour. Vera told them that this was for them to learn it but it was not yet the final product, which they would do later in November. Most of the time students seemed to be very interested in following with this activity. Besides the use of digital technologies, it was something very different in the school routine, since there were only four or five students in the lab receiving the full attention of a teacher. In most cases, Vera demonstrated the web functions by holding the mouse herself and by showing them where the buttons were located on the screen and which operations these buttons entailed. Once in a while she switched the mouse to one of the students, and she told them to do it themselves. Vera observed them as they faced many "errors" along the way. Vera corrected them and then they moved ahead to construct the test narrative (it contained two pages and was similar to two slides in a powerpoint) including students' texts and two pictures (with subtitles) that students chose from a pre-selection made by Vera.

Students' abilities did not hold. At that point I still recognized that there were some problems with the instruction that students were receiving, but I thought that it was satisfactory. However, students' difficulties with "using" the tools of the web interface did not end. While many students had refused to type texts in the word processor despite their abilities to do so, at this phase students' positioning was different. They received instruction focused on skills' acquisition, and they had a hard time making sense of what was going on. In most training sessions most of the students remained quiet, in silence, while Vera moved the mouse herself to present the main buttons on the screen and the functions that these buttons performed to build the narrative. While during the typing activities some students refused to stay in the lab, this time they seemed intrigued, and

most of them remained in the room. During the typing phase in the lab activities some students tried to use the mouse, and others tried to use the functions of word correction. Despite that, they acted by typing the written texts in a word file. That was not the case once they were exposed to the web environment tools. On one of these instructional sessions about the web environment in the lab, Julia was seated at one computer with another team member, Alex. After Vera had presented many functions and it was time to move on to how to transfer pictures from the computer to the web environment, she said:

Julia: (after teacher instruction) Oh, I got it.

That statement surprised me since I was witnessing students' difficulties in learning that. I wrote in my field notes that I wondered how she got it so quickly or would it be possible that she was being ironic? The answer to my question came up 30 minutes later, when they started actually assembling their text narrative in the web environment. She said then:

Julia: NOW I got it, I got it, I got it.

At that point I thought she was being sincere with her comments. Yet, Julia and Alex were not able to finish the activities during their first session, so they returned to the lab one week later. As Julia hesitated to press the right buttons to operate the functions to assemble her teams' narrative in the web environment, she said:

Julia: When I think I got it, I forget it.

Julia struggled to perform many operations, and despite Vera's help, she seemed to be upset about it. This was a common reaction of hers during many other computer lab activities. I observed this pattern with many other students. It was not enough to teach them, to demonstrate to them and to ask them to perform tasks on their own under the

teacher supervision. At the end of the fieldwork I conducted a workshop (as described on Chapter 3) with four students in the lab. From all four students only one seemed to make sense of the uses of the web environment tool. The other ones had experiences very similar to Julia's – it looked like to them and to me they had "got it" but when they returned for the next workshop session I saw that they had "lost it" since they could not perform the tasks I had "taught" them the previous session. Students not only got confused and experienced frustration as they struggled to make sense of that. They also experienced "losing" literacy abilities – writing – that they had demonstrated in the traditional classroom and in the cyber cafe.

The shortcomings of the skills-based instruction. The skills-based instruction was problematic. It attempted to teach students how to click on buttons on the screen to perform certain operations in the web interface. But it failed to help students' promote what Snyder, Angus and Shuterland-Smith (2002) have identified as the "socialisation" of digital technologies. Students' abilities to appropriate these technologies into their existing individual and group norms, values and lifestyles, to promote its "socialisation," were constrained in their school experience. As previously mentioned, Patricia stated in an interview that they had no "intention" to "create" and they could not "mess around" with the web environment as they do with Orkut. Also, when Jane volunteered to help her peers to use the web environment tools she did not succeed as it usually happened in the cyber café. These experiences allied to teachers' manifest desire for students to engage in "serious work" and to keep on task made if very hard for students to incorporate the literacy practice around the web tools in their shared "ways of doing" their communicative practices.

It is not simply the case that students did not have the capabilities to develop knowledge and to use the tools of digital technologies. Cole's (1996) experiences in comparing Liberians "illiterate" rice farmers and American/Canadian college students' abilities to perform a local game using leaves to assess categorizing and remembering abilities seems to illuminate some aspects of such complexity. As the author stated, he and his associates:

> [...] were *not* assuming that that poor performance on our experimental task reflected deep and pervasive cognitive differences such as an inability to organize experience conceptually in memory; rather, when people performed poorly in one of our tasks we assumed that it was the task and our understanding of its relationship to locally organized activities, not the people's minds, that were deficient. Sometimes we were successful in devising tasks that did demonstrate the presence of the "missing ability"; sometimes we were not. (p.80)

The author stressed the clear connection between one's ability to perform well on a test and its contextualized character. Cole (1996) found that during these tasks, when he used a decontextualized condition (fictitious and arbitrary condition), the rice farmers did not use a categorical distinction that "they certainly knew" (p.79) since they had performed promptly in the first contextualized task and since the leaves they had to deal with belonged to trees they were familiar with.

The students I observed had performed by using digital technology tools in the cyber café and they had also written short texts using these technologies. However, at school the skills-based instruction was problematic given its "lack of contextual meaning," and it affected students' communicative performance in the presence of digital

technologies. This resonates with the Christianakis' proposition that "children's use of a computer as a writing tool depends upon the social and cultural uses to which it is put, both in the official school curriculum and in the unofficial peer world" (2002, p.17). This perspective holds within a sociocultural perspective of literacy, which proposes that:

> [I]n order to make sense of a new tool or practice, the learner must bring to bear his or her existing cultural knowledge. As a result, the processes of appropriation and internalization involve, not a simple copying, but a transformation: of the use of the tool, of the capacities of the learner, and of the problem situation in which the tool is used. It is in the creativity and originality that, to some degree, characterizes all tool-mediated problem-solving that the potential for both cultural continuity and the realization of the individual potential resides. (Wells, 1992, p.20)

The "skill-based" instruction was not enough to fulfill such requirements and neither the "school-based", "serious work" contributed to such cultural continuity and the manifestation of students' potentials around uses of digital technologies. These findings seem to be in line with research conducted by Nunes analyzing why children in Brazil would solve arithmetic problems outside of school (when they were selling coconuts in the street) but these same children would not perform written arithmetic assignments at school. The author concluded that "they have an investment in the situation [selling coconuts], they want to know the answer because it will be used to make a decision ... the difference in goals define different social functions. If written arithmetic is viewed not as a means but as a goal in school, children may not be willing to use their street knowledge of arithmetic in school" (Nunes, 1999, p.101). It seems that students

perceived their uses of digital technologies at the cyber café as a "means" (to make friends, to have fun), but students perceived digital technologies at school as a "goal" (to please teachers, to get a grade, to get done with school work). This may explain their disengagement and their difficulties to transfer their knowledge and their uses of digital technologies from the cyber café to the school computer lab.

Students' Experiences in the Lab and Students' Context

All teams (even with only a few members actually doing something) finished their tasks of developing a narrative in the *RiverWalk Brasil* project web interface. That included mostly texts they had written by hand in the classroom and at home and later typed in a word file. It also included pictures and subtitles for these pictures. They assembled texts and pictures in a web page by using a few tools available at the *RiverWalk Brasil* project web environment. This was achieved through some students' input (not all students wanted to participate) but also with the teachers' participation and with my participation (on a second phase, close to the end of the fieldwork).

When I asked students about their accounts of their experiences with new media literacies it was difficult for them to talk about it. During Patricia and Amanda's interview, they mentioned the concrete experiences of learning about the river instead of talking about the web interface. They used elements of their context to situate and to make sense of their experiences with the *RiverWalk Brasil* project (their visits to the river with their families, the fieldtrips to other sections of the river). The features of digital technologies and their uses of Internet did not surfaced in their conversations about the *RiverWalk Brasil* project, while their use of contextual elements appeared naturally in the conversation. My initial question was not related to this issue.

Eduardo: What is interesting is that the song was for Rita's (the Portuguese teacher) class and [it was for] grade, but the rest of the work (related to the *RiverWalk Brasil* project) was not for grade, right?

(all students talk at the same time)

...

Patricia: [The activities] started in August, when they [teachers] mentioned it would be about Cocó River I got interested. I wanted to learn, know how it is, my mother used to take me there [Cocó River], and it is very dirty currently, my friends live here nearby, it is cool, I want to know it, but also because of the fun too, we went out, that field trip there.

Eduardo: [when you went to] Sabiaguaba?

Patricia: Yes, it was cool. When we thought about the parody, we even created a song, do you remember, Amanda?

Amanda: We did a dance, there was a song everybody used to sing, oh my god, we put our feet in the mud [mangrove], Maria laughed, we danced inside the bus ... it was cool, I liked it, it would be good to go again.

Amanda also mentioned that her parents used to fish in the river and she loved the taste of those fishes.

The virtual reality of the web interface and their new media literacy practices at school in which they become the producers of narratives in that space was not as present in students' conversations, although they talked frequently about using these literacies in the cyber café. This manifestation was similar to students' struggle to make sense of other literacy practices taking place inside the classroom due to the lack of contextualized

meaning as Rita explained to me. The Portuguese teacher said the following during a formal interview in which she elaborated on a class assignment based on magazine advertisements:

> Rita: I think it is essential, you know? They [need to] understand why they are learning that, because the language for them is very abstract, the language taught at school. You know? I like to work a lot with ads' texts, because students have a lot of contact with this, they understand it better, they get more interested.
>
> Eduardo: Is it because you think this belongs to their context and it is easier for them to understand it?
>
> Rita: Right, right, when they understand that what they are learning belongs to their lives, they get it better and they understand it better. Now, there are some topics, issues that I could not demonstrate to them without using those empty [of contextual meaning] sentences, such as syntactical analysis. So I try to put for them what I think they will need [to know to write], you know?

I borrow Baynham's metaphor of school as a maze that students have to learn how to navigate in parallel with their need to decipher the maze of the system of written language itself not always connected to the contexts in which they live. In other words, they need to decipher the maze to situate the practices they are supposed to engage with at school in their context and therefore make them meaningful. The students I observed entered at a third level of this maze, the new media literacies maze. This dimension of the maze stretched from new ways of behaving in the lab as a rarely visited learning space – Patricia's need to ask the principal's consent to use it is indicative of these new

perspectives at play – to how to use the web tools in a "serious" way and how to write in the project's web interface. It was not easy for students to make sense of all that.

Downplaying digital technologies. Students' struggle to "socialise" (Snyder et al., 2002) digital technologies within their communicative repertoire was also related to their local context, in which in many situations being able to use digital technologies is not perceived as a highly valuable commodity. In an interview at the end of the semester, after students had concluded their narratives in the web interface, Edison told me that he liked computers for some things, and that he enjoyed doing the *RiverWalk Brasil* project activities, despite the fact that he could not write much and he struggled to type the materials, being helped by his buddy Tomas. After Edison had said that during the interview, he added that in fact, he preferred to "work" in more active ways, such as in grocery stores. Edison was talking about the computer course he and Tomas were taking in the mornings:

Eduardo: How long ago did you start?

Edison: Three months.

Tomas: I am one month ahead of him.

Eduardo: Why are you taking [the computer course]?

Edison: (laughs) It was because of my mother, she wanted it.

Eduardo: Why Edison?

Edison: I understand this but I am not very interested in Internet.

Eduardo: What don't you like [about the Internet]?

Edison: Playing there, messing with it, it is not for me. I do not like it. I do not see myself in front of computers, I get lazy.

Eduardo: You see yourself doing what?

Edison: More active things. Let me see.

(pause)

Tomas: Fun, more active [things].

Edison: Like, more active, working in grocery stores, I mean, I always worked in markets, many different ones, doing some things there I liked it, [it is] better than to be seated in front of a computer, I think it is tiresome, I prefer work [in which I have to] move around.

Edison' elaboration is important from an analytical perspective. His experiences in his life seem to have given him a sense that physical activities are "better" than activities related to digital technologies (not perceived as physical). His elaboration provides another element into the analysis of the reasons why students struggled to use the projects' web tools in the lab. However, the acknowledgement of Edison's perceptions should not lead to a romanticized perception per se as the as locals' perception and the "right" account towards literacies practices. The fact is that the ability to perform tasks around digital technologies is currently a much more valuable commodity than being able to perform general physical activities in most western societies, including in Brazil.

Context, Meaning and Practice: The Complexities of New Media Literacies

In students' experiences there were not many shared ways of infusing objects and actions related to the web interface and the project enacted at school with "meaning" (Geertz, 1973). These difficulties stemmed from how the new media literacy practices were situated in the institution of schooling. They were also related to the skills-based

approached of the instruction, which did not help students make connections with other experiences they have in their lives situated in the local context. Students situated the project in their context and this highlighted other aspects of the project beyond the new media literacies component of the *RiverWalk Brasil* project. Some students also downplayed the importance of digital technologies to make their lives meaningful.

Baynham quotes a student who said that he "look[s] at [his] literacy in a slightly different way. I think of literacy as entering a large maze. When you first enter the maze, the way to the centre seems nearly impossible, with all the blind alleys and dead ends, but gradually you manage to work your way further into the maze. You may have to go over some ground two or three times, but with persistence you eventually make it to the centre" (p.71). In the literacy events discussed in this chapter, students' experiences were less hopeful. Many time students stopped once they faced the "blind alley" of writing in the web environment. They struggled even with extra help and they did not seem to be interested in navigating further in some alleys of the maze, even refusing to go to the computer lab. While Edison enjoyed the *RiverWalk Brasil* project (although he could not put that into words to explain his enjoyment when this was related to activities in the computer lab) he knew he did not like computers very much, preferring work in grocery stores, where he "actually" had to "do" things and to "move" around.

On a few occasions students attempted to use a very common strategy they experienced in many moments of their schooling – peer support as a way to surpass difficulties. This was meaningful in their context of lack of resources to learn at school. However, given that lack of understanding, students could not help each other with the *RiverWalk Brasil* web interface and the ones who attempted to do it, like Ra, faced

trouble themselves and the problems escalated. Students could not play as "mediators of literacy" (Baynham, 1995). This seems to be key in literacy practices given that this mediator "can make his or her skills available to others, on a formal or informal basis, to accomplish literacy purposes" (p.39).

Students turned to me expecting that I would play as this mediator. Towards the end of the fieldwork I started answering their requests (as addressed in Chapter 3) and some students were able to move ahead with some writing, although still with difficulties not always present in their writing experiences outside of the lab. In many occasions, students faced those difficulties either by escaping from the lab or by going off task, which happened frequently and in a more accentuated ways when they had to type their materials in the word processor. On those occasions, Vera and Maria told them to close their Orkut and email and go back to "work," i.e., *RiverWalk Brasil* related tasks. Despite many students' lack of interest in typing handwritten materials in a word processor file, these activities constituted moments in which they were "successful" and in which they felt "successful" (when asked to type a text written by a friend, Cristine and Fatima made changes on it and they produced a clean, revised copy of the text in word file document). Students used digital technologies to accomplish a school established goal.

New Meanings, Old Practices

The various vignettes presented in this chapter constitute evidence that the enactment of the literacy-related activities of the project at school represented a situation in which, according to Lankshear and Knobel (2003) , new media literacies practices "reflect[ed] a marked tendency to perpetuate the old [literacies and social practices], rather than to ... reinvent the new" (p.29). The authors' claim also resonates with

Millard, who states that "access to technological means of transforming meaning is often minimal in school and even when employed, serve often to reinstate the privilege of more literary forms"(Millard, 2003, p.4). This tendency manifested at this school experience by a strong focus on skills and on standard-based written texts, leaving few, if any, space for other ways of making sense of the literacy practice and for multiple modalities of writing, including the ones students were used to engaging with in the local cyber café.

Most of the time the new media literacies learning and the "new" writing (mostly typing) practice that took place in the computer lab embodied what Lankshear and Knobel have named the "old wine in new bottles" syndrome, "whereby long-standing, school literacy routines have a new technology tacked on here and there, without in any way changing the substance of the practice, such as using computers to produce neat final copies" (Lankshear & Knobel, 2003, p.29). The authors refer to the deep "grammar of schooling" and how as institutions schools tend to perpetuate these traditional practices, despite students various, "new" literacy practices outside of school, as was the case of students using Orkut, instant-messaging and email in the cyber café. This leads to the fact that "school learning is learning for school; school as it always had been ... school learning is at odds with authentic ways of learning. To be in the world, and with social practice beyond the school gates. The reason why many school appropriations of new technologies appear 'odd' in relation to 'real world' practices – with which children are often familiar and comfortable – has to do with this very logic" (p.31). In the case of this study, it seems that "the grammar of schooling" was assimilated by students once again as they transitioned to the lab hoping to engage in a new, distinct school experience. When students were confronted with the nature and the mechanics of the new media

literacies ahead, they positioned themselves. They did that by making a distinction between what was "fun and cool" – and what they knew how to do, e.g., Orkut – and what was "serious" and it was difficult to make sense of and to do it since it was perceived by them as out of their context – at those moments students became "serious" and "quiet."

Various Constraints

In students' experiences in the computer lab with the *RiverWalk Brasil* web interface, their literacies, their abilities to communicate were constrained, instead of being extended. This took place in opposition of what has been proposed by Kenner, who explains that "for children learning different writing systems through culturally different pedagogies, we might expect that these repertoires will be expanded and become quite varied. The availability of a range of possibilities gives the child enhanced potential for multimodal experience and cognitive reflection. The result is a variety of 'embodied knowledges' relating to the ways in which the act of writing can be performed and interpreted" (Kenner, 2003, p.90). Students demonstrated "embodied knowledge" when writing in paper and pen, as discussed in Chapter 5. However they struggled to apply this "embodied knowledge" to their actions around the rivers' project web interface.

When I interfered at the students' level (towards the end of the school year and usually upon students' request) I tried to develop some "scaffolded assistance" (McCormick & Donato, 2000) in the learners' "zone of proximal development" (Vygotsky, 1978). I tried overt instruction in some aspect of a situated practice by either starting my participation by citing what they had said the turn before mine or by saying words related to concrete elements they experienced in their lives, e.g., I said to Julia and

Alex "it rains a lot in the season you call here 'winter'." Some of them moved ahead to complete some tasks, but that was it. Engaging students in critical thinking or metacognitive development was extremely challenging also for very practical reasons – computer time was scarce as the school tried to provide access to computers to the largest possible number of students and the number of machines was minimal.

I ended up helping students to complete tasks they felt they needed to accomplish despite their struggle to make sense of what they were doing. This was problematic. Chang-Wells and Wells (1993) propose that "if learners are to come to know what their teachers know, therefore, more is required than the presentation of propositional knowledge through talk or text. As well as the presentation of new information and skills, there needs to be extended opportunity for discussion and problem-solving in the context of shared activities, in which meaning and action are collaboratively constructed and negotiated. In other words, education must be thought not in terms of the transmission of knowledge but of transaction and transformation" (p.59). As Dyson (1993) has elaborated, "to learn a mediational tool, including talk or writing, children need other people who not only model and guide the appropriate processes but also respond to their efforts (their spoken words, written texts, drawing and paintings) in situationally and culturally appropriated ways. It is those responses that imbue the child's symbolic acts with social meaning and drives the symbolic process" (p.29). This takes place in line with Street's (1993) account of literacies as practices that take place within social activities through which communication is produced.

Students were able to develop those experiences at the cyber café, even if by only writing short materials and by using a circumscribed repertoire of digital technologies.

Therefore, new media literacies at the cyber café took place in complex, meaningful ways framed by students' context. It was difficult for the teacher, for me and for the students to enact a similar complexity around new media literacies to fulfill their communicative practices at the school computer lab.

Summary

The evidence presented in this chapter and the analysis conducted along with it integrated four key elements framing students' experiences with new media literacies at the school's computer lab through their participation in the *RiverWalk Brasil* project. First, students' experiences with NML at school took place in contrast with their experiences at the local cyber café. This tension was originated by the way the NML activities were framed – as "school work." As students struggled, school responded with further developed ways of instruction targeting students skills acquisition and that back fired as it reinforced the "school way" that was rejected by students. This made it difficult for them to transfer their "successful" experiences with digital technologies at the cyber café to the computer lab. Also, it was difficult for students to situate the use of digital technologies at school in their context and at least some students did not recognize the highly commodity value associated with computers, preferring other types of activities.

The conjunction of these elements made it difficult for students to take actions around new media literacies in the computer lab. They demonstrated only temporary, superficial understandings of the project's web interface tools and they had difficulties with writing in the web interface. These experiences contrasted with their demonstrated abilities to understand other aspects of their schooling experiences and their abilities to write on paper and to think about their writing in critical ways as indicated in Chapter 5.

Since many students did not see parallels between their communicative practices with digital technologies conducted in the cyber café and the ones prescribed at school, they could not use the tools and write. Therefore, it was difficult for students to manipulate their symbolic repertoire to develop actions within communicative practices involving digital technologies at school.

In the next chapter I situate students' experiences with writing (in classroom, in the school computer lab and in the cyber café) and with new media literacies (the use of the *RiverWalk Brasil* web interface tools in particular) into the broader conversation related to issues of international development and literacies. I will indicate how students' struggle to take actions related to new media literacies at school problematizes current propositions held by scholars and practitioners who advocate a "natural" link between students' exposition to digital technologies and new media literacies acquisition. And I will discuss new media literacies teaching and learning at school as a sociocultural practice that problematizes the skills-acquisition perspective informing current practice.

CHAPTER 7
CONCLUSIONS, DISCUSSION AND IMPLICATIONS

> Lets us not decide beforehand what is good for them. Whatever we may think it is good for them is actually good in our own view within an idealised image we may have built of them and their lives
>
> -- Marilda Cavalcanti (2004, p.323)

A Personal and Intellectual Journey

As I sat in the steamy computer lab room to observe teachers and students who were tired, hungry and unmotivated to engage with "school chores" in front of out of date computers, I feared for my dissertation project. Repeatedly, I found myself thinking "what can I take back to the U.S. from this ethnographic investigation in which people are not acting?" It was not an easy road from there to these final pages of my doctoral dissertation. It was not easy because when I started working with the *RiverWalk Brasil* project I believed in the power of the digital technologies to point new ways, to change the problematic scenario of public education in Brazil, to make teachers and students happy. Then I was there, in a real lab, with real people, facing real challenging issues at that school in my real country and I wanted to know what all those experiences meant. I had to deconstruct old ideas, assumptions and stereotypes to rebuild them within this dissertation project. I was puzzled, to say the least.

The new school year in Brazil started in March. Today is April the 2nd and I checked the school narrative developed by teachers and students in the projects' web environment once again. Although some pages have been finished, others are still only half way done. In a recent email Maria, the school coordinator, asked me if I would still

be willing to publish their web narrative on the Internet. She also said that she was waiting for the help of a specialist from the state secretary of education. Most of her message talked about the difficulties at school (the lack of teachers remains a serious issue) and in her personal life (she had been robbed recently just two blocks away from her home). The context poses many difficulties that cannot be ignored. I told her that I thought it was important to have a sense of closure to the project activities, so that the participants could experience some sense of accomplishment and hopefully feel proud of what they did. I also asked her if Vera, the computer lab teacher, would be available to help. Maria does not check her email very often and now I wonder how she will manage these last steps of the project initially scheduled to be concluded almost four months ago, in December of 2006.

As I logged out of the web environment one strong image came to mind: the uncomfortable, heavy, disturbing silence in the computer lab when Edison and Tomas, usually so energetic, smart and talkative, could not take action to write the title of their web page. After them, there were the girls, and then other boys followed the same path. I felt I was in a nightmare. What has happened to my dreams and to their dreams? Why weren't those teachers and students having fun, clicking on buttons, creating, learning, and writing?

During the fieldwork many times I felt like I had become one of those mythical figures captaining another "modernizing" enterprise about which we joke in Brazil as we remember about the Portuguese colonizers. The images the colonizers evoke are obvious these days, but the implications of the actions of these mythical figures to our current times may not be so. It goes like this. One day the stranger arrives at the remote land of

the natives and he tells them about all these new things, the wonders of a world to which they do not belong. That is when the natives are taught that they do not know as much as they thought they knew, that there is much more out there to be learned. One day the visitor says goodbye. But he leaves behind ideas and tools from "his world." Although the visitor explained to them how to use those tools, the natives may not do much once they put their hands on the tools. Some natives will simply disregard the tools, which are not important for their lives. Others will disdain the tools, trying to get rid of the memory of the sudden visitor. And yet there will be the ones who will try to make something with the tools left behind, the natives who are more willing to engage in serious games (Ortner, 1996) to "change" their lives. While the developments stemming from this situation are hardly predictable, scholars have provided us with insight into what seem to be the more likely scenarios. As Street has formulated:

> Formal schooled literacy practices and the autonomous model [the tools] on which they are based may indeed have facilitated power for some: but they will not necessarily provide power for many, when the kinds of literacy needed in their specific context are often very different and, in a social sense, more complex. Developing policy and designing programmes to cater for this level of complexity and 'need' is a more challenging and difficult task than simply 'delivering' a package of 'neutral' literacy skills through central designed programmes. (2001, p.13)

As I conducted this dissertation project I observed teachers and students disregarding, disdaining and trying to engage with what for them are still very new things, very new ways of teaching, very new ways of learning, very new tools, new

technologies, new ways of expressing something, new languages, new media literacies. I think about the girls and the boys I observed at the school and their silence in the lab and I now grapple with the following question: What did it mean to engage these teachers and students in the *RiverWalk Brasil* project? I have to answer this question until I reach the end of these pages. Secondly, I have to frame this answer, what I learned from this experience, with current debates in the field of education, hopefully to shed light on some meaningful issues around the theme of literacies, learning and digital technologies. As I do that, I wish to help the teachers and the students who participated in this dissertation project – and also myself – reconnect with our dreams.

The theoretical perspective that positions literacy practices as context bounded and as evolving in tune with social life makes it extremely difficult for me to propose "new" ways of teaching new media literacies for teenagers or for teachers, or to talk about "best practices." Instead, it seems important to move away from the massive commercial and power interests playing behind the discourses and practices about digital technologies at schools – now on a global scale to either justify or to deny it. Instead, it seems appropriate to focus on new research findings that may allow us to get a better sense of what these processes called "modernization" and "reform" imply to people living at the floor "below." This task is particularly difficult because it does not seem to be the case of denying the need for "modernization" and digital technologies' introduction at schools. In dealing with these processes, it is important not to ignore the "voices and bodies" – all of them – of teachers and students who are enduring the consequences, which are not always as positive as we may assume, of such processes of "reform."

In the next section I will summarize what teachers and students did and what they told me while I was in the field and how I made sense of it in light of theories and current conversations in the field. This summary will allow me to transition to what I expect to be the study's contribution to theoretical discussions around literacies and international development, new media literacies, schooling and youth communicative practices. I will also discuss the limitations of my study. Finally, I will use the study findings and the new elements introduced in the theoretical discussions to set the stage for reflections about practice. Now that the teachers and students gave me all this, what do I have to say to them? I will conclude this chapter facing this welcome challenge.

Summary of Findings

The ethnographic study I conducted for this dissertation project focused on students and teachers' cultural production as they took actions to communicate using various literacy practices situated in the context of an inner-city school located on the outskirts of a large city in the northeast of Brazil. The broad theoretical perspective informing my study focuses on human experiences with various literacies framed by a sociocultural perspective (Dyson, 1993; Enk et al., 2005; Heath, 1983; Lankshear, 1999; Street, 1984). This means that the study looks at students and teachers participating in social life – particularly at school – as they engage in communicative practices meaningful in their context. As they interact with one another, students and teachers co-construct meaning about their lives, in general, and about the literacies enacted in their communication, in particular. The meanings, the literacies and the communication produced by people is not uniform and predictable, instead these literacies change over

time as they move across contexts, and as they engage in the "serious game"(Ortner, 1996) of life.

The investigation about students and teachers' literacy practices focused specifically on their actions around new media literacies taking place through the use of digital technologies. The purpose of the study was to understand the complexities of the enactment of the *RiverWalk Brasil* project, which contains a strong emphasis on the use of new media literacies at school. The study investigated students' practices at school and, because it was expressive for the participants, it also investigated their activities with digital technologies at a local cyber café. In order to frame, contrast and explain participants' actions around new media literacies, the study also focused on their literacy practices around writing in more "traditional" ways, specifically writing on paper both in the classroom and outside of that space since these were meaningful literacy experiences for the students.

Students' Actions around "Traditional" Writing

The fieldwork and the data analysis indicated important patterns about how the students used and made sense of new media literacies in ways closely associated with the context in which they are situated. First, the data and the analysis conducted indicated that students had significant difficulties writing at school, no matter if they were writing on paper or on the computer. When I observed students writing on paper, in the classroom, their actions looked messy and students seemed to be off task in many moments. Sometimes students' writing in classroom was short, impersonal and superficial. In other times, the writing was imaginative and complex. Despite the problematic writing displayed on paper, students were able to think about their writing

and to analyze it in very complex ways. They recognized many issues in their writing, and they were able to talk about how they could "improve" it, as they addressed the themes of audience, content, structure and meaning.

In some cases, students developed more complex writing in the classroom which seemed to be more in line with their intellectual abilities. In those cases, writing was usually conducted in teams in which peer support took place. It was more closely connected with students' experiences with genres and modes of communication more closely related to their communicative experiences at large, such as pop music and TV. Students' experiences with writing outside of the classroom were also meaningful. Overall, the traditional perspective of school in which the teachers assigned an activity and students were asked to complete it did not work well for most students I observed. It seemed that students were resisting school, in some cases even when the assignment was for grading. In situations in which students would bring their imprint to the activity and it was situated in their context, the results seemed to be more satisfactory. As students talked about these written artifacts produced by them for school related assignments and also about written artifacts not directly related to school, they demonstrated their various intellectual abilities informing their more "traditional" writing (mostly paper based) and their communicative practices in those circumstances.

In short:

- Despite syntactical and lexical difficulties, students wrote for many purposes within their communicative practices;
- Students' writing experiences demonstrated complexity and multiple layers of meaning;

- Students demonstrated propositional knowledge, procedural knowledge and metacognitive knowledge;
- Students promoted re-interpretations about hybrid uses of digital technologies on the level of their traditional writing (on the level of what was meaningful to them);
- Students demonstrated communicative competence.
- Students' difficulties seemed to be associated with the scenario of material scarcity at the school and with the accommodating required by that environment as a space for learning. Howèver, students demonstrated their potential to write in multiples ways and they produced various written artifacts, many of them developed through peer support and collective authorship.

Students' Experiences with Writing and Computers

Students' experiences with new media literacies at school contrasted with their paper based writing activities. During the fieldwork students started engaging in activities at the computer lab given their participation in the *RiverWalk Brasil* project. Their experience in the school computer lab contrasted both with their uses of digital technologies in the cyber café and their paper-based writing (in classroom and beyond it). In the cyber café, despite the fact that those students' uses of technologies were limited to a few computer programs, students would write on the computer. These actions seemed to be in line with their needs and they seemed to achieve their communicative goals. Students considered these activities to be "fun." At the school computer lab students engaged in skills-based instruction and despite their general perception that they were "learning" how to click on buttons to build narratives on the *RiverWalk Brasil* web

interface, their "learning" did not hold through time and many of them could not perform the operations on the web interface. Their attempts to engage in the "tactics" of peer support to overcome difficulties in using literacies as experienced in classroom and in the cyber café did not work in the school computer lab. Students often went off task to do Orkut and instant messaging in the lab.

When students were assigned writing tasks as part of these activities in the lab they struggled once again. Their difficulty with writing on the computer contrasted with their previous experiences with paper-based writing in the classroom and with their "fun" writing in the local cyber café. In the computer lab students got "quiet" and they could not start actions to write a title for their web page or a subtitle for a picture displayed on the computer screen in front of them. The teacher's explicit intervention (and also my intervention at certain moments) was necessary in order to help students perform certain writing actions that they seemed unwilling or unable to develop on their own – although they performed "similar" writing actions in the cyber café.

When students were asked to talk about their activities in the lab as they participated in the *RiverWalk Brasil* project they manifested a different understanding about what writing was about in those two spaces. While writing in the cyber café was about transforming words and messing with grammar rules, in the school computer lab it was about being serious, about using "difficult" words. When I asked students what they thought about the *RiverWalk Brasil* project as we browsed their web pages on the computer, they usually drew on aspects of their engagement with the project that were not related to their experiences with digital technologies in the lab or in the cyber café. Students talked about how they enjoyed taking field trips and learning more about the

river that flows close to the area in which they live with their families – these indicated how students made sense of the experience as they situated the literacy practice in their context. There was no talk about computers, Internet, multimodality.

In short:

- Students made some sense of using digital technologies in the cyber café (to communicate and to validate group identity), but hardly when it applied to school work;
- Students struggled to "get it" and to "write" on the computer – there were no shared ways of infusing objects and actions developed in the computer lab with meaning (Geertz, 1973);
- Students' initiatives to provide peer support (as experienced in classroom and in the cyber café) did not worked in the lab;
- Students went "off task" to do what they understood – Orkut and instant-messaging;
- Students did not demonstrate communicative competence in the lab.

Students who struggle to use digital technologies in more socially valued ways may be perceived as "illiterate"– either because they are not willing to display their writing or because they do not possess some digital technologies' skills. However, they may be also constructed and they may be perceived as "literate" – if there is not a script about what being literate means and if this conceptualization extends beyond the possession of some skills, including digital technologies ones. As proposed by Dyson (1993) "the essential language skill is not mastery of any one genre or style – it is the capacity to negotiate

among contexts, to be socially and politically astute in discourse use" (p.31). Students demonstrated that in classroom and in the cyber café, but not in the computer lab.

The study findings seem to inform theoretical and practical issues currently on stake in the field of education. In the following section I will discuss how the study findings represent tensions and indicate new perspectives about ideas circulating around three large theoretical constructs that permeate this study: literacies and international "development," new media literacies practices, and schooling and youth communicative practices.

Theoretical Discussion

Literacies and International "Development"

Ouane (1999) argues that:

Literacies campaigns and programs were often launched under the naïve and false assumption that once people became literate, they were literate permanently; that learning to read resulted automatically in reading to learn and acquiring sustainable self-confidence and autonomy. In actual practice, many campaigns showed low learning achievement and retention rates, and most were confronted with a drop out rate averaging 30 and 40 percent. The fact is that many new literate learners relapse into illiteracy after painstakingly investing their valuable time and scarce resources in the acquisition of basic literacy skills. (p.337)

My study findings seem to be in line with Ouane's claim. It seems that in some cases the involvement of students with new media literacy at school may not constitute, necessarily, a meaningful experience that will enable them to expand their literacy practices. The constraining of students' literacy repertoire experienced at school – they

became silenced when exposed to digital technologies – problematizes the assumption justifying a causal relation between literacy diffusion and "development," as discussed in Chapter 1. As proposed by Escobar (1994), seeking to eradicate the "problems" of "illiteracy" – now formulated around uses of digital literacies – the program and policy proponents ended up multiplying them indefinitely. In order words, such initiatives have failed systematically given their lack of fit with people who were supposed to benefit from them (Ahmed, 1999).

A friend from Brazil tells me that Simon Schwartzman, one of the most prominent sociologists in the country, is questioning the government's initiatives to provide computers to public schools (Schwartzman, 2007). Schwartzman has been drawing on a study also publicized in the U.S. conducted by Maresa Sprietsma, from the Centre for European Economic Research in Germany (Sprietsma, 2007). The study indicated that the use of computers interfered in negative ways with students' learning of mathematics. At this point there is also evidence that computers have little, if any, impact in children's literacy learning at school (Andrews, 2004). Despite these not very encouraging results for learning, it seems that there is little disagreement that students should be exposed to digital technologies at school in "developed" countries. For "developing" countries that are struggling to manage scarce resources, the question should become how and when to do this.

This is another reason why the suggestions usually formulated by international organizations about the need to expose student to digital technologies at school is so problematic. First, because these suggestions are usually tied to promises of helping increase learning, this may not be the case. Second, because even in the cases in which

these organizations offer financial help, the debilitated infrastructure and enduring basic problems (many students and teachers at school are hungry) challenge the capabilities of the financial help to fulfill the planed goals. Third, because these propositions for "innovations" in education interfere and de-center with the "native" ways of doing education, which may leave these countries with a very negative outcome: the innovations have not worked as expected and the local knowledge about education has been overlooked.

New Media Literacies Learning

It is a challenge to use the findings of a study in a dilapidated public school in Brazil to speak back to researchers conducting studies in the U.S., Europe and Australia, where students seem to be engaged with all sorts of new media literacies, from blogs to podcasts, as both learning experiences and as cultural production. Every time I would visit a school in the U.S. I would find a way to stop by the computer lab and most of the time I saw what I expected – enough up do date computers to accommodate a full class of students (in fact, various schools have 2 or 3 computer labs, plus they have computers in the teachers' classrooms). It is true that in one school in a poor area in Michigan students were mostly printing content from the Internet to take home with them since the school did not allow them to take course books home. The abundance of computers at schools in the U.S. reflects the availability of computers in the society as a whole, which means that students' experiences with computers at school may constitute an extension of their technology-infused lives outside of school. In 2000 half of the homes in the U.S. already had a computer (U.S. Census Bureau, 2000) while in Brazil last year only 19.6% of the houses (CETIC, 2006) had a home computer. Even minorities

living in the U.S. who may not have a home computer seem to have much easier access to these machines at local libraries and at after school programs. This is not the case in Brazil and in most Third World countries, where computers are extremely scarce valuables. This does not mean that teachers and students do not have access to these technologies, but it may mean that they are constructing their lives and their literacies around other practices that are more meaningful to them, although they may keep a potential interest (despite their lack of familiarity) in other digital technologies. Studies about new media literacies need to acknowledge these nuances if we are willing to understand teachers' and students' relations and uses of new media literacies beyond the mainstream experiences.

This means that to talk about and to study new media literacy learning as participation in context (Rogoff et al., 1999; Vygotsky, 1978) may be a different enterprise when focusing on "developed" countries and/or on the Third World. The fact is that most students in the Third World potentially have fewer chances to participate in new media literacies and this may influence their development and their uses of these literacies in both positive and negative ways that defy generalizations. Some teachers and student even refuse to participate and such denial may become an interesting locus of sound scientific research that may help us understand the current times in which we study education in more nuanced ways, perhaps beyond the commercial hysteria around digital technologies and the "cool way of life."

It seems that the field has been operating around some potentially problematic paradigms. Many authors seem to assume that to understand new media literacies we must look at spaces "beyond the proverbial school" and they also seem to believe that

"we could learn much from listening to our students"(Alvermann, 2003, p. X). These are problematic generalizations. My study has shown that students carry many meaningful new media literacy practices outside of the school, but those practices may not downplay the importance of issues around new media literacies learning in the school computer lab – in fact my investigation around students' practices in the cyber café allowed me to better understand important learning issues playing in the computer lab, instead of excluding the experience at school. In the class I noticed that only two male students had "better" new media literacy skills than the computer lab teacher (the Geography and the Portuguese teachers were also "good" users of computers for the Brazilian context, while the school coordinator struggled to use computers in some situations).

Therefore, in the case of the classroom I observed it would be necessary to qualify better what Alvermann means by "learning from listening to our students." I am sure we would learn immensely from students, as I did during this dissertation project, but I am not sure how much of this learning would be directly related to the enactment of new media literacies as researchers envision it in the U.S. and in Europe simply because most students do not have many chances to access digital technologies in their daily lives. The other side of this proposition seems to downplay and even marginalize teachers' abilities and interests in new media literacies since in between the lines it carries an essentialized view of teachers as backward professionals who would be less open to innovations. While this assumption seems to hold more appropriately for schools as institutions (Cohen, 1988; Larry Cuban, 1984), I think that researchers working around new media literacies may want to re-examine such perspective taking into consideration the multitude of teachers and their various interests as professionals.

Finally, there it seems to be a discomfort for some scholars in the field with the lack of scientific basis in a significant portion of the literature in new media literacies studies. Because it is a very new feature in the field of literacies, there is not yet a substantive body of accumulated knowledge that would allow researchers in the area to propose theoretically rich questions and to discuss study results against solid literature. Instead, most studies seem to be exploratory and they seem to be drawing on anecdotal, impressionist data. While various studies conducted have been an important step in acknowledging a growing social and cultural production by teachers and students around new media literacies, it is important to keep in mind that the field of education is in great need of solid scientific research to help schools, teachers and students to overcome difficulties in participating in meaningful literacy practices at their fullest potential. This may help them overcome barriers to find new ways to participate in the culture and social arenas of our current times according to their own interests and needs.

Schooling and Youth Communicative Practices

Current communicative practices of youth in "developed" and in "developing" countries seem to contain, reflect and produce in more or less explicit ways hybrid cultural formulations. As pointed by Lyer (2001; 1989) in two complementary books, "western" ways of life have been permeating ways of living in remote areas of the world while ethnic minorities become more visible in the U.S. and Europe as they disseminate their ways of life around the planet. When teenagers communicate, particularly using digital technologies, they enter, navigate and help weave this complex web. Their various, multimodal (Kress, 2003) texts are located "everywhere" – even when produced with simple paper and pencil. It seems like the narrow boundaries of the letters as

representational symbols can no longer hold the complexity of cultural meanings of current times. Teenagers write, draw, insert colors, new icons, they cut and paste images, and sounds to produce messages they see as meaningful and that led them to achieve their communicative goals (Alvermann, 2002; Jewitt & Kress, 2003; Kist, 2005; Lankshear & Knobel, 2003; Seiter, 2005). Then the teenagers go to school.

One of the greatest challenges that is often mentioned but rarely explored in this literature is related to the difficulties of transferring such rich experiences taking place with teenagers and their communicative practice outside of schooling to inside of it. Usually authors tend to blame the institution of schooling as historically impermeable to change and the like. In less explicit ways teachers have also been blamed, which is often addressed as positioning them in need of more professional development. While all these arguments seem to be important, it seems that this issue also speaks to the nature of school in our societies and the expectations posed at schools. As I observed Wagner, one of the students in the classroom, I was intrigued by his almost inaction to what was going on inside of the classroom. Yet, he was one of the most popular students around, even among the teachers. Wagner's educational experiences were taking place outside of the school and he seemed to be fine with that. Formal schooling in Wagner's life was about getting a formal diploma and meeting friends and dating girls. At night he crossed the city to attend a web design course in a well regarded computer school. He worked with the theater group of his church and he was enrolled in an internship to place young teenagers in the job market. He also was involved with *parkour*, the extreme French sport, and he still had time to take care of his collection of old coins and so many other activities. Everyday I met him, he had something to tell me. Then I looked at him in class

and I asked myself: does Wagner need to go to school? While I do not have the final answer to this question, given the many issues implicated by it, I think that adopting this theoretical perspective may help us to move ahead from the usual blaming of the school and teachers for not fulfilling certain expectations. Maybe the point is to deconstruct school as we envision it and then reconstruct "schools," many of them, that would go more with how Wagner gets his "education."

Limitations of the Study

The main purpose of this ethnography was to provide a "thick" description (Geertz, 1973) of teachers and students participating in literacies practices in an urban school in the northeast of Brazil, I aimed to examine their actions and thoughts about a "modernizing" intervention through the *RiverWalk Brasil* project. As I analyzed the data from various perspectives to explore the web of meanings connecting various participants' actions and ideas I produced a complex, multilayered understanding of the experience of new media literacies situated at schools. While the results shed light in many important aspects of the experience, I do not claim that the study's findings can be generalized to the universe of Brazilian public schools, much less to schools outside of Brazil. This study may be used in conjunction with other ethnographies about teachers' and students' literacies practices around digital technologies to help scholars in the field raise new questions, to challenge assumptions and to discuss some possible commonalities across studies.

In this dissertation project I operated both as the researcher and the project investigator. I made my dual role explicit and I tried to indicate how I was perceived by the participants and how my institutional personas have interfered with actions and ideas

evolving in the project. While being a coordinator afforded me the opportunity to look at some actions from a closer perspective, since I also had to take actions regarding processes taking place in the field, it may be that at certain moments my ability to observe and to register was compromised. The interviews had a key role in trying to compensate for those potential occurrences, but it is possible that people interviewed were not willing or were not able to reconstitute occurrences in the field exactly as those unfolded.

Because I was more interested in looking at how various contextual elements played together to frame teachers' and students' actions and thoughts about literacies and digital technologies, it is difficult to attribute study results to particular elements of the context. For example, future studies could investigate teachers' and students' perspectives and actions in a less restrictive environment, with higher social economical level and more availability of resources. It is possible that study results would differ from the ones provided by this dissertation project, given that in some cases the scarcity of resources seemed to have limited participants' actions in the field. However, it does not seem reasonable to argue that simply the supply of resources (e.g., new computers, more books, better food) would drastically change participants' literacy practices in the short run. To claim that would mean ignoring other substantive cultural and social aspects that played deeply in the field and are associated with the identity of the participants.

This study has indicated that the problematic assumption that students will automatically transfer their new media literacy practices enacted outside of school to schools may not hold in many situations. This is due to various important factors playing in this process. An in-depth understanding of these issues has to take into account the

complex ways in which teachers and students make sense of their schooling experiences and how this contrasts with their experiences outside of school. It seems reasonable to hypothesize that if students perceive a less rigid boundary between their "outside world" and the "school world" it may became easier for them to contextualize and make sense of new media literacy practices at school. More research would be necessary to illuminate these possibilities.

Educational Implications

While the "ideological model" of literacy proposed by Street allows researchers to open up their analytical scope to embrace a wide array of practices that people engage with in various contexts to communicate, it does not imply a romantic, naïve view of the local, genuine practices of people and groups per se as the "right" ones (Street, 2001). This tells us that we, as educators, need to help teachers and students move towards more "globally valued" literacies (to enter the territories of the languages of power, inclusion, and "development"). However, this task poses a paradox. How could we develop these pedagogies without devaluating teachers' and students' "local taxonomy" (Hymes, 1994) of literacies or without diluting students' "desire to communicate" (Vygotsky, 1978)?

To answer this question I will draw on two perspectives that are not generally associated with issues around teaching and learning with digital technologies: pedagogies of English as a Second Language around "bilingualism" and "mainstreaming" and Freirean ideas in line with "dialogue" and one's intervention in the "world."

Borrowing from English as a Second Language Perspectives

I propose that we look at this paradox through the lenses of scholars operating outside of the field of new media technologies and digital technologies at schools. This

may bring new perspectives into the discussions about how to teach, and how to promote learning around new media literacies, in particular for teachers and students who still are not able or are not interested in making sense of certain uses of digital technologies, despite its importance for their future as they face a job market that will often demand such skills. First I would like to establish a parallel with issues proposed by scholars working around the teaching and learning of English as a Second Language (ESL). Their contribution seems particularly powerful to help us deal with the issues of decontextualized instruction affecting learning of more socially valuable uses of digital technologies that have not yet became meaningful for students situated in various contexts.

Reyes (2001) seems to be in line with other scholars in the field (Nieto, 2000; Valdes, 1992) when she criticizes the assumption that "non-English speakers must be moved to English usage as quickly as possible or they will not achieve academically; or, worse, they will refuse to assimilate or to adopt the common language and the culture of the larger community ... Inherent in this assumption is a deep-stated belief that limited English proficiency is equivalent to limited intellectual potential" (p.295). This formulation indicates to us a similar mechanism that may be present in programs, policies and even practices at the school level that propose the immersion of students into new media literacies as soon as possible and in the most intensive ways or they will not survive in the globalized world. In opposition, a lack of participation in literacy practices involving digital technologies seems to indicate, as in the case of a second language acquisition, a "limited intellectual potential." That does not seem to be the case.

Reyes continues by reporting about a teacher in a bilingual class in Colorado who:

> [R]ather than making English a prerequisite for process instruction, as is usually the case ... allowed students to write in Spanish and English – whichever language was most comfortable for them. She did so with the full conviction that the transfer of English literacy would occur more readily than if writing English were required immediately. (Reyes, 2001, p.302)

This means that instead of propagating new media literacies and digital technologies as the markers of "modern" education and as "the language to be spoken" (what English represents for ESL educators), it seems that we need to keep open spaces in the classroom, in instructional activities and in learning projects for students "native" ways with words and for their "native" literacies. As Cazden has proposed, we need to take "cultural differences into account, to adapt instruction more successfully to the needs of individual literacy learners, to recognize collective as well as individual identities, and to support learners and future citizens positive intercultural attitudes and skills"(Cazden, 2000, p. 250).

Teachers' and students' "native" perspectives can work as bridges that may lead them to new words, new tools, new meanings, new media literacies. This transition may lead teachers and students to create and engage with a real "culture of practice," maybe a hybrid one, with elements from the various traditions and experiences involved. Through this "culture of practice" students would learn to become full practitioners (Lave & Wenger, 1991, p.95) by gaining membership into a community of practice through participation and action in multiples levels. As Applebee (2000) puts it, it should be about how to do digital technologies "their way" instead of learning about it in a standard, decontextualized way.

This participation, this acting, is "entailed in membership in ... a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" (Lave & Wenger, 1991, p.98). Learning generated from this participation could be mediated by the differences of perspectives among the co-participants. This seems to resemble students' experiences with new media literacies in the local cyber café, but not at school. Once again it seems important to bridge the practices of the "community" built in the cyber café to the school, and also create a community at the school in line with Lave and Wenger propositions. The participation in this community at the school level, more specifically, would be based "on situated negotiation and renegotiation of meaning in the world. This implies that understanding and experience are in constant interaction – indeed, are mutually constitutive" (Lave & Wenger, 1991, p.51).

This hybrid, process-based, negotiated and shared learning does not constitute an end in itself. Street correctly points to the need to open possibilities for students to learn the more socially valued literacies. It also seems important to indicate that in learning certain practices students can gain the tools to get entry in certain instances of power and in doing that they can formulate their own imprint on those circles. This may lead to change towards social justice. Paulo Freire's ideas seem to indicate some paths in that direction as detailed next.

Dialogue and Action in the World

While new media literacies can empower some people, they also hold the potential to disfranchise people, to distance them from what is most valuable to them, which is their indigenous knowledge and practices. A possible solution for this paradox

may come from a Freirean perspective. Paulo Freire's proposition of learning as "taking action in the world" seems to help justify the acknowledgement of literacy practices around digital technologies in various contexts, despite the fact that it may be perceived as a commercial or imperialist agenda to sell digital technologies in a "world without borders" and to prepare new sites for "renewed exploitation."

Paulo Freire reminds us of the need to move beyond a "banking" system of education, traditionally associated with the use of top-down discourses and decontextualized school materials but currently also associated with the use of digital machines that may not have been yet incorporated into the daily lives of students. That would mean promoting undesirable oppressive practices. Instead, if the presence of digital technologies could be used to create new opportunities to put away with oppressive positioning of teachers, then this would be something worth exploring in the school setting. This may happen not only regarding certain uses of the digital technologies for certain goals that are more meaningful for teachers and students in their context, but also regarding student relationships. Teachers may become more vulnerable to students who may be more used to certain uses of digital technologies than their instructors. This "imbalance" could interfere with long lasting structures of power within the institution of schooling and this could open up space for new experiences in teaching and learning, including new media literacies. According to Freire, these kinds of imbalance may originate new possibilities for the creation of the "pedagogy of the oppressed"(Freire, 1970) given that it may be conducive to new openings for an educational dialogue between teachers and students. Students could be removed from the constraining positionality of being "oppressed" and from this renewed dialogue with

teachers they could get new perspectives into their learning processes. As they "teach" computers to their teachers, new media literacies could become meaningful to them and to the teachers.

Finally, learning around practices involving digital literacies could represent, from a Freirean perspective, another opportunity for teachers and students to insert their imprint in the world they live in, to appropriate new media technologies in ways that are better for society. This possibility seems to be a reasonable project to counteract the merely commercial or "imperialist" agenda behind the transferring of digital technologies to schools in the Third World. This perspective would be in line with Street's proposition that more than the simple introduction of literacy to passive indigenous people, what is important are "the particular forms which their uses of literacy took, rather than simply the presence of literacy itself" (Street, 1995, p.36). In teaching students from various contexts how to access and transform literacies around new media literacy, teachers can also open space for students to think about new ways of transforming the world, hopefully to produce more needed social justice. That is how I can reconnect with my dreams. I hope this also helps the teachers and the students involved in this study and beyond it to also reconnect to their dreams.

APPENDICES

APPENDIX A[9] - FIGURES

Figure 1. By clicking on the displayed buttons on the *RiverWalk Brasil* web-interface pages students can add various formats of text, image and sound.

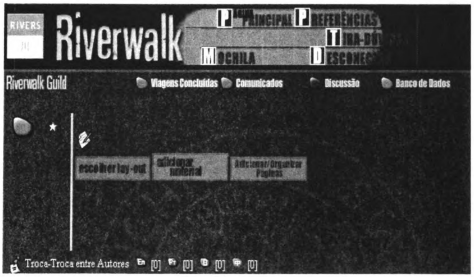
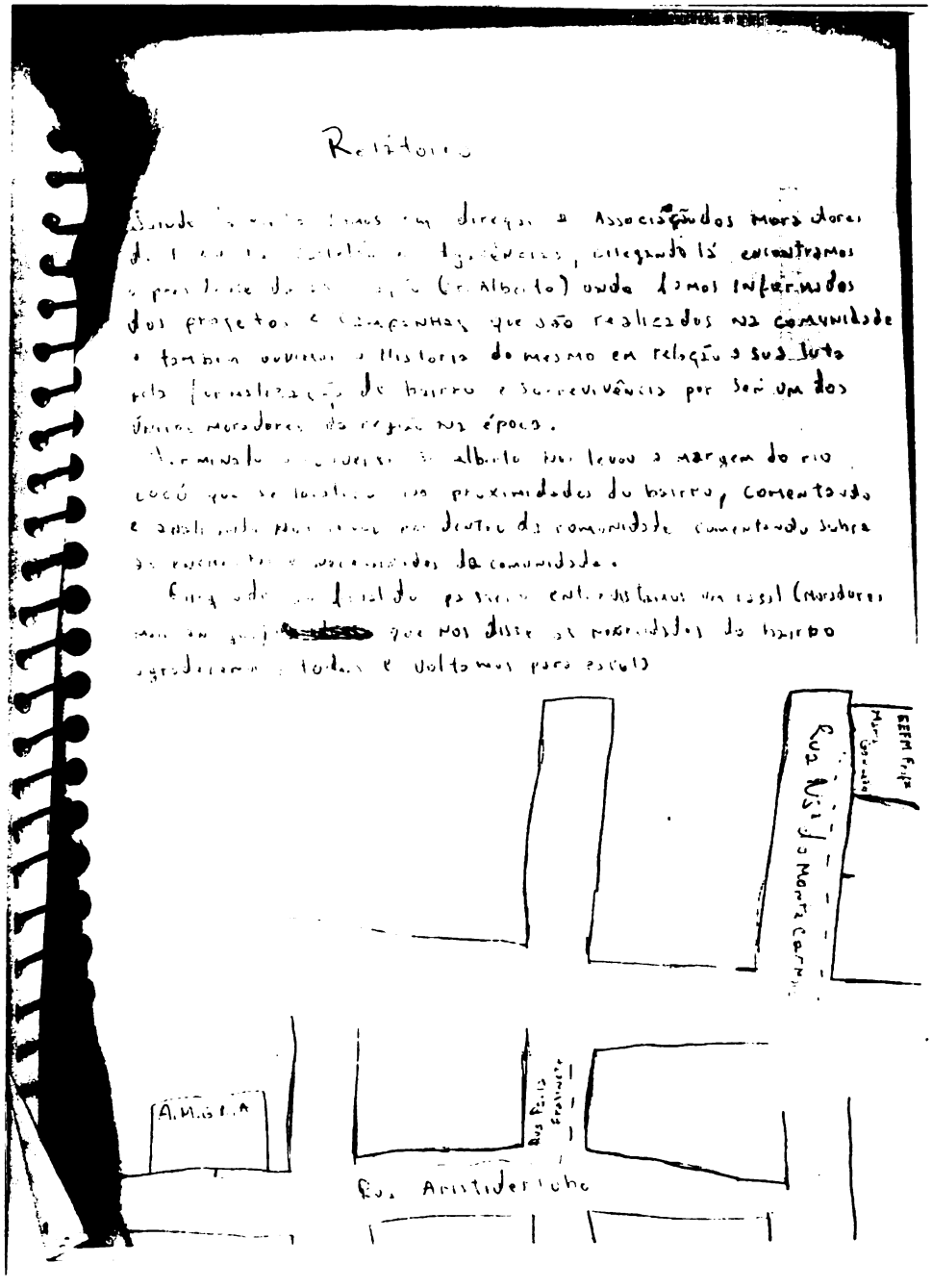


Figure 2. Students reproduce in writing and in image their interactions with nearby river residents. Some pages also contain music, drawings and hyperlinks.

[9] Students' original writing in Portuguese was translated to English to preserve its originality and structure. That means that often times the translation will not fit with the standard grammar and syntax of English.

Figure 3. Wagner's report written during a Geography class.



Translation of Wagner's report written during a Geography class:

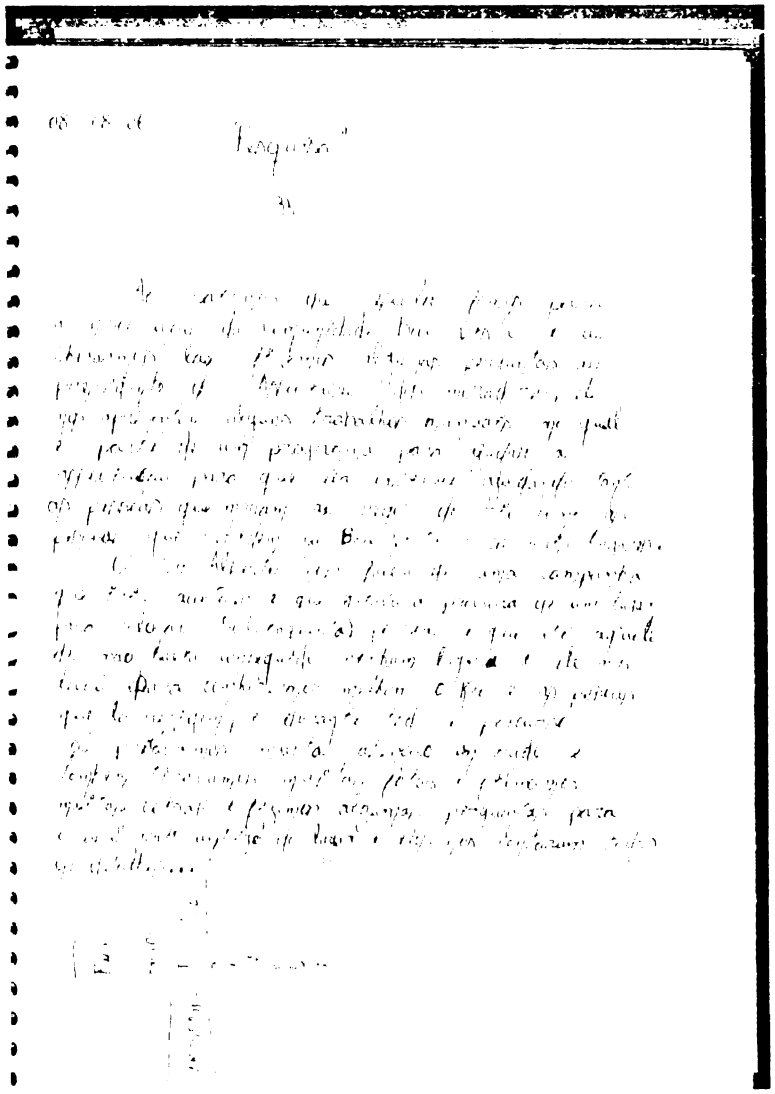
Report

Leaving the school we went in the direction of the Residents' Association of Boa Vista-Castelão and neighborhood areas, arriving there we met the president of the association (Mr. Alberto) where we were informed about projects and campaigns that are developed by the community and also we listened to his story about his fight to legalize the neighborhood and his survival since he was one of the few residents in the region at that time.

Once the talk was over Mr. Alberto took us to the edge of the Cocó river that is located near the neighborhood, explaining and analyzing he took us inside the community commenting about the floods and the community needs.

Arriving at the end of the trip we interviewed a couple (longtime residents) that told us the needs of the neighborhood we thanked them all and returned to the school

Figure 4. Roberto's report written during a Geography class.



Translation of Roberto's report written during a Geography class:

(date)

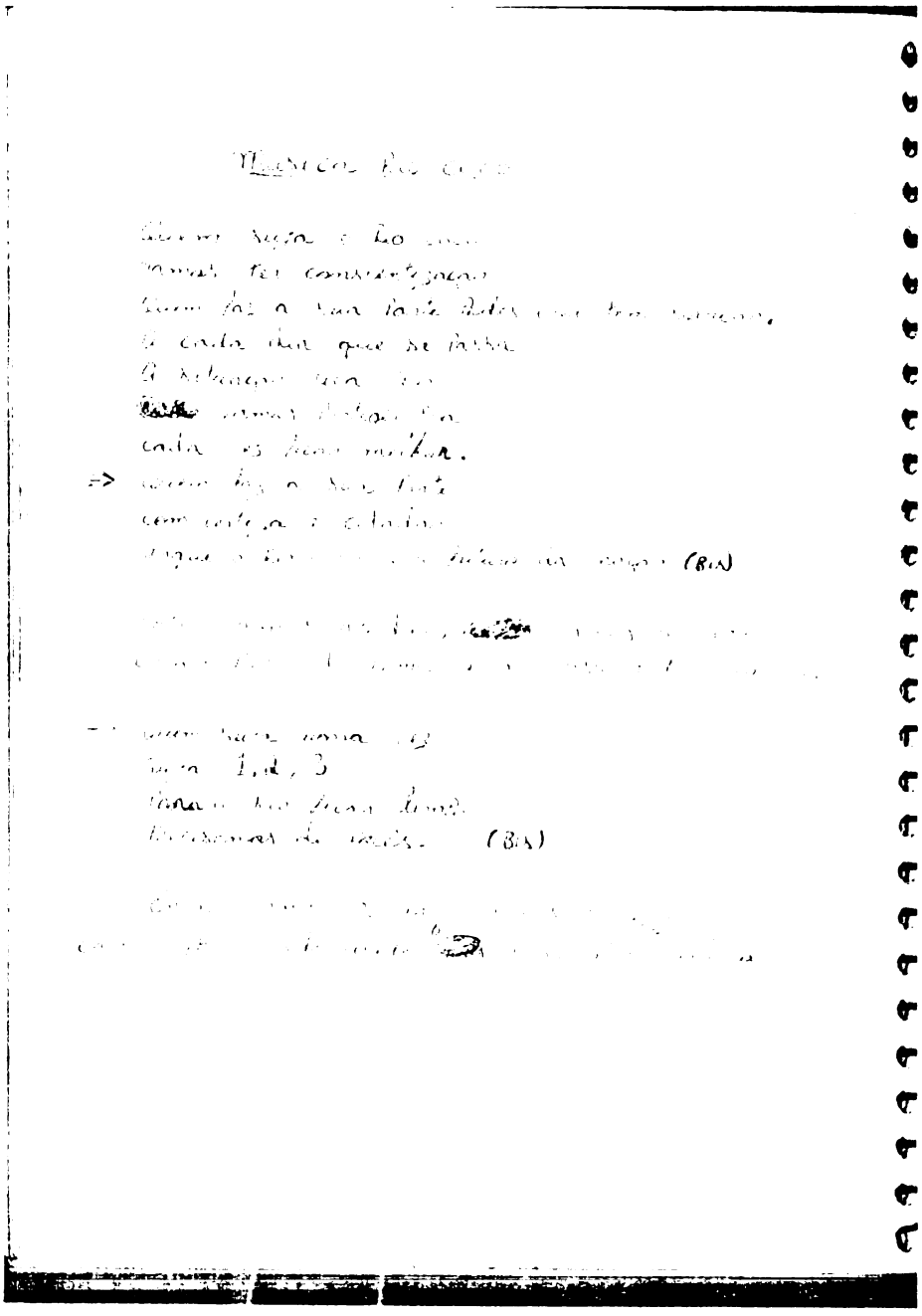
"Investigation"

(R's name) (R's student number) (The Geography teacher's name)

As we left the school we went to the Boa Vista community association and as we arrived there we asked the president of the Residents Association some questions, he showed us some handmade works in which is part of a program to help the association so that it keeps helping both the people who live nearby the river and the people who live in Boa Vista and other areas.

Mr. Alberto talked to us about a campaign to take place and that he was looking for a place to accommodate 50 (fifty) people and that until that day he had not found any place and he took us to get to know better the river and the people who live there, and during the whole journey we paid a lot of attention to everything and also we took a lot of pictures and videos of many things and we asked a few questions to the oldest couple in the area and they told us all the details...

Figure 5. The funk lyrics written by the boys.



Translation of the funk lyrics written by the boys:

Music cocó River[10]

The ones who dirty cocó River

Let's be conscious[11]

The ones who do their part you can believe there will be a solution.

Each day that passes

The situation gets worse

Let's protect for

Make sure it gets better.

The ones who do their part

Are citizen for sure

Because the cocó River is the nation's future (repeat)

So let's help, let's help

With the river all clean and our life will get better.

The one who make it dirty once

Make it dirty 1, 2, 3

To clean the river

We need you. (repeat)

So let's help, let's help

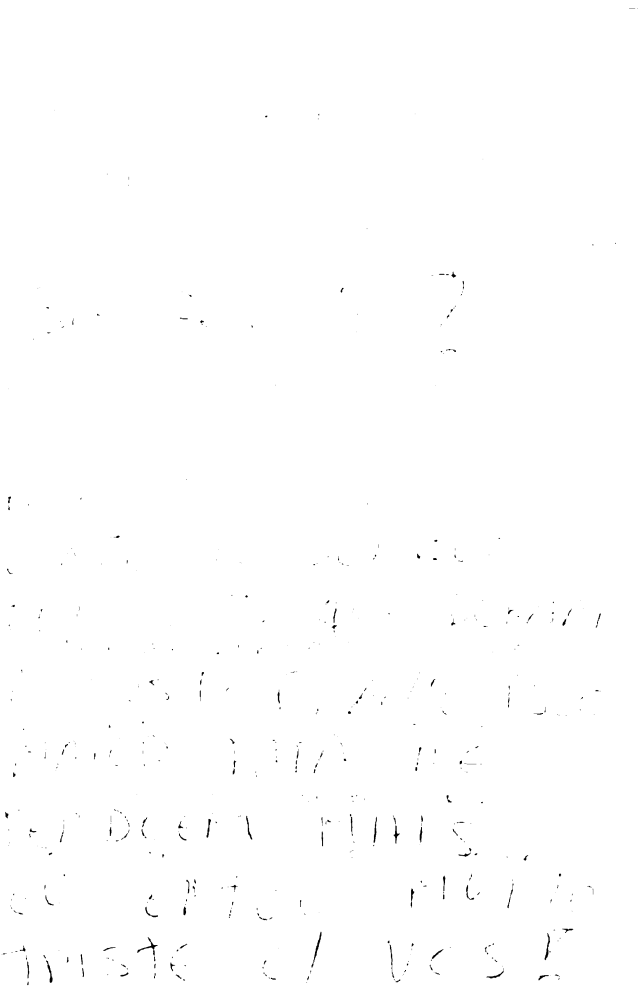
With everybody together our river will get better.

---

[10] This was their last draft. Once they were done with this one they simply copied it again on a plain sheet of paper with no scribbles on it and they handed it to Rita, the Portuguese teacher.

[11] They misspelled this word and then they corrected it in the final copy after I helped them with the correct way of spelling it.

Figure 6. The girls exchanged brief messages written in paper and circulated them around the class as a paper ball.



Translation of the brief messages written in paper and exchanged by the girls around the class as a paper ball.

Girls' instant-messaging-in-paper

I am kidding I will just warn you that your little message disappeared...[12]

Which message?[13]

That one from the notebook I looked for it and I did not find it. L also[14] did not find it. Now what?

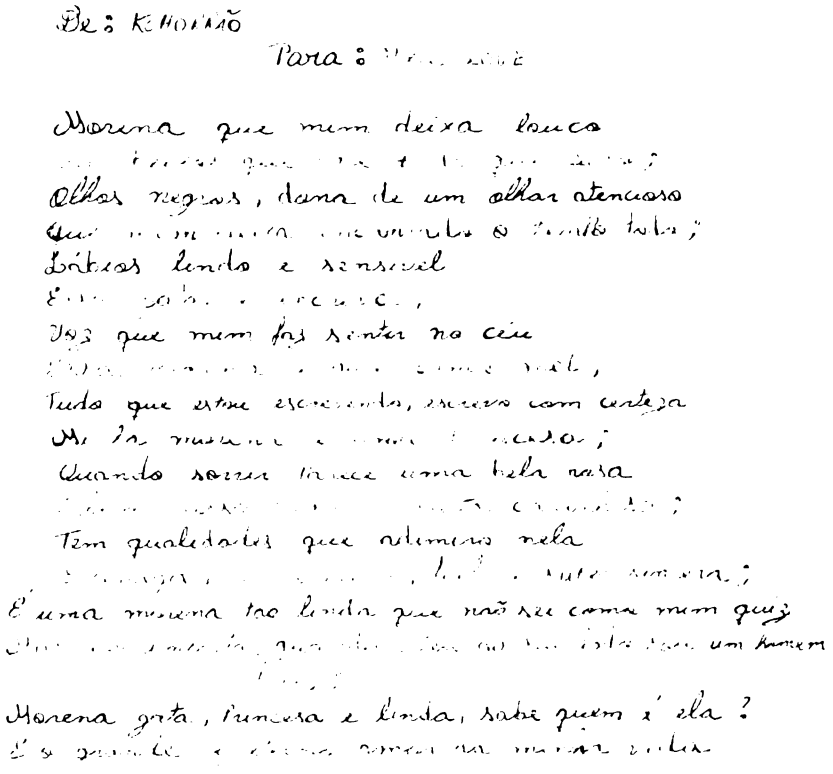
Folks, I know that you[15] gave it I did not like it, I think this is bullshit[16], I am sorry but I am very sad w/ you!

I am sorry I had to show it to him so that he could see that it is not good to play with someone's feelings but there a new thing he said that he also liked you, but that you like him +[17] that he likes you.[18]

---

[12] She used blue ink to write.
[13] She used black ink to write.
[14] She used only three letters "TBM" as abbreviation for the word "Também" as they do when they do instant messaging in the cyber café.
[15] Same pattern of abbreviated word writing as in "TBM."
[16] Slang in the original Portuguese.
[17] She used the summation symbol as a substitute for the word "more."
[18] I preserved the lack of comas in some sentences as it was in the original.

Figure 7. The first page of the poem that Tomas and Edison wrote together for their girlfriends.



Translation of the poem that Tomas and Edison wrote together for their girlfriends:

From: Kchorrão[19] (Big Dog)
To: My love[20]

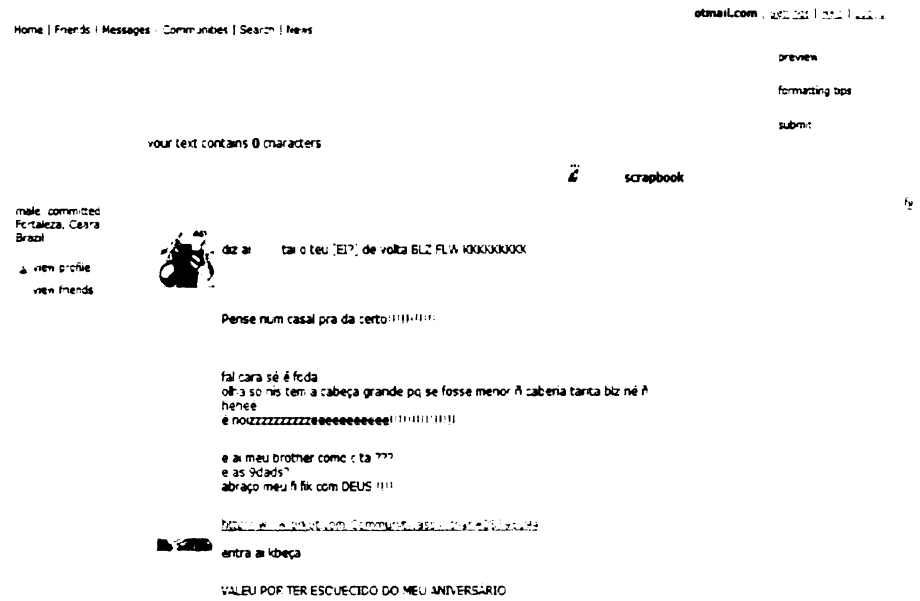
Brunette who drives me[21] crazy
With kisses that are worth + than gold;
Black eyes, you have a caring way of looking[22]
That enchants me all the time;
Beautiful and sensible[23] lips
This girl is amazing;
Your voice puts me in heaven
This girl is sweet as honey;
I am sure about everything I am writing
My brunette is a princess;
When she smiles she looks like a beautiful rose
On top of that she is very tender;
She has qualities that I admire
She is a friend, a companion, she is faithful and very sincere;
She is so beautiful, I don't know why she chose me
It doesn't matter, when I am by her side I am happy;
My Brunette is cool, she is a Princess and beautiful, do you know how she is?
She is the great and eternal love of my life: "R".[24]

R I love you
X[25]

[19] The "K" letter is not frequently used in Portuguese. They used it to produce the same sound of *ca*. This way of writing is similar to the way they write when they use Orkut in the cyber café.
[20] The word "love" was originally in English in their manuscript.

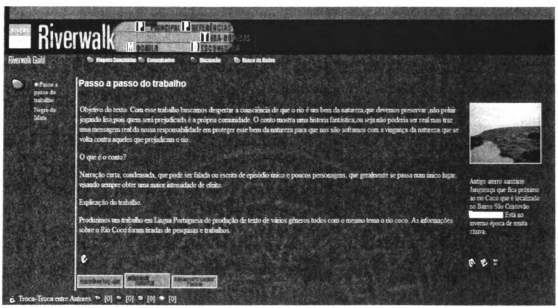
[21] They produced a grammar "error" here that does not have a parallel in English.
[22] The equivalent word at this point rhymes with the equivalent word for crazy, in the first sentence. The whole poem was built around this structure of rhymes between even sentences (written in blue ink) and rhymes between odd sentences (written in red ink).
[23] They conjugated the adjective referring to the word *lips* in the singular form.
[24] They wrote her real name in quotation marks.
[25] In this part they inserted her name and his name in a design that resembles a score screen from a soccer stadium.

Figure 8. The image presents brief Orkut messages posted at the profile of one of the male students form the class that I observed.



The image contains samples of teenagers' writing in abbreviated forms in which they replaced some letter and/or parts of some words with other letters that convey the same meaning to the original word based not on the original/standard meaning of the letters ("BLZ," "FLW"), but instead on the sounds associated with the letters (e.g., the word ex would become *x*). These procedures seem to characterize a particular way of writing currently used by some teenagers in Brazil. The image was modified to preserve the identity of the people who wrote the messages.

Figure 9. Students' written materials in the computer lab for the *RiverWalk Brasil* web interface.



The subtitle for the picture (on the right side of the figure) was produced by Julia and Alex with my help. The main text was produced by hand by a team of students during the Portuguese class (in the classroom) and later the text was typed in a word file (in the computer lab). Students cut the text from the word file and pasted it into the web interface as they constructed their web page. This was a test page, it was not the final page produced by this team.

The subtitle of the picture (on the right side of the figure) says: "Old garbage deposit of Jangurucu which is close to the Cocó river that is located in the São Cristovão neighborhood in (name of the city and state). It is winter time of a lot of rain." The image was modified to preserve the identity of the people who wrote the messages and the school location.

APPENDIX B – TRANSCRIPT CONVENTIONS

Conventions used in the presentation of Transcripts

( ) I used parenthesis to insert contextual and nonverbal information (e.g., laughs) in an attempt to make statements and situations in the data clearer to the readers.

[ ] Brackets contain explanatory information inserted into participants' quotes by me, rather then by the speaker, to help make sense of their oral speech once I put it in written form in this manuscript.

NO A capitalized word or phrase indicates increased voice volume of the speaker.

... Text omitted within the quotation.

APPENDIX C – List of Codes

The following are the main codes used in Atlas, a qualitative software, to organize the data collected during the fieldwork in Brazil. These codes were developed from my first reading of all the materials in the data set and they evolved along the data analysis process. The presentation of the codes organized around various levels has been done solely as an attempt to organize the information displayed. These levels do not imply a hierarchy or a dichotomization between levels and actions. Instead, the codes were approached as multiple points in a complex, multilayered web of meaning.

Level 1 – Context and societal issues

Lack of resources
Cultural practices
Globalization
Irrationality
New and it does not make sense
Modernization is bad
Modernization is good

Level 2 – Space

Computer lab
Cyber café

Level 3 – Spaces at school

Geography class
Geography class *RiverWalk Brasil*

Portuguese class
Portuguese class *RiverWalk Brasil*
Portuguese beyond classroom
Narrative genres

Biology class
Biology class *RiverWalk Brasil*

Level 4 - Literacies

A – Actions around "traditional" literacies

Writing
Writing *RiverWalk Brasil*
Writing together
Not writing
Copying

Reading
Reading *RiverWalk Brasil*
Reading together
Not reading

B – Actions around new media literacies

Use of technology
Use of technology web search
Use of technology basic functions
Use of technology copying
Use of technology off task
Use of technology outside of school
Use of technology reading
Use of technology typing
Use of technology video camera
Use of technology watching
Use of technology writing
New perspective about a digital technology

Level 5 – "Teaching" and "learning" new media literacies

Learning
Team work
Learning as they go
Learning new media literacies
Not learning
Off task general

Level 6 – Making sense of it

A – Teachers' perceptions and statements

Teacher-student relationships
Teachers' perceptions of schooling
Teachers' perceptions of students
Teachers' perceptions of themselves
Teachers' statements about media
Teachers' perceptions of technology

B – Students' perceptions and statements

Students' perceptions of schooling
Students' perceptions of themselves
Students' reactions to technology
Students' statements about media
Students' statements about writing

The code "Researcher-participant relationships in the field" permeated all the levels mentioned above.

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