BRIDGING THE DIGITAL DIVIDE: AN ECOLOGICAL APPROACH TO LATINO ADOLESCENT ENGLISH LANGUAGE LEARNERS AND ONLINE DISCOURSE COMMUNITIES

by

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(Under the Direction of Linda Harklau and Kathryn Roulston)

ABSTRACT

Using Conversation Analysis (CA) and Multimodal Analysis (MMA), this ecological study examined how semiotic modes were employed at an institutional and individual level in order to affect student beliefs about issues of nationalism, culture, and patriotism. The study examined how adolescent Latino/a English Language Learners (ELLs) at two separate middle schools in the Southeastern United States negotiated the affordances of an electronic environment as they wrote in the target language (TL) of English to one another online. The study particularly investigated how the interactions and metalanguage around online posts affected the second language (L2) composition process. Data were collected using participant observation methods over a one-year period, digital video and audio recordings of participant interactions, digital images, archival, and interview data. Participant talk, modal communication, and interviews were transcribed and analyzed using CA and MMA methods. Three major findings included: a) the intentional deployment of semiotic means by the school to influence student beliefs about patriotism, nationalism, culture, and societal ideologies, b) the way that the use of gesture as a mediator in second language learning shifted as a result of a shift from text-based knowledge to the abstract concepts inherent in online writing, and 3) the role of metalanguage in online second language (L2) writing in the second language classroom. Using ecological theory, social semiotic

analysis, and visual cultural studies the analysis of the school ecology showed how nation-state ideologies were transmitted through semiotic signification systems creating a specific cultural and political ecology through the use of school banners, signs, dress code, colors, and other regalia. Using social semiotic theory and system functional linguistics the analysis of participant metalanguage around the L2 composition of online posts revealed how transnational ELLs resisted the hegemonic stance sanctioned by the school and posited through teacher-student interactions. Analysis also showed the importance of maintaining tacit approval of one bilingual, technological proficient, Latino student who acted as unofficial peer- and teacher liaison in navigating classroom and technological discourses. Finally, the findings for this study had significant implications on issues of technological access and the school's role in bridging the digital divide for Latino ELLs, the need for more nuanced paradigm shift in the face of transnational ELLs entering U.S. public schools, and the role of semiotic signification systems in the intentional shaping of student beliefs in regard to societal, national, and cultural ideologies.

INDEX WORDS: Latino/a, middle school, English language learners, ecology, culture, gangs, visual cultural studies, social semiotic theory, System Functional Linguistics, Multimodal Analysis, Conversation Analysis, Computer Mediated Communication, Internet and Communication Technologies.

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DEDICATION

This dissertation is dedicated to my family: Howard and Belinda Pinnow, Niki, Frank, Zoe & Annabelle Cook. Thank you for your unwavering support, belief, and faith in me. You provided encouragement, perspective, and much laughter throughout this journey, without which I might have completed this daunting endeavor, but not with the same joy. I love you.

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CHAPTER ONE

INTRODUCTION

In the year 2000, the United States Census Bureau revealed that since 1990, the Latino/a population has increased by 50%, however, Latino/a student academic achievement has not kept pace with the population's mercurial growth. Census Bureau and National Center for Education Statistics data indicate that 43% of all Latinos leave public school without a high school diploma, leaving Latinos "the most poorly educated major population in the United States" (Fry, 2002, p.1).

These dismal statistics have prompted researchers to undertake intervention studies aimed at the middle school years (Gándara, Larson, Mehan, & Rumberger, 1998; Garcia-Reid, Reid, & Peterson, 2005; Llegas & Snyder, 2003) in the hopes of avoiding the looming specter of Latino/a high school attrition. In the process of identifying successful strategies for increasing Latino/a high school graduation rates, researchers (Gándara, Larson, Mehan, & Rumberger, 1998) found that a key factor in promoting Latino/a academic achievement is through the development of "peer-related protective factors" (Garcia-Reid, Reid & Peterson, 2005, p.4) such as positive peer group affiliations in school clubs or sports activities. However, social affiliation among U.S. adolescents has shifted swiftly to reflect the increasingly digital literacy of larger U.S. culture, namely the widespread use of Information and Communication Technologies (ICT) such as computers, Internet access, cell phones, and Ipods©, leading Fairlie (2005) to note that the "digital divide" or the gap between White and minority student access to technology, is not diminishing, with only one fourth of Latino/a families owning computers as compared to 70 percent of White families (Fairlie, 2005; Llegas & Snyder, 2003). U.S. schools now face tremendous responsibility to educate Latino/a English Language Learners (ELLs) for entry into a

digital society, navigate critical shifts in definitions of literacy (Cope & Kalantzis, 2000; Lankshear & Knobel, 2003; New London Group, 2000), as well decisively move away from mechanistic "drill and kill" (Warschauer & Healey 1998; p.1) uses of technology traditionally employed in ELL classrooms.

Due to these developments, U.S. public schools, more specifically middle school classrooms, are poised as cornerstones in providing Latino/a ELLs with the multiliteracies (Cope & Kalantzis, 2000) necessary for advanced education, as well as position them to successfully compete in a globalized society and workforce.

Background of the Study

Over the past decade the evolution of Internet and Communication Technologies (ICTs) has escorted a global market economy into the everyday lives of people of diverse cultures, languages, races, and ethnicities. This revolution has directly impacted K-12 public schooling efforts shifting educational aims from traditional print-based literacy to the multiliteracies (Cope & Kalantzis, 2000; New London Group, 2000) necessary to aid societal members in meeting the challenges of a globalized world.

This triumvirate of language, culture, and technology has been keenly recognized in foreign language and second language studies as desktop computing, laptops, the Internet, hypermedia, multimedia, and language learning software such as Rosetta Stone, can substantially affect the trajectory of second language learning (Chapelle, 2001; Salaberry, 2001; Warschauer, 1999; Warschauer, 2000; Warschauer & Healey, 1998). However, within this body of research, studies in K-12 ELL classrooms have only just begun to touch upon the issues that are normative in non-ELL environments, leading to the notion that there is a "digital divide" (Warschauer, 2003) separating learners with access to modern technologies and those without such access.

The concept of the digital divide was first publicly initiated through the Clinton administration's National Telecommunications and Information Administration (NTIA) 1995 report that addressed the information "haves and have nots" (NTIA, 1995) in terms of rural U.S. computer access. The actual term, "digital divide" cropped up in the 1998 NTIA report and was later defined as "cyber-segregation" (Gates Jr., 2000) indicating that the divide between technological 'haves' and 'have-nots' is linked to racial, socioeconomic, and geographic conditions (Light, 2001).

The NTIA 2004 report continued to depict troubling gaps between Latino and African-American access to ICTs in comparison with White families (Light, 2001). Fairlie (2005) found that only 48.7 percent of Latino/a families had access to computers at home and only 38.1 percent had access to the Internet. Recent research on public ICT access reveals that computer use is interwoven throughout almost all levels of modern U.S. society except those in the lowest socioeconomic strata (Sandvig, 2006) who are relegated to computer use in public libraries and community centers where public policy dictates "a kind of moral language about what ought to be done with computers" (Sandvig, 2006, p. 952). This is problematic given the strong link between computer literacies and Internet access in gaining employment in the current job market as well as accessing government, educational, and commercial opportunities hosted online (Fairlie, 2005).

In addition, Attewell (2001) found that there is a "first and second digital divide" (p. 252) with the first divide representing access to technologies, but the second in *how* these technologies are used in schools. Attewell (2001) found that minority students were more likely to have teachers with the least technological expertise, yet spent more time on a computer in a given school day than their White counterparts, most often using computers for "drill and kill"

(p. 254) exercises that were far from academically challenging. For Latino/a ELLs, especially those in middle school, the lack of access and apprenticeship in crucial multiliteracies puts them at a distinct disadvantage when entering high school classrooms where ICTs are the vehicle through which students gain the multiliteracies necessary for entrance into higher education institutions and the global market place.

To address the challenge of providing access and meaningful interaction, research suggests that non-native speaker to non-native speaker interactions are more beneficial for ELLs (Varonis & Gass, 1986), especially those in online forums (Fernández-García & Martínez-Arbelaiz, 2002) as they offer ELLs excellent opportunities for composition in the target language (TL), peer feedback that improves second language (L2) writing (Black, 2005) and identity construction (Lam, 2000, 2004) that ELLs are often denied in mainstream forums where competition for the floor is not easily navigated with native speakers of the TL.

Rationale and Significance of the Study

This study responds to the need for access and authentic computer-mediated communication (CMC) experiences with L2 writers in two ways. First, given the need for secure technological access by Latino/a middle school ELLs and the need for meaningful interactions rather than traditional mechanistic uses of ICTs, this study focuses on exploring how, through the use of peer interactions in a secure electronic environment, the affordances offered by online environments can be exploited for L2 learning and authorship. Secondly, this study extends current ecological research by examining the way that schools, as societal institutions, intentionally deploy semiotic resources in order to shape the ideological beliefs of transnational ELLs in U.S. public schools.

For this study I observed and investigated middle school transnational ELLs and their English to Speakers of Other Languages (ESOL) teachers as they composed, posted, and negotiated meaning around online interactions in WebCT, an online course management system. I used social semiotic and ecological theoretical perspectives in order to explore and understand the ways that participants used various modes for meaning making as they negotiated online writing. Specifically, the research questions that guided my study were: (1) How do adolescent Latino/a ELLs negotiate the affordances of an electronic environment? (2) How do the interactions and metalanguage around online posts affect the L2 composition process? (3) How are semiotic modes employed to create a cultural ecology in the school?

Literature Review

Guided by my research questions, three lines of research inform the present study: (1) Research on ecological systems theory, (2) Computer Mediated Communication (CMC) and Internet and Communication Technologies (ICTs) on second language learning, and (3) multiliteracies research. In this chapter I review the current research literature on each of these avenues in order to situate my dissertation study within modern concerns regarding visual media, electronic communication, and second language pedagogy with adolescent ELLs.

Ecological Systems Theory

The notion of viewing human development from an ecological perspective is not new. Ecology, as a biological field of study was instituted in the 19th century by German biologist Ernst Haekel in order "to refer to the totality of relationships of an organism with all other organisms with which it comes into contact" (van Lier, 2004). The linguist Einer Haugen (Haugen, 1972) introduced the metaphor, "ecology of language" (p. 325) in an effort to address the poverty of representation apparent in much linguistic research of that time period. Bateson (1972)

popularized the term in anthropology through his approach to the evolution of human mind, but within educational studies it was not until Russian-born psychologist Urie Bronfenbrenner (1979, 1989, 2005) introduced *ecological systems theory* that a formal theory was posited that encompassed psychological, social, biological, cultural, and identity structures in human development. Ecological systems theory approaches child development from the standpoint of ecosystems that directly contain the child (microsystem) such as home, school, and community, to those that connect these various structures (mesosystem), as well as larger societal structures that do not affect the child directly but influence events that can determine future courses of action for the child (exosystem). Bronfenbrenner (1979) posited that a final macrosystem contained culture, values, principles, and societal laws (Berk, 2000) that affect and shape all the other systems as well as a chronosystem (Bronfenbrenner, 2005) reflecting time and historic changes of societies and cultures. One of the primary strengths of this model is that it recognizes culture, ideologies, societal principles, values, and laws as having a powerful role in the shaping of all other ecosystems.

Ecological theory and related perspectives have regularly emerged in second language acquisition (SLA) and literacy studies. Second language researchers have continued to evoke the term 'ecology' as a metaphor to shift the focus in SLA research from mechanistic models of language acquisition to ones that encompass the multifaceted nuances of second language learning (Haugen, 1972; Kramsch, 2002; van Lier, 2004), as well as explore the ideologies inherent in multilingual language policies (Hornberger, 2002; Hornberger, 2003). Within literacy studies, an ecological perspective has also been used to create a critical perspective (Moje, Young, Readence, & Moore, 2000) for extending literacy studies outside of the school ecology and into home and community ecologies in order to understand and interpret multiple literacies

practices (Barton, Drake, Perez, St. Louis, & George, 2004; Hawkins, 2004, 2005; Moje et al., 2000; Neuman & Celano, 2001; Villalva, 2006), community maintenance (Matusov, 1999), and parental engagement (Barton et al., 2004). These studies employ an ecological perspective in the manner of the New Literacy Studies (Barton, 2007; Gee, 2003; Pahl & Roswell, 2006; Street, 1993) in order to extend examination of literacy practices beyond the school ecology, and also situate our understanding of literacy practices within cultural and societal contexts.

Ecological theory has also been invoked in eco-cultural anthropological research that links ecological and cultural theories (D'Andrade & Strauss, 1992; Geertz, 1963, 1968; Holland & Quinn, 1987), on voluntary and involuntary minorities (Ogbu & Simons, 1998), family-community development (Weisner, 1997), and Latino/a family, community, and school literacy practices (Reese, 2002; Reese & Goldenberg, 2006). These studies link ecological and cultural practices of students' families but give primacy to the outcome of this perspective on cultural practices over time (Reese, 2002).

However, one of the problems with the ways that 'ecology' is invoked in some educational research is that it is invoked as a stand-in for the relational aspect of the biological meaning of the word (Moje et al., 2000), while in others it is employed metaphorically (Kramsch, 2002) in order to offer a perspective that invokes linkages, relations, and discursive, dialectical understandings of school, family, and community literacy and language learning. This invocation is both helpful and yet problematic in that by invoking the term in such general ways, terminology is forced as a stand-in for a theorized explication of the effects of multiple domains upon educational, cultural, and societal development. In this dissertation I contend that a theorized view of ecological research is needed to explicate in detail how semiotic resources are intentionally employed in institutions to influence student ideological beliefs. Given this modern,

visually driven culture, the school ecology itself, as a material agent of cultural transmission, offers rich potential as the focus of analysis in order to interpret the semiotic practices of schools in the shaping of student notions of identity, culture, and citizenship.

Computer-Mediated Communication and Second Language Writing

The use of CMC with ELLs is a broad topic that narrows as one looks at its development in the use of adolescent ELL L2 writing. In order to gain a clear perspective of what we mean when we discuss CMC and ICTs and language learning it is important to briefly discuss the evolution of computers in language learning, arriving at our current course in their use in the ELL classroom.

Historical development of computers in second language learning

Computers have been linked to language learning in the United States since the 1957 launching of Sputnik. Through this singular event, the U.S. government faced both a scientific and foreign language crisis, leading them to acknowledge the "need for more intensive effort to teach foreign languages in order to prevent Americans from becoming isolated from scientific advances made in other countries" (Richards & Rodgers, 2001). However, while politics guided computer technology development, the theoretical basis for the use of computers in linguistics and literary research was a direct result of Noam Chomsky's seminal publication, *Syntactic Structures* (Chomsky, 1957), in which he attacked structuralism and proposed his theory of transformational grammar. *Syntactic Structures* changed how computers were used in computational linguistics. Rather than simply producing corpora and concordances, Chomsky's (1957) rules of syntax had "the necessary mathematical and logical apparatus to motivate people familiar with computers to implement these rules on a computer system, in other words, to 'model' aspects of natural language on a computer" (Ahmed, Corbett, Rogers, & Sussex, 1985, p. 40).

This initial modeling of natural language on a computer, classified under the area of artificial intelligence (AI), was the method by which linguists hoped to "make computers 'understand' natural language input" (Ahmad et al., 1985, p. 40) and it eagerly united computer scientists and linguists in their fervent search for natural language models. However, while Chomsky's (1957) work changed the face of theoretical work in linguistics, B.F. Skinner's (Skinner, 1957) work was claimed for pedagogical purposes.

Skinner's (1957) theory, known as *behaviorism* due to its focus on observable behavior, was quickly claimed for pedagogical purposes in foreign language learning due to its reliance on mechanical, rote repetition to achieve desired results. The result of conjoining computer technology of the day with Skinner's behaviorist model of learning was the audiolingual method (ALM) which was used in high school foreign language classrooms (Anderson, 1964) and in the United States Armed Forces to teach service men and women how to speak foreign languages for postings abroad.

The use of computers for language learning remained confined for several decades to computer and linguistic concordances and corpora and the ALM for foreign language learning. However, as computer technologies evolved, second language researchers co-opted the potential for second language acquisition (SLA) through computers and by 1983, the TESOL (Teachers of English to Speakers of Other Languages) organization had adopted the term CALL (Computer Assisted Language Learning) to represent how computers could be used in SLA (Chapelle, 2001). Within the next few years, researchers (Ahmed et al., 1985; Underwood, 1984) published work using the term CALL, as it more specifically linked computers with *language* learning, rather than general educational contexts.

The terminology used today in SLA when discussing computer technologies has undergone several revolutions in order to reflect both the capabilities of current technologies, as well as their use in language learning. As discussed previously, the term CALL was employed but this terminology has proved to be problematic given its historical link with mechanistic uses of computers in education contexts. Today, when speaking of CALL, many researchers in the field have divided it into three segments: behavioristic, communication, and integrative CALL.

The first phase of developmental learning theory for CALL has been retroactively termed "behavioristic CALL" (Warschauer and Healey, 1998), or more recently "structural CALL" (Bax, 2003) as it is utilizes the computer as a "mechanical tutor" (Warschauer & Healey, 1998). Behaviorist CALL is still in evidence today in some forms of "drill and kill" (Warschauer and Healey, 1998, p.1) software that simply mimic the ALM of the 1950s.

In the 1980s, the development and boom of the microcomputer led to a tandem explosion of books and articles addressing CALL in this fresh context (Ahmed et al., 1985; Chapelle & Jamieson, 1986; Higgins & Johns, 1984; O'Shea & Self, 1983; Underwood, 1984) and a specialized journal, CALICO (Computer Assisted Language Instruction Consortium), devoted exclusively to CALL. It was also during the microcomputer explosion that the monitor model (Krashen, 1979) came in vogue and it became "fashionable to invent CALL that could be claimed to promote 'acquisition' rather than 'learning'" (Chapelle, 2001, p.8).

Krashen's (1979) theory ushered in the next phase of CALL, communicative CALL (Warschauer & Healy, 1998), which emphasized the communicative use of language rather than mastery of isolated forms. The hallmark of communicative CALL is a focus on using the target language exclusively, implicit grammar instruction, and generation of original utterances by students rather than simply manipulating prefabricated language. In communicative CALL, the

outcome was not the focus but rather the process of learning to use the target language in ways that felt natural to the student (Underwood, 1984).

The 1990s ushered in the powerful desktop computer and with it, the next phase of CALL, integrative CALL (Warschauer & Healy, 1998). Integrative CALL emerged as Local Area Networks (LANs), the Internet, multimedia, and hypermedia became available. Hypermedia (linking capability) allows for non-sequential, dynamic text (Scanlon & O'Shea, 1992), video, and graphics that could be launched by the learner within a given digital construct. This has been a major development in CALL, as it has provided highly interactive and individualized instruction that puts more of the control of learning into the hands of the learner. It also provides learners with multiple ways to access information, rather than privileging only one form of information dissemination in the form of written text. This de-privileging of text can be an additional benefit for second language learners, especially ELLs who may need bilingual instruction mediated through integrative CALL software. Thus, the term *integrative* is used for this phase of CALL due to the formation of a language world that houses video, graphics, text in the form of games, exercises, dictionaries and grammar lessons, as well as immediate feedback delivered in an individualized way to students.

From integrative CALL has emerged a new advent of computers and language learning, or computer-mediated communication (CMC) (Hiltz & Goldman, 2005). CMC arose "as a response to the perceived need to distinguish between the contexts of natural/oral language interaction and those which occur in a computerized context" (Harrington & Levy, 2001, p. 21). CMC has been defined as "communication that takes place between human beings via the instrumentality of computers" (Herring, 1996, p. 1). However, this definition is still under debate

within the CALL community (Murray, 2000) and some researchers apply it to more specific communication formats such as "only text-based modes" (Murray, 2000, p. 399).

Different forms of CMC include synchronous communication and asynchronous communication. Synchronous communication, such as chatrooms and MOOs (multiple-user-domain-object-oriented), are online electronic domains where users interact with one another in real time (at the same time). Asynchronous communication, such as e-mail and electronic bulletin boards, occurs whenever users wish to log on and post to specific domains, which can then be read at different times by other users.

In the present study, the terms CMC and ICTs are used somewhat interchangeably as the term ICT has come to represent any technological activity that requires Internet access to accomplish. For instance, logging onto the WebCT platform required logging onto the Internet at the respective schools in order to reach the secure server that hosted the WebCT application. In addition, the teachers in the study also used WebCT to host images and written text moving the activity beyond a rigid interpretation of computer-mediated activity (CMC). In this way, it is becoming more difficult to refer to online composition as only CMC. However, within the research literature, studies published over the last decade show the shift in terminology, which reflects the shift in technological advances that promoted the change in reference terms. Therefore, when referring to specific research studies, I will use CMC or ICT when the studies under examination do so.

Research on CMC, ICTs, and adult ELLs

Traditionally, research investigating CMC and L2 writing has focused on adult ELLS, most notably at the college level (Harklau & Pinnow, 2008). Fortunately, much can be gained from what has been learned from these studies and they continue to guide approaches to

adolescent ELL online L2 writing. Research investigating CMC and L2 writing with adults reveals that certain characteristics particular to CMC benefit second language learning (Beauvois, 1992; Kern, 1995; Kern, & Warschauer, 2000; Sullivan & Pratt, 1996; Warschauer, 1995; Warschauer, 1997) by promoting the development of online forms of communicative competence (Fitze, 2006) often missing in face-to-face classroom interactions. In addition, research shows that CMC is an excellent tool to help hesitant or shy learners gain the floor in online conversation (Beauvois, 1992; Freiremuth, 2001),provides additional composition time (Beauvois, 1998), and is an excellent source of motivation for second language writers (Warschauer, 1996)

Other research in this area has investigated CMC use in foreign language development such as L2 interlanguage (Blake, 2000), promoting foreign culture acquisition (Osuna, 2000), developing L2 oral proficiency (Payne & Whitney, 2002) as well as discourse functions in ESL adult populations (Sotillo, 2000).

Research investigating synchronous classroom discussions via networked computers in the second language classroom has shown improved quality of student L2 writing (Sullivan & Pratt, 1996), student participation (Fotos & Browne, 2004; Ortega, 1997) as well as providing "a context in which opportunities for language development are enhanced, since students are motivated to stretch their linguistic resources in order to meet the demands of real communication in a social context" (Ortega, 1997, p. 3). Ortega's (1997) findings were some of the first to suggest that peer related CMC would be beneficial to L2 writers. Other research (Liu & Randall, 2003) echoes Ortega's (1997) findings by showing that peer review in an electronic mode increases ELL uptake of necessary editing in the L2, although face-to-face interaction was necessary as the nonverbal communication feature was crucial to intercultural communication.

Building upon research by Varonis and Gass (1986) which indicates that nonnative speaker dyads of the TL produce more negotiation of meaning, more recent research (Fernández-García & Martínez-Arbelaiz, 2002) also found that dyads of nonnative speakers negotiate meaning in online discourse in much the same way as in oral discourse. The findings from this study promote the potential for adolescent ELL research wherein online communication between ELLs, rather than dyads of NS and NNS, would be more helpful for generating negotiation of meaning in the TL.

CMC, ICTs, and adolescent ELLs

While there has been a concerted effort to research CMC in adult second language learning and teaching there is a noticeable gap in the literature when exploring CMC among adolescent ELLs. The year of 1980 appears to be the watershed year for recognition of the value of CMC for children's learning. Papert (1993a, 1993b) viewed the computer as an amazing tool that children could use to create their own knowledge while introducing them to the process of intellectual inquiry. This excitement flooded over into TESOL research and praxis. At the 1980 TESOL convention in San Francisco, Carol Chapelle and Joan Jamieson introduced "computer software for the teaching of English as a second language" (Chapelle, 2001, p.1). Both Chapelle and Jamieson were admittedly "unquestioning proponents of computers in language teaching" (Chapelle, 2001, p.1) and were surprised when audience members at the conference openly questioned whether computers *should* be used for language teaching. Chapelle (2001) notes that throughout the 1980s this remained the primary question in TESOL and it was not until the 1990s that the question changed to "*how* can the computer best be used in language teaching" (p.1). Chapelle (2001) went on to state:

> As we enter the 21st century, everyday language use is so tied to technology that learning language through technology has become a fact of life with important implications for all applied linguists, particularly for those concerned with facets of second language acquisition (SLA) (p.1).

Research exploring the use of CMC in K-12 TESOL classrooms is much narrower than that of adult ESL research and this dearth reflects the infancy of this research area, but does not diminish the urgency of the need to explore and document significant developments. In one of the first studies on CMC in the K-12 TESOL classroom, researchers studied the effects of computer-enhanced vocabulary lessons on achievement in 76 Korean ESL fifth graders (Kang & Dennis, 1995). Citing CALL's ability to accommodate diverse learning modes and strategies, Kang and Dennis (1995) found that students, given multiple modes of learning in *context*, made the most post-test gains and retained information longer and with more accuracy. Kang and Dennis (1995) clearly state, "merely exposing the learner to multiple modalities of presentation-namely, sound, picture, and text-does not yield better learning. Rather it is how different modalities are integrated to produce an authentic language learning environment that can have a real impact on learning" (p. 34)

Further studies explored verbal interaction between adolescent ESL students during computer book reading (Liaw, 1997), studied the use of CALL to improve high school ESL learners reading skills (Williams & Williams, 2000), surveyed K-12 ESL teachers on technology use and ESL software (Meskill & Mossop, 2000), explored Internet Relay Chat as a vehicle for potential English language enhancement (Coniam & Wong, 2004) and investigated child-to-child interaction and corrective feedback online (Morris, 2005).

Recent research that looks more closely at CMC and adolescent L2 writing has shown that for ELLs, online forums offer social identity development opportunities not available in public school classrooms (Lam, 2000). Lam (2000) takes notions of literacy and social identity, interweaving them into a coherent and thorough examination of CMC and ICTs use with an adolescent ELL. Lam followed up her 2000 study with one exploring the transnational, bilingual identities of adolescent Asian American ELLs in online bilingual communities (Lam, 2004). One of the strengths of Lam's (2000, 2004) work is that she addresses the critical need for technological literacies in K-12 TESOL student populations and shows the reader how ICTs can engender literacy development in ELLs (Lam, 2000).

Research by Black (2007, 2005) has also explored adolescent ELL utilization of the affordances of ICTs in websites devoted to fanfiction. Fanfiction is online writing wherein community members take up pop culture storylines such as Battlestar Galactica, or anime characters, represented in mass media and print-based text, and write their own story lines using the same characters. Often participants on fanfiction websites will re-write events depicted in these shows in ways that represent how they would have liked to see events develop.

Black's (2007, 2005) research has emphasized that ELLs often engage in more fruitful L2 writing practices in out-of-school electronic forums wherein they are free from institutional constraints on what may be deemed academic writing. Due to this, Black's research (2007, 2005) has explored how adolescent ELLs are able to develop as L2 authors through online interactions with their peers. This research (Black, 2005; Lam, 2000) strongly suggests that online communication with peers promotes authentic use of the TL in ways that do not always occur in classroom interactions. However, given the digital divide (Servon, 2002), research that relocates

online communication within the K-12 language-learning classroom is necessary and well-addressed by multiliteracies research.

Research on Multiliteracies

Multiliteracies as terminology refers to the underlying theoretical position of multiliteracies researchers (Cope & Kalantzis, 2000; The New London Group, 2000) used to reflect an "emerging cultural, institutional, and global order" (Cope & Kalantzis, 2000, p.5) and the multiple channels of communication and media, as well as the multiplicity of languages and cultural diversity, that have resulted from this new world order (Gee, Hull, & Lankshear, 1996). For the present study, the term multiliteracies will refer to work that seeks to further the literacies, including linguistic, cultural, technological, social, and economic, that are necessary to be a literate person in the modern world.

What helped to bring about these shifts in notions of literacy was research by Gee, Hull, and Lankshear (1996). In their seminal work, The New Work Order: Behind the Language of the New Capitalism, the authors offered an insightful and well-documented account of how the changing nature of technological advancement was being used to transform the world into a global community. This global shift was soon appropriated by corporate industries resulting in what has come to be referred to as "fast capitalism" (Gee, Hull, & Lankshear, 1996, p.38). Advocates of fast capitalism argued that the implementation of this brand of capitalism would result in more democratically shared knowledge and horizontal management integration wherein traditional, vertical authoritative structures were leveled and workers at all positions throughout the organization would be considered important to the overall direction of the organization. However, fast capitalism resulted in greater cultural and socioeconomic disparities, creating subclasses of information workers and industrial servant workers from poorer, sometimes third

world, nations in order to serve wealthier and more powerful countries. Gee, Hull, & Lankshear (1996) argued that fast capitalism was simply recreating socioeconomic, ethnic, and race inequities across a broader map and would result in further privileging particular educational practices such as those found by Heath (1983) and Delpit (1995).

Nascent multiliteracies work (Cope & Kalantzis, 2000; Gee, Hull, & Lankshear, 1996; Lankshear & Knobel, 2003; New London Group, 2000) has addressed these potential disparities by focusing upon schooling from a broad perspective, arguing that 21st century students need to be literate in languages, cultures, economies, policies, and technologies in order to enter the techno-global world with the multiliteracies necessary to succeed.

In accordance with the concerns iterated in multiliteracies research, terminological shifts from CMC to ICTs emerged in the research reflecting the changing nature of communication technologies available for personal and in school use (Godwin-Jones, 2005). Educational research in general, and language learning research in particular, began reflecting this shift by investigating how ICTs could affect the writing process of ESL students in a Canadian public school (Parks, Huot, Hamers, & Lemonnier, 2005). Further research explores effective design and use of ICTs in learning (Richards, 2005)arguing that teachers should approach ICTs more as designers rather than transmitters of skills and information (Richards, 2005). This terminology, "designers" (Richards, 2005, p. 60), reflects the potential of recent technologies for creation of multifaceted online 'texts' that employ multiple modes in collaboration, as well as the call by multiliteracies researchers for a paradigm shift that does not view learners as technology *users,* but rather as *designers* (Cope & Kalantzis, 2005). Within multiliteracies research, the term *user* is considered consumer oriented and does not put the individual in a position of agency, while the term *designer* positions the individual as one who has agency for change and choice, as well

as one who can make creative and original decisions in text creation. The term designer also coincides with advances in technology that in some ways allow for much greater control over representational choices in various modes.

In addition, terms such as *multimedia* and *multimodal* began to crop up as well from researchers in social semiotics and multimodality (Jewitt & Kress, 2003; Kress, 2003; Kress & van Leeuwen, 2001; Kress & van Leeuwen, 2003) who were beginning to frame what they termed the 'grammars' of modalities such as images, color, sound, space, movement, and so forth, in order to address the increasingly multimodal nature of literacy in the 21st century (Cope & Kalantzis, 2000; Kress & van Leeuwen, 2003). Multimodal researchers (Kress, 2003; Kress, & van Leeuwen, 2001) claimed that the term *text*, which had traditionally referred to written, linguistic based writing, needed to be extended to include the many modes available through ICTs such as websites and blogs, where images, color, sound, written language, and video produce texts of their own. Therefore, in multiliteracies and multimodal research, the *text* is no longer bound to definitions of the term that signify only written words on a page.

Currently, research on multimodality can take several avenues. For instance, as used in this study, multimodal research can be used to explicate the way participants employ modes such as gaze, gesture, and proxemics in meaning making (Baldry & Thibault, 2006; Norris, 2004), or how modes are used by teachers in classroom interactions (Bourne & Jewitt, 2003). Other multimodal research investigates multimodality in comic-book literacies with adolescents (Schwartz & Rubenstein-Ávila, 2006), multimodality in children's writing (Vincent, 2006), multimodality, pace, and interactivity in the K-12 classroom (Jewitt, Moss, & Cardini, 2007) and multimodality in the TESOL classroom (Kress, 2000; Royce, 2002; Stein, 2000).

Research in multiliteracies focuses on both mainstream and ELL students. Multiliteracies research in mainstream classrooms can be traced to work by Kist (2005) who investigates what multiliteracies practices look like in the K-12 public school classroom. Kist (2005) found that teaching and learning in multiple media (Kist, 2005) was more successful when project-based and learner-driven. One notable project was at a school in California with a large Latino/a student population who created "a dot-com with salsa" (Kist, 2005, p. 61) which focused on developing a teaching and education technology philosophy geared towards a multiliteracies, process-oriented stance to learning.

Other research has explored multiliteracies from the standpoint of adolescent identity discourse (Del-Castillo, García-Varela, & Lacasa, 2003), copy and paste literacies (Perkel, 2006), middle school educators beliefs about multiliteracies (Mallette, Henk, Waggoner, & DeLaney, 2005), multiliteracies in middle school classrooms (Grisham & Wolsey, 2006), and critical multiliteracies in adolescents (Erstad, Gilje, & de Lange, 2007; Leino, Linnakylä, & Malin, 2004) and adolescent ELL multiliteracies (Mills, 2006a, 2006b). Studies examining adolescent critical literacies revealed that student multiliteracies often far outpaced those of the teacher resulting in student knowledge that was vital to technology based classroom projects, but discounted in classroom interactions.

Organization of the Dissertation

In this chapter I have provided the background, rationale and significance of the study, and the literature review related to my research questions. In chapter two of my study I provide the methods that guided the study, including the research perspective, research design, recruitment procedures, research site, participants, researcher role and subjectivities statement, and data collection and analysis procedures.

Chapters three through five are the findings my dissertation study in manuscript form. Chapter three addresses my third research question: How are semiotic modes employed to create a cultural ecology in the school? In this chapter I explore, through ecological theory and social semiotic inquiry, how cultural transmission can be accomplished via semiotic resources.

Chapters four and five both address my first and second research questions: (1) How do adolescent Latino/a ELLs negotiate the affordances of an electronic, and (2) How do the interactions and metalanguage around online posts affect the L2 composition process?
In chapter four I focus on how the use of gesture shifts as the ESOL teacher and her students move from primarily face-to-face meaning making to online L2 writing which requires more use of metaphoric gesture in order to successfully communicate in a culturally relevant way. In chapter five I focus on how the concept of multiliteracies can be extended to fully address the literacies that transnational students carry with them and draw upon in order to engage in everyday communicative events.

In my final chapter, chapter six, I offer a summary of this dissertation study including the findings from all three manuscripts, pedagogical and research implications, and final remarks.

CHAPTER TWO

METHODS

Research Perspective: Ethnography

Research on classroom interaction is heavily influenced by constructionist epistemology whereby meaning is not discovered but rather constructed by individuals through social interaction (Crotty, 1998). Therefore social constructionism can best be understood as the way that knowledge is constructed by, for, and between members of a discursively mediated community (Hruby, 2001, 2002). Social constructionism focuses on the ways that societal members reorganize symbolic, behavioral, cultural, and technological resources in order to construct meaning in a social world (Hruby, 2001). Within the constructionist framework, modal resources, including language, gaze, gesture, and proxemics, can be studied to gain insight into how members of a participation community, such as a classroom, generate knowledge about themselves, one another, culture, and society.

Social constructionism is a proper foundation for studies employing social semiotic and ecological theoretical perspectives whose underlying principles give primacy to symbolic resources used by participants in institutional environments. The epistemological stance of constructionism is also reflected in ethnomethodological CA where reality is "talked into being" (Have, 1999) thus making the study of talk-in-interaction in the classroom an ontological prospect wherein talk between participants both reflects institutional order and creates it (Mehan, 1991).

It is this constructionist philosophy that governs my choice and use of qualitative inquiry to conduct my dissertation study. Merriam (1998) describes five defining features of qualitative research: (1) qualitative researchers are interested in understanding the phenomenon of interest

from the participants' perspective, (2) qualitative researchers are the primary instrument for data collection and analysis; (3) qualitative research involves fieldwork; (4) qualitative research employs an inductive mode of inquiry; (5) qualitative research findings are in the form of rich description and interpretation.

Given that the present study sought to understand how ELLs negotiate the affordances of an online writing environment, and how semiotic resources can be employed for cultural transmission of institutional ideologies, an ethnographic qualitative study was selected as the most appropriate methodology. As a qualitative ethnography, this research study contains a rich, thick description of participants and research context in order to analyze and interpret the phenomenon through an inductive mode of inquiry.

Research Design

This study was initially conceived as an innovative opportunity to unite two separate middle school ELL classrooms online in an effort to examine how adolescent ELLs navigated the affordances of authentic peer-to-peer interaction in an electronic environment in the TL of English. Two teachers and 30 students were successfully recruited for the study and data were generated for four months as they interacted online with one another. The final eight months of data collection focused on one school and ELL classroom due to the school's fascinating, and unusual, ecology and the large Latino/a ELL population.

Therefore, this present study focuses on one ESOL teacher and her Latino/a ELL students as they negotiate the affordances provided through peer-to-peer and student-teacher online and face-to-face (f2f) interactions. This year long ethnography employed video and audio recordings of f2f classroom interactions, online writing sessions in WebCT, interviews, digital photos, documents, and archival data to answer the following research questions:

(1) How do adolescent Latino/a ELLs negotiate the affordances of an electronic environment?

(2) How do the interactions and metalanguage around online posts affect the L2 composition process?

(3) How are semiotic modes employed to create a cultural ecology in the school?

Recruitment Procedures

After completing a pilot study in the spring of 2006 that explored the potential of using online writing to enhance middle school ELLs L2 authorship, it was clear to me that regular and consistent access to technology in the form of computers, word processing software, and fast access Internet connections, were necessary as a basic foundation for examining the affordances of L2 writing. It was also clear to me that teacher enthusiasm and willingness to engage with new ways of using computer technology to enhance L2 writing was a vital component in sustaining ethnographic examination of ELL online L2 writing. Due to the knowledge I gained from my pilot study, I focused on recruiting ESOL teachers who were enthusiastic and eager to use ICTs in their own classrooms, and had regular access to laptop or desktop computers with fast access Internet connections.

To recruit potential candidates for the study, I composed a listserv inquiry that was dispersed through an ESOL listserv for K-12 public school teachers hosted by a Research Extensive University in the southeastern portion of the United States. Fourteen ESOL teachers from various counties in the state responded with enthusiasm to the email message, inviting me to contact them about the study. However, as interviews unfolded regarding the study, twelve teachers were culled from the potential pool for the following reasons: (1) teachers were not middle school teachers, (2) I was unable to obtain permission to conduct the study in the school

district, and (3) the schools had poor or unreliable access to the necessary technology for the study. The remaining three teachers were interviewed and two were selected based upon: (1) teacher motivation and enthusiasm towards using technology in the ELL classroom and (2) availability and reliability of technological access in the school. The two ESOL teachers chosen for the study were Cindy Broward and Ellen Miller (pseudonyms).

In addition, I chose WebCT, an online course management system, as the electronic forum for the project. I chose WebCT because both teachers had regularly used WebCT in their graduate degree coursework at a local university and were comfortable using this forum. I also chose WebCT because it provided a password protected electronic space, on a secure server, that increased the safety protocols required by both Cindy and Ellen's schools.

In May of 2006 I met with Cindy and Ellen at Ellen's school, Myers Middle School, and we discussed the online project. Cindy and Ellen decided that they would begin the project by teaching students how to introduce themselves online, give a brief lesson on 'netiquette' (polite online behavior), and then have students post original writing, reports, and other academic work over the course of the school year in order to provide students with practice writing for an authentic audience of their peers, as well as learning how to give and receive peer feedback online.

Cindy taught at Bayley Middle School, which was located 45 miles by automobile from a major metropolitan southeastern city. The ELLs in Bayley made up less than 10 % of the overall student population and the majority of these students were from México. Cindy was born and raised in the southwestern portion of the United States and spoke fluent Spanish. Cindy used technology such as laptop and desktop computers, the Internet, word processing programs, and cell phones regularly but stated, "I took a technology course that the county required me to take

but just don't feel that it really prepared me for using computers in my classroom. I know my kids would enjoy writing to online penpals, so this project would be great for us both!" Cindy chose her fifth and sixth period classes, a total of 15 ELLs, to be a part of the study (Table 2.0).

Table 2.0

Bayley Middle School Participants

	Name	Role	Age	Gender	Country of origin	Native language
1	Cindy	ESOL teacher	52	F	United States	English
2	Carmen	ELL	13	F	México	Spanish
3	Consuelo	ELL	12	F	México	Spanish
4	Dina	ELL	13	F	Haiti	Haitian Creole
5	Esperanza	ELL	12	F	México	Spanish
6	Lucía	ELL	13	F	México	Spanish
7	Inés	ELL	13	F	México	Spanish
8	Marta	ELL	13	F	México	Spanish
9	Akira	ELL	13	M	Vietnam	Vietnamese
10	Alvaro	ELL	13	M	United States	Spanish
11	Arturo	ELL	13	M	México	Spanish
12	Eduardo	ELL	13	M	México	Spanish
13	Gilberto	ELL	14	M	México	Spanish
14	Jorge	ELL	13	M	México	Spanish
15	Martín	ELL	13	M	United States	Spanish
16	Rubén	ELL	13	M	United States	Spanish

Ellen taught at Myers Middle School, which was located 75 miles north of Bayley Middle School. The ELLs at Myers made up 40 % of the overall student population and of this 40 %, all but four students were from México. Ellen was born and raised in the northern part of the United States and was a monolingual English speaker. Ellen used technology frequently in her professional and personal life but hoped that this online writing project would encourage her students to "get to know other kids more. They are a really inclusive bunch and don't reach out to other kids beyond their own little group". Ellen also chose her last two class periods of the day, 15 students total, to take part in the study (Table 2.1).

Table 2.1

Myers Middle School Participants

	Name	Role	Age	Gender	Country of origin	Native language
1	Ellen	ESOL teacher	59	F	United States	English
2	Angélica	ELL	12	F	México	Spanish
3	Consuelo	ELL	12	F	México	Spanish
4	Gaby	ELL	12	F	México	Spanish
5	Luciana	ELL	12	F	México	Spanish
6	Margarita	ELL	12	F	México	Spanish
7	Melba	ELL	12	F	México	Spanish
8	Paz	ELL	14	F	México	Spanish
9	Raquel	ELL	12	F	México	Spanish
10	Chuy	ELL	12	M	México	Spanish
11	Domingo	ELL	12	M	México	Spanish
12	Enrique	ELL	12	M	México	Spanish
13	Francisco	ELL	12	M	México	Spanish

14	Gerardo	ELL	12	M	México	Spanish
15	Javier	ELL	12	M	México	Spanish
16	Roberto	ELL	12	M	México	Spanish

I provided all students in the study with a WebCT login account number and a password. All students were allowed to choose their own online monikers (Appendix A) with which to be identified with online.

The students at Bayley Middle logged onto WebCT every Tuesday afternoon and posted their writing for that day onto a section of the electronic bulletin board in WebCT designated for that week's posts. For instance, during the first two weeks of the study, students posted their introductions under the "Introductions" section of WebCT. I created these sections on the electronic bulletin board, week-by-week, at the direction of Cindy and Ellen who decided upon the student's writing topics for the week (or in some cases, the topics that students would write about for several weeks).

The students from Myers Middle logged onto WebCT every Thursday afternoon and posted their own writing for that week, then read and gave feedback on the posted writing of the students at Bayley. Peer feedback included error correction of words or information, clarification requests, encouragement, and posting additional questions to help the writer to produce more information about a given topic. In this way, students from each school practiced online composition with an audience of their peers, gave and received peer feedback, and practiced navigating the technology of WebCT.

The students at Bayley and Myers never met one another face-to-face, but I took digital images of all students and posted them to a section of our WebCT space so that they could see what the students from each school looked like and have a face to match with the online peer

they were writing to each week. Students were not assigned specific penpals, but rather the teachers requested that students focus on responding to the students at the "other" school before responding to students at their own school. In this way, Ellen and Cindy sought to create a situation in which students had to negotiate meaning primarily through their online writing rather than relying too heavily upon face-to-face interactions should miscommunication occur.

After collecting my data and analyzing it, it was clear to me that reporting findings from all of the data from both schools would offer a wide, but thinly layered, perspective and understanding of my topic. In order to provide an in-depth and well explicated perspective of CMC with adolescent Latino/a ELLs this study focuses on Myers Middle School, Ellen the ESOL teacher at Myers, and five of her Latino seventh grade students as they composed in their L2 in their ESOL classroom, and wrote online in the media center and computer lab.

Research Site

The research site consisted of an electronic environment, WebCT, one U.S. public middle school, and the ELL classroom. WebCT is an instructional technology component that is commonly used in colleges and universities in North America. WebCT is referred to as an *instructional* technology unit as it is used in delivering and supplementing instruction and teaching with the capability of hosting Word documents, power point slides, video and audio segments, as well as its own internally derived instructional units that operate much like the pages of an electronic book. WebCT was used for this study for two reasons: (1) its accessibility and ease of use for everyone from novice to expert, and (2) its location on a secure server rather than the World Wide Web. Due to stringent safety concerns on the part of school officials and administration, WebCT provided a safe, reliable, and reasonable bridge between safety concerns and server access that could replicate Internet accessibility for online L2 writing.

In this dissertation study, ELLs were apprenticed into online L2 writing by learning to introduce themselves initially through an online activity entitled: *Two truths and a lie*. In this activity, ELLs from both schools posted two true statements, and one false statement, onto the electronic bulletin board located in WebCT. Students read each others posts and guessed which statements were true and which were lies. Students were also apprenticed into online L2 writing by learning how to research and compile reports on academic topics, compose final drafts for publication online, and respond to the questions from their peers on the reports they posted.

The second context of the study was Myers Middle School located in a wooded, suburban neighborhood, 10 miles by automobile from the urban, industrial city of Walker Heights (a pseudonym). Walker Heights hosted thriving agriculture, poultry and textile industries and had been the site of a flood of immigrant labor beginning in the early 1990s. The majority of the employees in Myers' booming industries were originally from México, willing to work long days for low-wages and in quite difficult working conditions. Walker Heights was a bustling, thriving town which is reflected in the main city thoroughfare where one can see almost every city sign in English and Spanish as many small shops, restaurants and businesses cropped up, owned and operated by Spanish speaking peoples from all walks of life.

This reality was also present in Myers Middle where 40 % of the student body is Latino. Of all the ELLs at Myers, two students were from Vietnam, two from Latin America, with the remainder comprised entirely of students from México. To meet the educational demand presented at the school due to the influx of ELLs, Myers employed four ESOL teachers; three full-time teachers and one part-time teacher.

The third context of this study is the ESOL classroom at Myers Middle. In the ESOL classes at Myers, students were pulled out of mainstream classes to receive instruction from their

ESOL teacher in the areas of Social Studies, Science, and Language Arts where the TL of English was used as the vehicle through which content material was delivered.

Research Participants

The study focused analysis on six focal participants, five adolescent Latino ELLs and one ESOL teacher. Qualitative research traditionally relies upon purposeful sampling based upon the assumption that by selecting information-rich cases for study one can learn a great deal about the issues central to the purpose of the inquiry (Patton, 2002). Patton (2002) outlines 16 sampling strategies for purposeful sampling of information rich cases for qualitative inquiry. In conducting the present study I relied upon intensity sampling and maximum variation sampling to generate information-rich cases that would illuminate the questions under study.

Intensity sampling focuses on "information-rich cases that manifest the phenomenon intensely" (Patton, 2002, p. 243). Maximum variation sampling "documents unique or diverse variations that have emerged in adapting to different conditions" (Patton, 2002, p. 243). As data were generated over the course of the first month, I found that this was a very teacher-fronted classroom. In addition Ellen's attention was regularly taken up in extended interactions with male participants, while female students rarely attempted, or gained, the conversation floor. This is reflected in the findings that show that male students dominated classroom talk and the teacher's attention.

From a maximum variation sampling (Patton, 2002) standpoint, I wanted to see who didn't gain the floor and who was left out of interactions. In this manner, the sampling employed for this qualitative ethnography were most useful in generating information-rich data with which to yield descriptive and interpretive understanding of the research questions.

Finally, given the importance of language to the present study, the status of focal students' Spanish and English language skills was noted in sampling procedures. The focal students each had widely varying degrees of spoken fluency in Spanish and none were literate in Spanish. All of the focal students were fluent in spoken English but had not yet reached grade level literacy in English as measured by the school in terms of L2 classroom writing and test taking. A description of each participant is presented in the following section.

Ellen

Ellen Miller was a 59-year-old, white, non-Spanish speaking ESOL teacher who had been teaching for 32 years. Born and raised in the United States, Ellen had begun her career as a special education teacher in an institutional hospital setting, transferring two years later to a public school setting where she was a mainstream middle school teacher for the next 15 years. Ellen had been teaching ESOL at Myers for the last fifteen years, since the school had originally opened. Ellen had attained masters' and specialist degrees in education, an ESOL endorsement from the state, and a certification in language arts that was well used in her capacity as an ESOL teacher. With short red hair and blue eyes, Ellen had a diminutive build with a high pitched, almost childlike, voice that sometimes barely penetrated the din of the classroom.

Ellen had studied Spanish briefly in college but had not pursued any foreign language study beyond college. Ellen stated early in the study that she felt she "should probably learn some Spanish" in order to communicate better with her students and their families.

At the time of the study Ellen was pursuing her doctoral degree in TESOL from an online university and spent several nights a week online, communicating with her instructors and fellow-students in her online courses. Ellen was comfortable using technology for email, online chat, and composing documents for submission to her instructors. Ellen frequently used Word

and Power Point software programs in order to create documents for her online college courses, ESOL lesson plans, and administrative reports due to a committee that she served on at Myers.

Being an excellent writing teacher to her students was important to Ellen as she felt that excellent literacy skills were vital to engaging in a highly digitized modern world. This sensitive and caring aspect of her character, combined with her enthusiasm, was matched only by her seemingly boundless energy outside the classroom. In addition to her teaching position at Myers, Ellen also worked as a waitress a few times a week at a prestigious restaurant in Walker Heights, and bred award-winning horses that she presented at regional and national shows throughout the year. Ellen's ESOL teaching ethos was strongly influenced by her belief that developing a strong sense of "belonging" was the key to academic achievement for ELLs, especially Latino/a students who she felt strongly valued social ties and interactions in every aspect of life. Ellen was deeply influenced by Thomas Friedman's The World is Flat, as she believed that students of the 21st century needed to know how to work together in groups, manage projects, and use technology well. These beliefs were primarily what led her to join my study as she felt her students could use practice with online communication, as well as practice in navigating communication with peers outside of their regular, everyday lives at Myers Middle School.

One aspect of Ellen's teaching that emerged during data collection was her belief that she needed to handle any problems in her classroom by herself. One commonly held belief by Ellen was that teachers were judged by their student's test scores, and the school administration related test scores to "time on task", meaning that the administration related student test scores to how frequently they were absent from class for either illness or disciplinary issues. Due to this, during the entire school year, Ellen never sent one student to the main office to receive discipline, preferring to discipline students within the walls of her own classroom. However, Ellen's desire

to avoid unnecessary contact with Myers' administration kept one student, Domingo, from possibly receiving the social support team (SST) care that he needed early in the school year. While Ellen stated that she believed that Domingo needed to be "SST'd", she never followed up on this observation and at the end of the school year Domingo had never received any care in the form of social support from the school.

Ellen's desire to avoid handling classroom problems through administrative channels was in contrast to her sometimes fiery and direct responses to one of the administrators in the school. Ellen was at heart a contrarian, but after 32 years in the school system, she was very careful to limit her battles to circumscribed areas where she felt she would not be harmed by institutional norms should she directly contradict stated goals, policies, and aims.

Angélica

Angélica was a 12-year-old girl who was born in México and came to the United States when she was seven years old. Angélica was fluent in English and Spanish. She was not literate in Spanish, and had not yet attained grade level literacy in English. Angélica lived with her mother, father, and brother in Walker Heights. Angélica was very fond of Ellen and frequently came by Ellen's classroom to give Ellen a hug or get candy from the candy basket that sat on Ellen's desk. Angélica had medium brown hair, light brown eyes, and dressed like a much younger child, wearing cotton dresses and sneakers with ankle socks. Angélica was very respectful to Ellen and obedient in class to the point that she rarely raised her hand, and never interrupted the teacher.

Angélica's family owned a computer and a printer but the printer did not work and she rarely spent any time on the computer, either for games or schoolwork. Angélica's family did not have Internet access but were planning on getting a dedicated service line (DSL) in the future.

Angélica mentioned that she played on her brother's Game Boy© with him sometimes and enjoyed this.

Enrique

Enrique was a 12-year-old boy who was born in México and moved to the United States with his mother and three brothers when he was four years old. Enrique had recently moved to Walker Heights and entered Myers in the fall of 2006, at the beginning of the study. At his previous school, located in the same county as Myers but 45 minutes away by automobile, Enrique had been targeted for recruitment by gangs leading his mother to move to Walker Heights to remove Enrique from gang influence. Enrique was fluent in spoken Spanish and English, and was gaining literacy in English although he struggled academically. Enrique's family owned a desktop computer but Enrique rarely used it, preferring to hang out with friends in his neighborhood after school and on weekends With close-cropped hair and large brown eyes, Enrique displayed impressive social acumen, to the point of being somewhat of a 'ladies man' and attracting the attention and flirtation of many of the female students in the class. Ellen mentioned this aspect of his character with amusement several times over the course of the study and Enrique regularly appears in classroom video dancing, laughing, smiling, and teasing girls in the class. As a struggling student and L2 writer, Ellen frequently chastised Enrique for "blurting out" answers in classroom discussions. Enrique often called out any answer to questions that Ellen posed in classroom interactions, only to align with the correct answer once it had been revealed. Enrique did not show great enthusiasm for preparing academic L2 writing assignments to post online to his peers, but did enjoy online L2 writing that was social in orientation. In his online writing Enrique attended well to social talk, and under the eye of the teacher, was careful to respond within the stated limits of the online forum.

Roberto

Roberto was a 12-year-old boy who was born in México and moved to the United States with his mother, father, and twin sister when he was two years old. Roberto had been a student at Myers for two years and carried himself with the air of the 'good student' and scholar. With short curly hair and a tall lanky build, Roberto had an exceedingly neat and tidy appearance, and walked and moved with an almost military precision in his speech and movements. Roberto regularly used the computer and Internet at home but his parents monitored his use closely out of fear that he might be approached by unsavory characters while on the Internet. Roberto was the most technologically proficient student in the study. Roberto was fluent in spoken Spanish and English, and approaching grade level literacy in English. Roberto's English and Spanish language skills were some of the best in the class and he became Ellen's unacknowledged peer liaison whom other students looked to for guidance when they did not understand class instructions. However, over time I found that Roberto used his power in the classroom to sometimes lead his peers astray by using Spanish to mask his use of foul language and off color joking from Ellen, while encouraging other students to do the same.

Chuy

Chuy was a 12-year-old boy born and raised in the United States. Small and compact with dark dancing eyes and an impish smile, Chuy was the jokester of the class and could make anyone laugh when the sound of his chortling giggle filled the room. Chuy's parents had been farmers in México and now worked in one of Myers' most well-known textile factories. Chuy traveled to México and Texas to visit family each year during summer vacation. Chuy's family did not own a computer and he was eager to practice his online skills during the study. Chuy was fluent in oral English but his Spanish was the poorest of the group and to compensate he had developed a

hybrid language that blended the Spanish he did know with Spanish words and phrases he learned from his peers. Chuy also frequently created his own words from a blend of Spanish sounds that held no direct meaning in Spanish but that his peers had come to accept as his way of speaking Spanish. Since speaking Spanish was an important part of being a member of the ESOL group at Myers, Chuy used his Spanish language frequently and his peers took up his utterances regardless of their technical correctness. Chuy was one student that frequently tested Ellen's patience with his overt chatter and reliance upon argument to make his voice heard in the classroom.

Domingo

Domingo was a 12 twelve-year-old boy who was born in México and came with his father to the United States when he was eight years old. Domingo, with his thin physical build and fifties flat-top hairdo, presented himself as a retro, hip hop urban boy who wanted to be a pilot when he grew up, and used both English and Spanish to maintain this self presentation. Domingo's family did not own a computer but were planning on buying one within the next year. Domingo enjoyed playing on his cousin's Game Boy© with them and expressed excitement throughout the study at the opportunity to write online to other children. Domingo struggled academically and behaviorally at times in Ellen's classroom, leading Ellen to make the comment early in the year that he "needed to be SST'd" (social support team). Ellen believed that Domingo might be the child of migrant workers and that they relocated so frequently that Domingo had difficulty keeping up academically. At the time of the study, Ellen was working with Domingo to help him learn his multiplication tables and catch up on content material in his science class. Domingo was fluent in spoken Spanish and English, but not yet on grade level in English. Domingo often parroted whatever Ellen said in class in frequent attempts to align with her power. This sort of

piggyback behavior allowed him to 'pass' as a 'knowing other' and ride on Ellen's expertise as teacher to be a knowing member in classroom interactions. The following table (Table 2.2) summarizes the background information of the research participants.

Table 2.2

Focal Participant's Background Information

Name	Age	Gender	Age at arrival in U.S.	Country of Origin	English Oral Fluency	Spanish Oral Fluency
Ellen	59	F	U.S. born	U.S.	NS	None
Angélica	12	F	7	México	NS fluency	NS
Chuy	12	M	U.S. born	U.S.	NS fluency	NNS
Domingo	12	M	8	México	NS fluency	NS
Enrique	12	M	4	México	NS fluency	NS
Roberto	12	M	2	México	NS fluency	NS

F = Female; M = Male; NS = Native Speaker; NNS = Nonnative Speaker

Researcher Role and Subjectivities Statement

My role as a researcher and participant observer began when I initiated the current study by recruiting ESOL teachers in order to implement an online writing project designed to apprentice middle school ELLs into online communication. Having read a great deal of research about the digital divide affecting Latino middle school students, noticing the rapid increase in Latino students in Georgia public schools, I wanted to implement a study to address the technological access and quality (Attewell, 2001) issues affecting this particular group of students.

During the study I was solely responsible for managing all the technological components of WebCT, including managing the electronic bulletin board discussion postings, naming upcoming online discussion sections, and uploading any images or other documents that the teacher wanted me to upload throughout the study. I also helped students to login to their

accounts in WebCT and answered both technology, and language related questions throughout the study. I was not responsible for preparing or implementing lesson plans, but did help teach ESOL students at Bayley Middle on two occasions.

During most class sessions I brought a digital video camera and audio recording device and used those items to collect video and audio data from participants. I also took field notes during ESOL classes, in the media center, and in the computer labs throughout the study when I was not actively helping students.

As a critical proponent of technology I believe that ELLs can benefit from *quality* instruction and *authentic* writing tasks in online forums. I have a great deal of experience in various forms of technology and use Internet and computer technologies almost every day, but I do not view technology as a panacea for all of society's ills, nor a saving grace in every instance. However, technology has become a fundamental part of U.S. society and I feel that all students should be given opportunities to take part in technological developments in order to make choices regarding what parts of technology they wish to take up in their own lifeworlds.

As a 39-year-old, white, female, with medium fluency in spoken Spanish, beginner level fluency now in Mandarin Chinese and German, and having lived abroad for seven years of my life, I am well-acquainted with the difficulties of relocation and familial separation that many of the students in my study have experienced. I also deeply appreciate the importance of maintaining cultural, familial, and community ties through language use.

Having worked with K-12 TESOL educators over the last six years, I am sensitive to the difficulties and stresses that implementing ICTs in the language learning classroom can entail. Given that, I take into account, when analyzing data generated with and by the research participants that I am afforded the luxury of being one who observes and therefore have ample

time for introspection and deliberation in judging others' actions in what they have experienced as immediate situations. Due to this, I have attempted to take various explanations into account when recounting participant's actions and their stances in classroom interactions.

In this chapter I have introduced the participants in the study, described my own role in the study, and my own subjectivities. In the next chapter I will present the first of three articles that relate the findings from my data in relation to my research questions.

Data Collection

The data collection period began in May 2006 and was collected over a total of one year. I used ethnographic methods to collect data which consisted of observations, field notes, video and audio data, digital still images, formal and informal interviews, documents, and archival data.

Observations

During this study I conducted a total of 56 classroom and school site observations. The first classroom observation was in May 2006 and continued on the basis of once per week for four months, twice per week for five months and once per week for the last two months of the study. A total of 40 classroom observations were conducted at Myers (Appendix B). These observations allowed me to gain familiarity and knowledge about my participants and their interactions and relationships with one another. I used video and audio recording devices for all but one classroom observation.

My role in the classroom was that of a participant observer, "seeking out opportunities to spend time with and carry out activities with members of [the] community" (DeWalt & DeWalt, 2002, p. 4) in order to gain an emic perspective of my participants and research site. DeWalt and DeWalt (2002) argue that participant observation is a method most useful for research design attempting to develop a "holistic understanding of the phenomena under study" (p. 92).

Participant observation in this vein is therefore a fitting method for the current study which sought an ecological perspective which is explained in chapter three of this study.

I conducted 15 school site observations over one year at Myers, observing the school from the main office, school clinic, counseling center, media center, gymnasium, and school cafeteria. During my school site observations I carefully observed and recorded in field notes the physical setting, school personnel, school visitors, participants, interactions, and activities. School site observations were not audio or video recorded so that I could remain as unobtrusive as possible during the observations. However, with permission from the principal I regularly took digital still pictures to capture various school activities, signs, posters, messages, awards, and announcements in order to inform my ethnography of the school and participants.

My field notes of classroom and school observations contained descriptions of physical settings, direct quotes from participants, and questions and musings that arose as I observed interactions and various activities on site (Sanjek, 1990).

Digital Data: Video, audio, and still pictures

I relied upon one mini-DV (mini digital video) camera with an attached sound mixer, a tripod, and two microphones to capture video and audio through the camera during each classroom observation. I used a lapel microphone on the teacher and a Sony flat microphone, the size of a credit card, to place near the students. By capturing sound in this manner, I was able to capture the teacher's voice whether she spoke loudly or softly as well as capture what students said to the teacher. In addition, I used a digital audio recorder placed at various places in the classroom and computer labs to capture student conversations.

I took digital still photos of participants and published them on the WebCT site so that students could look at one another and relate the names of the students they were writing to

online with their faces. Digital still photos were also taken of school posters, signs, architectural features, posted awards, and messages in order to have an ethnographic, digital chronicle of the changes in the school over the course of the school year.

Interviews

Using a semi-structured interview guide in a private, one-on-one setting, I conducted interviews at Myers Middle School with: (1) Ellen, (2) focal students, (3) the principal ,(4) Latino parent liaison, and (5) the technology instructor. One of my colleagues, a native Spanish-speaker, conducted interviews in Spanish with three focal students (Chuy, Enrique, and Domingo) who requested this service, and translated and transcribed the interviews as well. The interview protocol for Ellen (Appendix C), focal students (Appendix D), the principal (Appendix E), the Latino Parent Liaison (Appendix F), and the Myers Middle technology instructor (Appendix G) focused on questions that would illuminate individual attitudes towards technology, professional background history, language and writing abilities, and biographical information. Informal conversational interviews (Patton, 2002) in the form of spontaneous generation of questions occurred throughout the study with focal participants, school personnel, students' parents, and teachers in the school. These interviews, and my consisted presence at the school, gave me additional insight into the school ecology (Table 2.2)**.**

Table 2.2

Interview Data

Interviewees	Role	SSI	Length	II
Ellen Miller	ESOL teacher	1	1 hour	12
Karen Jones	Principal	1	45 mins	3
Alberto Fuentes	Latino Parent Liaison	1	40 mins.	6
Luz Esposito	Computer Lab Manager and Technology Support	1	40 mins.	3
April White	Secretary-Counseling Office	0		6
Gayle Robertson	Secretary-Main Office	0		8
Angélica	ELL	1	20 mins	5
Chuy	ELL	1	20 mins.	20
Domingo	ELL	1	20 mins.	7
Enrique	ELL	1	20 mins	12
Roberto	ELL	1	20 mins	10

Note: SSI = Semistructured Interviews; II = Informal Interviews

Documents

Through WebCT I was able to collect online documents of student L2 writing assignments as they posted to one another on various topics provided by their teacher. These online documents consisted of student posts on an electronic bulletin board in WebCT, initial outlines and pictorial depictions of social studies units created using Inspiration software and uploaded as digital picture documents to WebCT, and graphs created in Power Point published to WebCT. In this manner, the WebCT unit became both a place to document student L2 writing and writing organization assignments, but also a document in itself as each of these components

were used to create online portfolios for each student. A survey (Appendix H) was conducted at the beginning of the study to determine participants' use of technology at home and personally (e.g. cell phones, Ipods©, an mp3 players).

Archival Data

In addition to the online documents I collected in WebCT, I collected physical documents in the form of classroom handouts, student assignments, school fliers, informational handouts offered at the school clinic, the school monthly newsletters, and local area and regional newspapers provided at the front office each day by the school administration. These archival elements provided additional insight into the way the school ecology was constituted.

Data Analysis

While multimodal and conversation analysis are useful tools for analyzing data that has already been transcribed, determining which video segments to include for transcription for a truly inductive analytic process can be daunting. Due to these concerns, the present study borrows raw data analysis methods from grounded theory (Charmaz, 2000; Strauss & Corbin, 1997) in an effort to inductively generate pertinent sections for multimodal and conversation analysis (Table 2.3).

Table 2.3 Data Collection and Analysis Methods

Data Collection Methods	Data Collected & Generated	Data Analysis Methods
Classroom Observations	Fieldnotes from 40 Observations	Open Coding*
School Site Observations	Fieldnotes from 15 Observations	Open Coding*
Interviews	Transcripts from 8 SSI	Conversation Analysis
	Fieldnotes 87 II	Open Coding*

Audio Data	Transcripts	Conversation Analysis
Video Data	Transcripts	Conversation Analysis Multimodal Analysis
Digital Data	175 photos	Multimodal Analysis
Documents	419 WebCT postings	Conversation Analysis
Archival Data	School fliers, news-Papers, newsletters, Announcements	Open Coding*

*Notes: *Open coding refers to coding employed by Strauss & Corbin (1990) and Patton (2002)*
SSI = Semistructured Interviews; II = Informal Interviews

During the data analysis process I used a video/audio transcription and analysis software program, Transana, to code my video data. Using Transana I viewed each video tape in real time and used open coding (Patton, 2002; Strauss & Corbin, 1990) to identify activities related to my research questions. However, activities that did not address my research questions were also coded in an effort to learn more about the personal, classroom, and school ecologies under study. In addition, by inserting time-marks in Transana I was able to index key events and interactions, and register code keys which allowed me to begin generating open codes from the beginning of the analytic process. This approach was more time consuming but helped to ensure that the data analysis process was truly inductive, as well as to ensure that upon final reflection, all activity on video had been accounted for even if it was not directly related to my research questions.

Upon locating video segments that addressed my research questions, these segments were fully transcribed. Completed transcripts were saved as RTF (Rich Text Format) files to be further compiled and analyzed in Microsoft Word along with transcripts from field notes and interviews. I used modified transcript conventions based upon Gail Jefferson's transcription system (Appendix I) and added Sigrid Norris' (2004) use of digital images for multimodal analysis. The transcripts captured participants' speech and multimodal communication such as posture, gaze,

gesture, and vocal tone. The transcripts reveal the sequential and orderly organization of talk through such features as overlapping speech, simultaneous utterances, time lapse between utterances, prolonged sounds, tone of voice, volume of voice, rising and falling intonation, posture, gesture, and gaze. Based upon Markee's (2000) argument that in L2 transcription it is an ethical matter to avoid presenting participant speech in a way that suggests ridicule, I transcribed participant talk by using "standard English spelling supplemented by phonetic script as appropriate" (p. 59).Given that this study relies upon both multimodal and conversation analysis, I used phonetic transcription when participant speech conveyed multiple meanings such as through prolonged stress on vowels, rising intonation, or changes in voice volume. This process of discerning multiple meanings through participant's utterances was based upon pertinent research (Bourne & Jewitt, 2003) as well as "the transcriber's knowledge of when and how a given utterance qualifies for marking against the backdrop of 'normal' or neutral speech (Baker, 1997, p.114).

The open codes generated from the video data, interviews, and field notes, were compiled and organized in a graph in Microsoft Word (Table 2.4) to allowed me to triangulate (Mathison, 1988) the emerging codes into a plausible explanation of the phenomena under study.

Table 2.4

Data source, Coding, and Categories Generated

Data Source	Open Codes	Research Questions	Ecological features
Digital Video	writing topics, peer editing Spanish language time, culture, identity-Méxicano	negotiation L2 writing modes institutionalized talk tech problems	membership semiotic modes patriotism language use
Interviews	culture, gangs, nationalism, ISS, immigration membership	L2 writing, culture technology, nationalism	gangs, culture technology discipline immigration
Fieldnotes	L2 writing, tech gangs, power, agency Spanish language use time, nationalism	L2 writing, Spanish language use, time	technology technology, literacy Spanish in school language use nationalism
Documents	classroom activities culture, world knowledge	classroom interactions	culture, health patriotism membership
Archival Data	nationality, mode literacy, nationalism, patriotism, membership, achievement, success	culture	culture, national ID nationalism

After coordinating the open codes from this data to the research questions and ecological theoretical perspective of the study, I analyzed the transcripts from the video segments and interviews using Multimodal analysis (MMA) and Conversation Analysis (CA).

Conversation and Multimodal Analysis

Typically, SLA researchers have employed discourse analytic methods in order to identify participant roles in interactions, gain perspective on learner attitudes, identify functions of oral discourse, and the cognitive demands and benefits of classroom oral negotiations for

learners. In most research on language learning, the analysis of talk identifies salient themes, recurring patterns, and characteristics of talk that address the research questions. The unit of analysis regularly includes the utterance and focuses on isolated sentences or clauses, at times addressing d/D discourses (Gee, 2005). However, less focus has traditionally been placed upon how prosodic features of language (e.g. volume, tone, stress), and what have traditionally been referred to as "paraverbal" (van Dijk, 2001) features (e.g. pauses, gaps, gaze, gesture, and proxemics), are employed by ELLs for the purpose of meaning making in L2 classroom interactions.

Conversation Analysis (CA) provides analytic concepts and methods that enable fine-grained analysis of prosodic features of interactions. CA, or *talk-in-interaction,* emerged as a field of sociological study in the early 1960s under the auspices of Harvey Sacks, Emanuel Schegloff, and Gail Jefferson. Building on the work of Harold Garfinkel (1967) who advocated an ethnomethodological approach to social science research that looked at people's "common sense reasoning and practical theorizing in everyday activities" (Have, 1999, p. 6), Sacks was able to show that conversational exchanges between people were not random, unruly, chaotic events but rather had underlying rules, structure and principles at work in even the most mundane conversations. More importantly to SLA research, Sacks was able to show that conversational turns and talk-in-interaction were *doing something* (Pomerantz & Fehr, 1997), achieving important actions and vital aims between social actors. Drew (2005) that CA is based upon four basic concepts: turns at talk, turn taking, turn design; social action, and sequence organization. Therefore in CA, the basic unit of analysis can be characterized as the *social action.* A defining feature of CA is that it does not examine talk in general, but rather treats actual talk as prima-facie evidence of what participants are orienting to and therefore what

participants say is used as the foundation for analysis (McHoul & Rapley, 2001, p.xii). This is vital to research within institutional settings, such as schools, where institutional and pedagogical goals are "talked into being" (Have, 2001, p. 4).

Employing CA through numerous readings of the transcripts from the video, audio, and interview data, allowed me to orient the analysis to descriptions that note in micro detail how an interaction evolves in the course of its actual production. Questions as to the meanings of actions were answered by direct examination of 'what happened before' and 'what follows next' (Psathas, 1995) in order to capture the manner in which participants themselves display how they are making sense of what occurs. From this level of analysis I was able to discern how participants made sense of issues pertaining to culture, language, L2 writing, technology, and nationalism. The fine-grained, talk-in-interaction analysis of teacher-student and student-student interactions became pivotal in exploring and revealing how participants interpreted questions and statements both in face-to-face interactions and online interactions.

CA also provided a means for interpreting participant interactions by exploring turn-taking, sequential organization of turns, and argument structure to assess how participants gained the floor in speaking, maintained the floor through argument structures (McDowell, 1985), and revealed preference organization (Sacks, 1987).

CA has been used to investigate talk in mundane settings where turn-taking, repair, pauses, and gaps in conversation are considered the normative structure of talk that make social interaction possible (Heritage, 2005). CA is also used in institutional settings (McHoul & Rapley, 2001; Have, 2001) such as courtrooms, medical institutions, mass media, and educational settings (Baker, 1992; Baker & Keogh, 1995; Heap, 1992; Mehan, 1979, 1985, 1991). Institutional CA is interested in how talk achieves the reinforcement or 'keeping' of

institutional values and beliefs, as well as how the setting of the institution itself requires certain kinds of talk. For instance, in school settings, such as an ESOL classroom, there are institutional standards, rules, or regulations that delineate who may pose questions and who must answer them. Inherent in institutional CA is the assumption that institutional talk exhibits three main characteristics: (1) institutional talk is oriented to the aims of the institution and in institutionally relevant ways, (2) institutional talk is constrained by what are considered acceptable contributions to the 'business at hand', and (3) institutional talk is defined and shaped by the frameworks and procedures that are specific to that institution (Drew & Heritage, 1992).

Current SLA research employing CA has resulted from calls from SLA researchers for a more "emically oriented (i.e. participant-relevant) perspective on language learning" (Markee & Kasper, 2004) that takes into account contextual and interactional aspects of L2 learning. This has produced a timely influx of applications of CA methods to SLA studies (He, 2004; Kasper, 2006; Markee, 2000; Seedhouse, 2004) which are vital to understanding how micro-moments of social action are instantiated in conversational behavior, contributing to observable changes in ELLs states of knowing and using a new language (Markee, 2000). Moreover, SLA research in the ESOL classroom could benefit from analytic methods that take into account the delivery of utterances and how listeners attend to these utterances.

Along a separate continuum is research on gesture (McNeill, 1992, 2005), gaze (Goodwin, 1980), and proxemics (Hall, 1990). Due to modern developments in digital video recording, classroom interactions can now be recorded and carefully analyzed in order to explore how ELLs employ the modes of spoken language, gesture, gaze, and proxemics for the purpose of meaning making in a second language (McCafferty & Stam, 2008). Research on SLA classroom interactions traditionally focuses on either talk, or other modes of meaning making

(e.g. gesture, gaze, proxemics), but almost always privileges linguistic output in analysis over the ubiquitous "paraverbal" (van Dijk, 2001) features of talk. However, McNeill (2005) argues that "language is inseparable from imagery" (p. 4) and that it is a profound "error to think of gesture as a code or 'body language', separate from spoken language" (p. 4). This study asserts that gesture, gaze, and proxemics are not 'para' in L2 interactions, but rather vital components in ELL meaning-making and deployment of signification systems from a semiotic perspective. In face-to-face interactions, participants regularly access and employ a large array of visual and kinesic phenomena (Bolden, 2003) therefore, to provide transcripts that only represent vocal behavior can make "talk appear more opaque than it actually is to the participants themselves" (Bolden 2003, p. 195). Therefore, providing transcripts that account for multimodal behaviors offers a comprehensive and emic perspective on participant planning and orientation during interactions that is not always available in transcripts of linguistic utterances alone.

Mirroring the focus of McNeill's research (1992, 2005) multimodal analysis (MMA) focuses on the semiotic modes that participants employ in an effort to "step away from the notion that language always plays the central role in interaction, without denying that it often does" (Norris, 2004, p. 2). Kress et al (2001) further argue that language is only one mode among many, and that it does not always take a central role in moment-by-moment interaction. Current multimodal analytic research has capitalized upon the development of excellent digital video recording which offers a rich body of research on gesture, gaze, and proxemics and the multiple modes of discourse and communication in modern society (Kress & van Leeuwen, 2003) to create a method of representing and analyzing meaning making in everyday life. Multimodal analysis (MMA) as an analytic and representational construct of data has thus far focused on analysis of media advertisement (Thibault & Baldry, 2006), visual and architectural media

(O'Halloran, 2004), and multimodal interactions of adult second language learners (Norris, 2004).

Multimodal analysis (Baldry & Thibault, 2006; Bourne & Jewitt, 2003; Norris, 2004) was employed in this study to analyze video data in order to examine participants' use of gaze, gesture, vocal tone, and proxemics in order to identify how these modes were used to communicate speakers' comprehension of interactions and interpret, describe how participants made sense of others' communication, as well as how students employed gestures to reveal their orientation to the teachers' expectations. On the advice of Bourne & Jewitt (2003) I looked for the ways that participants used tone of voice in their interactions with one another throughout the data.

Norris (2004) has described the basic unit of analysis in MMA as the *social action*. In this way, CA and MMA are complementary analytic methods with MMA regularly employing CA to analyze linguist utterances of video recorded talk (Norris, 2004).

In this chapter I have reviewed the research study perspective and design, recruitment procedures, research site, participants, researcher role and subjectivities, and data collection and analysis methods. In the next chapter I will present the research findings related to my third research question: How are semiotic modes employed to create a cultural ecology in the school?

CHAPTER THREE

A PATRIOT IS RESPECTFUL: EXPLORING CULTURAL TRANSMISSION THROUGH SEMIOTIC MODES AMONG MÉXICANO TRANSNATIONAL ADOLESCENTS IN A MIDDLE SCHOOL[1]

[1] Pinnow, R.J. To be submitted to *Anthropology & Education Quarterly*

As an increasing number of Méxicano adolescents enter U.S. education systems, questions of assimilation, citizenship, and membership have gained primacy in explorations of enculturation among Méxicano school children. Based upon a year-long ethnographic study undertaken in 2006-2007, this article explores how Méxicano middle school English Language Learners are positioned through semiotic means in the school ecology in order to promote institutional values and beliefs. Ecological theory frames the study, revealing the symbolic spaces given primacy for cultural transmission within the school ecology. This analysis critiques the "hidden premises" of cultural reproduction through semiotic means and suggests implications for educational practice and policy.

[Méxicano, middle school, English language learners, semiotics, ecology, cultural reproduction, gangs]

Introduction

Traditionally, anthropological education studies have focused upon how culture and identity are enacted through classroom interactions, literacy practices, and national policies in order to locate in what ways, and to what effect, these interactions shape transnational student beliefs about their role in U.S. society. The focus in much of this research is primarily on participant interactions as they affect educational aims. Due to this focus on participant interaction, other school signification systems are frequently positioned as ethnographic background data, the wallpaper to the 'real' focus of the study, human interaction. This approach often overlooks the powerful role that other forms of semiotic signification play in shaping students' cultural, societal, and ideological beliefs. De-emphasizing the role of such signification only serves to muffle the impact of semiotic modes in shaping student behavior, thereby reducing our ability to analyze,

understand, and account for the role of semiotic modes in enculturation and cultural reproduction. Ecological theory, which places *context* as an object of analysis, is a useful framework for explicating and interpreting semiotic signification systems in educational environments. However, ecological theory has yet to make an impact in anthropological education. This study imports ecological theory into an anthropological framework in order to reveal how school signification systems are intentionally and powerfully employed in schools in order to shape students' cultural, societal, and ideological beliefs. By adopting an ecological perspective (Bateson, 1972; Bronfenbrenner, 1979, 1989) this study repositions what has traditionally been considered ethnographic background data to the central focus of the study, thus making signification systems the *object* of study in order to inform questions concerning transnational Latino/a student enculturation.

Schooling, Semiotic Ideologies, and English Language Learners

Schools, as institutions, have been inculcated with the responsibility to educate, enculturate, and discipline (Foucault, 1995) school children in order to shape the citizenry of a given society. In the United States this process is undergoing a significant shift as the number of Latino/a students in U.S. public schools has increased by over 55 percent in the last decade (Fry, 2002). By the year 2025 Latino people groups are estimated to make up almost 20 % of the total U.S. population (Marlino & Wilson, 2006). Meador (2006) has noted that many of these students are of Méxicano birth, or recent descent, and do not conform to prior U.S. models of European immigrant orientation to their homeland and U.S. status. Rather, these peoples continue to maintain familial and cultural ties to México, crossing borders regularly in an effort to sustain their own cultural identity, thus giving rise to the term "transnational" (Ong, 1999; Portes, Guarnizo, & Landolt, 1999). The term transnational describes a person who orients to their

cultural values, beliefs, and ideologies, rather than nation-state borders as determinants of loyalty or citizenship. This has created a challenge for U.S. public schools, which typically operate from traditional assimilationist models with regard to students they continue to view as immigrants. In this article I will refer to the student participants in the study as both transnationals and Méxicano. This is due to the fact that all of the focal students in the study were from México and oriented to Méxicano as a cultural identity rather than the term immigrant. I also refer to the students in the study as Méxicano to respectfully differentiate these students from the more general term *Latinos* which can indicate Spanish-speaking people from many countries throughout the world. The term Latino/a will only be used to reflect the term as it appears in relevant research literature and the way that the school under study employed the term.

Recent anthropology and education research has explored the educational process of Latino/a students such as language, familial beliefs and practices (Olmedo, 2003) and academic achievement (Valdés, 1996; Valenzuela, 1999), home-school literacy practices (Reese, 2002; Reese & Goldenberg, 2006), membership (Meador, 2005), and gender (Cammarota, 2004; Rolón-Dow, 2004). However, school ideology, recognized through the creation of symbolic spaces and other semiotic modes, is often overlooked as a persistent source of ideological inculcation of transnational students. Schooling invariably involves shaping student identities and beliefs about societal membership and cultural identity. However, in this article I contend that the bulk of this influence does not necessarily reside in talk, but rather in the intentional employment of semiotic modes in schools, namely banners, signs, and other signification systems, for the tacit purpose of influencing student embodiment of expressed ideologies. Investigating such signification systems, I believe, offers a powerful resource for understanding how semiotic modes are harnessed and employed in order to shape student beliefs about culture,

identity, and patriotism. By shifting our focus to other semiotic modes operating intentionally within the school, it is possible to describe and interpret the role that various signification plays in shaping student beliefs.

This study uses ecological theory (Bateson, 1972; Bronfenbrenner, 1979, 1989, 2005) and social semiotic inquiry (Hodge & Kress, 1988; Jewitt & Oyama, 2001; van Leeuwen, 2005) in order to focus directly upon the visual media employed by schools as a method of cultural reproduction, and answer these research questions: (1) how, and in what way, are semiotic modes employed by the school, and (2) what can an examination and analysis of these semiotic modes tell us about the underlying premises governing institutional and nation-state principles in localized contexts for Méxicano transnational students?

I argue that by viewing the school from an ecological perspective (Bateson, 1972; Bronfenbrenner, 1979, 1989, 2005) it is possible to re-conceptualize the school environment in such a manner as to privilege other semiotic modes within the school in order to explicate the role that such signification plays in enculturating transnational students in the United States.

Methods

This article is part of a larger, year long, ethnographic study that took place from 2006-2007. In the spring of 2006 I recruited ESOL (English to Speakers of Other Languages) teachers in a state in the southeastern United States for a study I was implementing that would pair up English Language Learners (ELLs) in the online forum of WebCT (a course management system) in order to address research literature that identified a digital divide (Attewell, 2001) keeping Latino students from gaining the apprenticeship into online communication that they needed to meet the increasingly digital perspective of U.S. and global society. Fourteen ESOL teachers contacted me expressing interest in being a part of the study. Out of these fourteen teachers, I

chose two teachers from two separate schools due to their access to online technology and their excitement and willingness to use technology with their ESOL students. The students that were chosen from these two teachers ESOL classes were novice readers and writers of English and novice technology users.

This current article focuses on one of the middle schools in the study, Myers Middle School (a pseudonym), located in the Southeastern United States, in which Méxicano students made up 40 % of the student body. Of the entire ELL student population, all but four students were of Méxicano origin or recent descent (one generation). This particular school was chosen due to the rich, semiotic modes employed throughout the school for the purpose of enculturation and discipline of the student body.

Setting

Myers Middle School was located 45 miles from a major metropolitan southeastern city, and 10 miles from the smaller city of Walker Heights (a pseudonym). Walker Heights' agriculture, poultry and textile industries were thriving due to an influx of immigrant labor beginning in the early 1990s. The majority of these laborers were originally from México; willing to work long days for low-wages and in quite difficult working conditions. Walker Heights was a bustling, thriving town, which was reflected in the main city thoroughfare where one could see many shops, restaurants, and businesses owned and operated by Spanish speaking peoples from all walks of life.

Myers Middle School had just over 900 students registered and continued to grow, mainly through the influx of many Méxicano students. Although the school was 15 years old, it had been kept in excellent condition through regular maintenance.

The school had an active athletics program with boys' and girls' cross country, track and field, basketball, and soccer teams. Cheerleading and spirit teams were popular as well as choral and band programs. Méxicano students were well represented across all athletic teams, as this was an important avenue to school belonging and membership.

In addition, the school made consistent efforts to create a school environment where all students felt that they belonged, were welcomed, and were expected to excel both academically and socially. When focal Méxicano ELLs were interviewed, all students spoke positively about the school environment and expressed strong school affiliation. Several students even stated that they did not look forward to summer or winter holiday because at home "there is nothing to do". It was clear that the school took active and productive measures to increase Latino student affiliation with the school by hosting a monthly Latino Parent Night (LPN). The ESOL teacher who agreed to participate in the study, Ellen, instituted this event arguing that it would increase Latino student-parent positive affiliation with the school, and create a welcoming social and educational event that would increase Latino parent involvement in a non-threatening way. Rather than sending notes home or asking Latino parents, some of whom were on limited incomes, to go to certain places or buy certain things to show their support of their child (which Ellen believed was a relic of the traditional white, middle class culture in school politics), Ellen argued that a LPN with snacks, games for younger children, educational presentations in Spanish, and transportation provided would help to create a strong bond between Latino students' home and school communities.

The principal at Myers strongly supported Ellen's efforts with the LPN, providing the funding for a school bus that drove through the Latino/a communities where Myers' students lived. As long as there was a parent with the Latino/a child, the bus stopped and picked them up

and took them to the school for the event. The bus then took them all home after the event, which created a reliable and safe transportation option for families. Each month during the LPN, Ellen, the principal, the Latino parent liaison, and two other ESOL teachers at the school volunteered their time to host fun games in the gym for younger kids and host an arts-'n'-crafts table while selected speakers spoke to parents on topics ranging from Hispanic Scholarship Funds available for college, state healthcare options, to online access of student grades each month.

Participants

The focal participants in the study were the ESOL teacher at Myers, Ellen, and five of her Méxicano students: Angélica, Chuy, Domingo, Enrique, and Roberto. Participants were interviewed in semi-structured, formal interviews, and informal interviews several times throughout the study. Due to space constraints, the table below (3.0) provides the relevant data on these participants in a concise format. Participants were interviewed to discover their knowledge, opinions, and beliefs about school signage, the dress code, and possible gang activity in the school and community.

Table 3.0

Focal Participant's Background Information

Name	Age	Gender	Age at arrival in U.S.	Country of Origin	English Oral Fluency	Spanish Oral Fluency
Ellen	59	F	U.S. born	U.S.	NS	None
Angélica	12	F	7	México	NS fluency	NS
Chuy	12	M	U.S. born	U.S.	NS fluency	NNS
Domingo	12	M	8	México	NS fluency	NS
Enrique	12	M	4	México	NS fluency	NS
Roberto	12	M	2	México	NS fluency	NS

F = Female; M = Male; NS = Native Speaker; NNS = Nonnative Speaker

Researcher role

My role in the study was as a participant observer in the school in multiple settings over one year. I acted as a technological aid to the ESOL teacher and her students in the study, and from time to time helped ESOL students with language related issues as they wrote online. I spent one day per week for four months at the school, then two days per week for six months, and one day per week the final two months of the study. My consistent presence in the schools a researcher in the school allowed me to interact with students, teachers, staff, and administrators in various settings. My work at Myers also granted me access to the school environment including classrooms, teacher meetings, parent-teacher nights, and student activities such as Pep Rallies and athletic events. This level of consistent interaction helped me to gain an understanding of the school process as an institution as well as the lived reality of Méxicano students in this environment.

Data Collection

Data collection followed ethnographic research procedures including field notes (Sanjek, 1990; Spradley, 1980), visual anthropological methods for collection of visual data (El Guindi, 2004; Pink, 2006), interviews, and participant observation (DeWalt & DeWalt, 2002) of school activities such as school Pep Rallies, Latino Parent Night, after school athletic events, and administrative addresses to the student body. Digital photographic still images and digital video were taken of signs, banners, advertisements, posted school announcements and fliers, images of the school mascot, and the school mission statement.

Data Analysis

Social Semiotics.

In order to understand and interpret visual data it is useful to have a method of inquiry that provides the tools for critical analysis. Social semiotics provides just such tools (Hodge & Kress, 1988; Jewitt & Oyama, 2001; Kress. & van Leeuwen, 2003; van Leeuwen, 2005; van Leeuwen & Jewitt, 2001). Evolving from semiotics, the study of signs and sign making, social semiotics emerged from the Paris school of semiotics which viewed semiotic systems as containing 'codes' as "sets of rules for connecting signs and meanings" (Jewitt & Oyama, 2001, p.134). It was thought that by learning these codes people could connect the same meanings to visual data, graphic patterns, and sounds (Jewitt & Oyama, 2001). Some semiotic systems do operate under this coding system, yet many others, such as creative works of art, do not. The Paris school perspective also does not take into account the way that the viewer might interpret or 'take-up' images (Jewitt & Oyama, 2001). Social semiotics views images and other sign systems as *socially interactional* and therefore is a "critical form of visual discourse analysis which does not necessarily stop at description but may also seek to influence the semiotic practices it describes" (Jewitt & van Leeuwen, 2001, p.3).

Social semiotic inquiry lends further insight into the specific way that semiotic modes are deployed and taken up students. For instance, the angle and placement of signs can indicate many things about the perceived audience of any given visual media. The vertical angle of a sign, such as a sign that hangs far above students' heads, reveals an underlying premise indicative of power relations and structures at work in the institution. Other semiotic modes are also activated in signs such as the use of color, size, linguistic structure, and punctuation. Through these means, signs employ a specific *semiotic register* (van Leeuwen, 2005), carried out through various semiotic resources, in order to indicate the intended audience of a message.

Learning which signs apply to these separate positions in the school ecology could be considered part of the disciplining function of school signage and the 'work' of being a child.

All visual data, including digital images and visual archival data such as school fliers and newsletters, were analyzed using social semiotic inquiry (van Leeuwen, 2005) and multimodal analysis (Baldry & Thibault, 2006; Norris, 2004) (Table 3.1). School site observations were used to record changes in banners and signs over time, as well as to study the placement of signs when important events occurred, such as visits by county officials, in order to document the preparation and implementation of signification for these events (Table 3.1). I also conducted interviews with the focal ESOL teacher, the school principle, the Latino Parent Liaison, and the focal students in order to gain insight into how the school ecology was constituted. These interviews were analyzed using conversation analysis methods (Psathas, 1995).

Table 3.1

Data Collection and Analysis Methods

Data Collection Methods	Data Collected & Generated	Data Analysis Methods
Classroom Observations	Fieldnotes from 40 observations	Open Coding*
School Site Observations	Fieldnotes from 15 observations	Open Coding*
Interviews	Transcripts from 8 SSI	Conversation Analysis
	Fieldnotes from 87 II	Open Coding*
Video Data	Transcripts	Conversation Analysis Multimodal Analysis
Digital Data	175 photos	Multimodal Analysis
Archival Data	School fliers, news papers, newsletters, announcements	Open Coding*

*Notes: *Open coding refers to coding employed by Strauss & Corbin (1990) and Patton (2002)*
SSI = Semistructured Interviews; II = Informal Interviews

Theoretical Framework

Ecological Systems Theory

The notion of viewing human development from an ecological perspective is not new. Ecology, as a biological field of study was instituted in the 19th century by German biologist Ernst Haekel in order "to refer to the totality of relationships of an organism with all other organisms with which it comes into contact" (van Lier, 2004). The linguist Einer Haugen (1972) introduced the metaphor, "ecology of language" (p. 325) in an effort to address the poverty of representation apparent in much linguistic research of that time period. Bateson (1972) popularized the term in anthropology through his approach to the evolution of human mind, but

within educational studies it was not until Russian-born psychologist Urie Bronfenbrenner (1979, 1989, 2002) introduced *ecological systems theory* that a formal theory was posited that encompassed psychological, social, biological, cultural, and identity structures in human development. Ecological systems theory approaches child development from the standpoint of ecosystems that directly contain the child (microsystem) such as home, school, and community, to those that connect these various structures (mesosystem), as well as larger societal structures that do not affect the child directly but influence events that can determine future courses of action for the child (exosystem). Bronfenbrenner (1979) posited that a final macrosystem contained culture, values, principles, and societal laws (Berk, 2000) that affect and shape all the other systems as well as a chronosystem (Bronfenbrenner, 2005) reflecting time and historic changes of societies and cultures. One of the primary strengths of this model is that it recognizes culture, ideologies, societal principles, values, and laws as having a powerful role in the shaping of all other ecosystems.

Ecological theory and related perspectives have regularly emerged in second language acquisition (SLA) and literacy studies. Second language researchers have continued to evoke the term 'ecology' as a metaphor to shift the focus in SLA research from mechanistic models of language acquisition to ones that encompass the multifaceted nuances of second language learning (Haugen, 1972; Kramsch, 2006; van Lier, 2004). Within literacy studies, an ecological perspective has also been used to create a critical perspective (Moje et al., 2000) for extending literacy studies outside of the school ecology and into home and community ecologies in order to understand and interpret multiple literacies practices (Barton et al., 2004; Hawkins, 2004, 2005; Moje et al., 2000; Neuman & Celano, 2001; Villalva, 2006), community maintenance (Matusov, 1999), and parental engagement (Barton et al., 2004) These studies employ an ecological

perspective in the manner of the New Literacy Studies (Barton, 2007; Gee, 2003; Street, 1993) in order to extend examination of literacy practices beyond the school ecology, and also situate our understanding of literacy practices within cultural and societal contexts.

Ecological theory has also been invoked in eco-cultural anthropological research that links ecological and cultural theories (D'Andrade & Strauss, 1992; Geertz, 1963; Holland & Quinn, 1987), on voluntary and involuntary minorities (Ogbu & Simons, 1998), family-community development (Weisner, 1997), and Latino/a family, community, and school literacy practices (Reese, 2002; Reese & Goldenberg, 2006). These studies link ecological and cultural practices of students' families but give primacy to the outcome of this perspective on cultural practices over time (Reese, 2002).

However, one of the problems with the ways that 'ecology' is invoked in some educational research is that it is invoked as a stand-in for the relational aspect of the biological meaning of the word (Moje et al 2000), while in others it is employed metaphorically (Kramsch, 2002) in order to offer a perspective that invokes linkages, relations, and discursive, dialectical understandings of school, family, and community literacy and language learning. This invocation is both helpful and yet problematic in that by invoking the term in such general ways, terminology is forced as a stand-in for a theorized explication of the effects of multiple domains upon educational, cultural, and societal development.

Here, I contend that a theorized view of ecological research is needed to better understand and interpret anthropology and education research in a modern visually driven culture, and show how the school ecology itself, as a material agent of cultural transmission, might be the focus of analysis in order to interpret the semiotic practices of schools in the shaping of student notions of identity, culture, and citizenship.

Visual Culture Studies: 'Looking' and Cultural Transmission

Studies of visual media have taken various forms in the academy in order to explicate, understand, and interpret the link between culture, society, and education. Visual cultural studies (Evans & Hall, 1999; Hall, 1999; Lister & Wells, 2001; Rose, 2007; Sturken & Cartwright, 2001; van Leeuwen & Jewitt, 2001) focuses on multidisciplinary aspects of visual media in order to inform the integral relationship between ideologies and social institutions (Sturken & Cartwright, 2001) as reproduced through semiotic means. Visual cultural studies focuses on both the forms and practices of culture mediated through semiotic modes, and the power relations and social arrangements through which "culture is produced, enacted, and consumed" (Lister & Wells, 2001, p.157). More specifically, visual cultural studies views the production of signs as a social practice in and of itself, focusing on how semiotic modes position actors in social arenas and reproduce cultural norms and ideologies. Ideology in this sense does not refer necessarily to propaganda, but rather to the way that ideologies, as systems of belief, are made pervasive through mundane, persistent reproduction in everyday social life (Sturken & Cartwright, 2001).

In addition, visual cultural studies emphasize 'looking' with claims that 'looking' is "always embodied and undertaken by someone with an identity" (Lister & Wells, 2001, p.65). In the instance of institutions such as schools, cultural reproduction is at the heart of how, and in what way, schools deploy semiotic modes to shape student character (Jewitt & Oyama, 2001) and in the case of the data from this study, student national identity.

Bateson's (1972) spectatorship-exhibitionism motif, presented in his essay on moral and national character, serves as an excellent framework with which to position the study of signs in schools where national identity is a salient theme. The issue at hand is one of cultural transmission, embodiment, and assessment. By this I mean that the spectator-exhibition motif is

employed in U.S. public schools wherein semiotic means establish the student as alternately spectator and exhibitor of desired ideological traits. Bateson (1972) argues that various cultures depend on a continuum of spectator-exhibition in order to shape children into desirable citizenry. For instance, in the United States, children are first positioned as spectators of desired ideology with the tacit and explicit expectation that they will travel upon a continuum whereby by adulthood they exhibit through their behavior that they have taken up and internalized specific cultural and societal values. By doing so, the spectatorship-exhibition continuum is traversed with the young adult now exhibiting desired behaviors for the spectator of parents and other authority figures, thus showing that they have become independent and therefore are maturing into desirable American citizenry (Bateson, 1972).

I argue that the U.S. middle school, orienting to its basic philosophy (Brown & Saltman, 2005), first positions students, through use of signs and other signification systems, as spectators. At this point along the spectator-exhibitionist continuum the child is one who must *receive* the message transmitted through the sign. From this starting position then, the school can now assert the right to begin expecting that the student will take up the ideology transmitted through the sign. Proof of this cultural reproduction is assessed through student behavior, or in Bateson's (1972) terms, through the exhibition as actors of social ideology. It is through this traversal from spectator to exhibitionist that the school as a societal and cultural institution can assess the embodiment of ideology, for it is embodiment that is the primary goal in cultural reproduction. The sign then is both a tool of reproduction, and an instrument of assessment, in that the sign's mere existence within the school privileges its message. It is through the privileging of the message that a standard is placed upon students, thus employing the power of the sign to assess

whether students are meeting, or failing to meet, the messages enacted through symbolic social spaces in institutions such as schools.

Analyzing and interpreting the sign then means interrogating the underlying principles and ideologies at work in semiotic modes. Visual cultural studies takes up the study of visual media from two vital perspectives: that of the *viewer,* and from the perspective that visual data exhibits cultural and societal rules and principles, "hidden premises" (El Guindi, 2004, p.17), that affect how societal members are framed within societal discourse. Althusser (1999) states that ideology interpellates, or hails, us as viewers and by doing so transforms us into subjects of its message. Visual media is closely identified with the transmission of ideologies as images hail us as viewers and the way and means by which they do so "designate the kind of viewer they intend us to be" (Sturken & Cartwright, 2001, p. 52.)

Building upon Bentham's Panopticon, Foucault (1995) argued that ideologies are transmitted through visuality and space. Bentham's Panopticon was used as a model for prisons and consisted of a tower surrounded by smaller cells with windows arranged so that guards in the tower could see prisoners at all times (Foucault, 1995; Rose, 2007). This configuration made certain that prisoners never knew when they were under observation and due to their chronic visibility, they disciplined themselves and were therefore produced as docile bodies (Foucault, 1995). In this way, the inmate was "an object of information, never a subject in communication….hence the major effect of the Panopticon: to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power" (Foucault, 1995, p.201). This is also how signs operate in institutions such as schools. By their presence in institutional spaces such as walls, doors, windows, and even ceilings, they operate as silent, efficient witnesses to power and control. They also hail students and in doing so make them

material subjects to signified ideologies; reminding the student that they, as subjects, are visible to authority at all times thus inducing students to embody docility and institutional ideologies. In this way, signs are the modern society's way of influencing power/knowledge structures in order to "produce citizens who will actively participate in self-regulating behavior" (Sturken & Cartwright, 2001, p.96). Foucault (1995) argued that modern day power is one that does not necessarily dominate its' subjects overtly, but rather coerces and regulates citizenry bodies in order to (re)-produce knowledge/power structures. These (re)-produced knowledge/power structures in turn create and maintain social systems and governance that are vested in citizenry that can function as willing workers to further the survival and maintenance of the culture. Foucault (1995) argued that this control of the citizenry body occurs in order to create a body/citizenry that will "emit signs" (p. 25) that they have indeed taken up and embody institutional values, and aims that the nation state has expressed as desirable.

Thus through the tools of social semiotic inquiry, and visual cultural studies, we can bring an anthropological insight to the way that the school ecology is constituted via semiotic modes in order to influence student beliefs about the social and cultural context they enter into each day.

Findings

Patriots live here: School signification

The visual media exhibited throughout Myers Middle School was rich and heavily laden with meaning. The Myers' mascot was the Patriot, a revolutionary war figure with a determined and exaggerated grimace (Figure 3.0). This figure originally held a rifle but after the school shootings at Columbine High School in 1999, the rifle had been painted out of his hands and a flag inserted instead.

Figure 3.0. Patriot Mascot

The school colors were red, white, and blue. These colors, along with U.S. flags, were used as a constant theme throughout the school. This included the lobby which hosted a Christmas tree in December with red, white, and blue ornaments, the main office decorated in shades of red, white, and blue, the counseling office, media center, gymnasium and cafeteria with the mascot painted on walls along with the school mission statement. Like most schools, the hallways of Myers were rife with directions regarding the school dress code, posters, signs, announcements, fliers, and messages related to the school's stated mission and patriotic theme.

Entering the school through the main entrance on the north side of the school, visitors were greeted with red, white, and blue banners declaring academic and rigorous standards, and an enormous banner hanging overhead declaring that at this school, student minds were *always* on learning (Figure 3.1).

Figure 3.1. Patriot Country

The location of this sign would prove to be important because it was positioned for the eyes of those who entered the north side of the building where the main office was located. This entrance was where parents, visitors, administrators, and teachers entered each day and so the assumed audience was adults who held various positions of power within the culture and society.

This was in contrast to the hallway on the west side of the building where students were bussed in and picked up each day. As students entered the building from the west entrance, they were met with a quite different message (Figure 3.2):

Figure 3.2. No excuses

To the left of this sign was the school mission statement printed in both Spanish and English. All signs in the school office that pertained to students' welfare or policies were printed in Spanish and English showing the effort and importance that the school administration placed upon communicating clearly with Spanish-speaking parents.

We can see Althusser's (1999) principle at work in the 'NO EXCUSES' banner (Figure 3.2) that greets students each day. Students are hailed here, identified and socially constructed, as those who *will* make excuses and are therefore *lacking* in social and possibly academic maturity of which it is the schools' responsibility to observe, address, and remedy through institutional action. From this perspective we can also see that students, by gazing at the sign, realize that they also are being gazed *upon*. The split of surveyor and the surveyed, *surveillance*, enters the mind of the student. And this is intentional. This is the institutional gaze that is sanctioned by society and used for inspecting and normalizing human behavior in order to exert power (Sturken & Cartwright, 2001).

In addition, social semiotic inquiry gives primacy to the specific way that semiotic modes are deployed and taken up by the viewer. For instance, the angle and placement of the 'NO EXCUSES' banner (Figure 3.2), is a steep angle, the banner being placed far above student's heads. This steep vertical angle indicates "symbolic power" (Jewitt & Oyama, 2001, p.135) as students must look up to the sign to see it, thereby being situated in a submissive posture to the ideology represented there. The underlying premise of this sign can therefore be 'read' and interpreted due to the vertical angle and several other modes expressed in the sign.

Other semiotic modes are also activated in this sign such as the use of all capital letters, the size of the sign, the exclamation mark and linguistic command structure, color contrast, and the use of the color red which is considered especially salient in images (Jewitt & Oyama, 2001)

and is often used to semiotically index danger (van Leeuwen, 2005). There is also no overt subject in the sign ('YOU stop make excuses') but rather an implied subject, which is the *student* viewer. One way we can interpret the intended audience of this sign is through the linguistic command structure that suggests wrong doing, or potential wrongdoing, as well as the height and placement of the banner on the hall, which strongly suggests that this sign is not meant for teachers. It would seem then that part of the work of schooling for children is learning that certain signs address adults and others students. Signs employ a specific *semiotic register* (van Leeuwen, 2005), carried out through various semiotic resources, in order to indicate the intended audience of a message. Learning which signs apply to these separate positions in the school ecology could be considered part of the disciplining function of school signage and the 'work' of being a child.

This is in contrast to the "Welcome to Patriot Country" banner (Figure 3.1) on the north side of the building where administrators, parents, and teachers entered. Here, the audience constructed is one that either *will* be or *should* be focused on academic achievement. Viewing this banner from the perspective of the school, this banner serves to show others that the school takes the business of academic advancement seriously, and that as an institution they are doing the 'work of schooling' here. Teachers entering under this sign can also be reminded of their own academic duties and responsibilities that go hand-in-hand with the stated goals and aims of the school in the school mission statement posted nearby.

A Patriot is Cooperative: The Patriot Gallery

Social semiotic and visual media culture provide a framework for extending issues of address and representation to the manner in which Myers Middle School sought to affect student affiliation through photomontages mounted on the school walls. Students were represented in

these photos as actors carrying on with various school-based academic, athletic, and social activities. Méxicano students were depicted in over half of these photos, reflecting the large Méxicano student body population at the school. Through the main thoroughfare of the school was a sign entitled the Patriot Gallery (Figure 3.3) wherein framed, high quality photographs and action shots (Figures 3.4) depicted Myers' students in academic, sports, and club activities.

Figure 3.3. Patriot Gallery

Figure 3.4. Patriot Portraits

In the student photos, representational meaning, through narrative visual syntactic patterns (Jewitt & Oyama, 2001) is used to show students demonstrating the character traits now equated with being a Patriot. In social semiotics, narrative representations "relate participants in terms of 'doings' and 'happenings' (Jewitt & Oyama, 2001, p.141). In these photos (Figures 3.5 & 3.6), students are depicted in activities that suggest the character traits introduced (i.e. students standing and smiling together are therefore friendly and two students working on an academic assignment, one clearly pointing and leading while the other follows, to represent cooperative).

Here the term Patriot is both a direct reference to the school mascot, but has been extended to include a description of the student body as well.

Figure 3.5. A Patriot is Friendly

Figure 3.6. A Patriot is Cooperative

It is at this point that the invoking of the school mascot, the Patriot, is troublesome. The play on words through the use of the term and symbolic meaning of 'Patriot' provides extended possibilities for depicting students in a manner that seeks to shape them not only as good students, but as nation-state patriots who exhibit institutionally desired character traits.

In addition, the interactive meaning, the relation that an image can create between viewers and the world (Jewitt & Oyama, 2001), suggests the attitude that students should take up from these photos. Interactive meaning can be judged by *contact*, *distance*, and *point of view*. When photos show people looking directly at the viewer (Figure 3.7), they are considered in social semiotics to 'make contact' with their audience (Jewitt & Oyama, 2001).

Figure 3.7. A Patriot is Friendly

In the Myers' montages, students exhibiting the characteristic of 'friendly' are looking directly into the camera, making a symbolic 'demand' (Jewitt & Oyama, 2001) of the viewer. By this symbolic 'demand' they are encouraging the uptake from the viewer of what it means to be 'friendly'.

In the case of the girls in the photo depicting the character trait of 'cooperative' (Figure 3.6), the Latina students there are not looking at the camera, and therefore not addressing the viewer directly, but rather making an 'offer' to the viewer (Jewitt & Oyama, 2001). The 'offer' here is an offer of information about what it means, or looks like, to be cooperative. In this

instance, it would appear that helping one another with academic work is one institutional definition of the action of cooperativeness.

Both photos depict stances indicative of the character traits that they seek in their viewers. This is a salient point because it encourages the viewer, in this case Méxicano students at the school, to see themselves in the photo committing the various actions that will demonstrate that they have taken up symbolically represented ideology and are now exhibiting in their bodies institutional norms.

Distance and *point of view* are also salient to the analysis of these photos. Distance here refers to the way that images serve to increase or decrease the perceived social distance between those in the image and the viewer. This is not to suggest that an implied decreased social distance is in reality 'true'. For instance, in many images of famous celebrities, the celebrity is made to appear socially immediate through direct gaze and gesture, yet in reality we do not actually know the person at all. But rather, in images where people are depicted at a distance from the viewer, these people are more likely to be viewed as 'strangers' to the viewer. In contrast, when people appear close-up in images, the viewer is more likely to view them as people that are known, or as those situated to represent something personal or immediate to the viewer.

In the school photos above, the students in the images are of real students in the school, which serves to diminish the distance between the viewer and the truth claim of the sign. By that I mean that by the size, close-up framing of the shots, and the choice of using actual students in the school as models of these character traits, this serves to represent things "as though they belong or should belong to 'our group', and that the viewer is thereby addressed as a certain kind of person" (Jewitt & Oyama, 2001, p.146). This is an important distinction to make because it is

one that is used to acculturate students as members of the student body, as those with certain character traits, and possibly those who are included in larger social and political stances.

Finally, *point of view* is often used in images to depict modality, or the 'truth value' or credibility statements about the world (Kress & van Leeuwen, 2003). Modality in social semiotics is the primary avenue for assessing not 'how true is this' but rather, '"*as how true*" (van Leeuwen, 2005, p.160) is something represented. By using photographic images of actual students, these photos are in some ways making stronger truth claims than if obviously unknown students were depicted in the photos. This use of images of actual students, combined with declarative statements, also serves to heighten truth claims and intentionally situate the point of the view of the students walking past these images every day. From this perspective, we can see that these photos are operating to create a student body that is represented in a certain fashion. One can also see how transnational students might be influenced to take up certain ideological stances from the interactive meanings evoked in these images which show Méxicano students as active, willing, members of both the school ecology and overarching ideological and political stances.

The Patriot Dress Code: On White T-shirts, Gangs, and Social Space

The dress code at Myers also echoed the patriotic theme of the school. The dress code was made up of specific colors: red, white, blue, and gray for all clothing, with the addition of the color black for heavy winter coats, and khaki and blue jean material for pants, shorts, and skirts. Specific styles of pants, jeans, skirts, shoes, and tops were designated as well. Students could wear various mixes of the designated colors with two notable exceptions: no white *t-shirts* and no logos except for the Myers Patriot logo were allowed. T-shirts could be worn in red, blue, or gray but not white, as a white t-shirt was considered a gang symbol. All pants and shorts had to

fit the students' body closely, but not too tight, and could not bag or drape the student's body in any way. All shirts had to be tucked in and a belt worn unless the waistline was covered by a jacket, hoodie (hooded sweatshirt), or crew neck sweatshirt. Skirts and shorts could be worn as long as they hit below the knee. Almost any shoe apparel was allowed except for flip-flops, which the principal felt were "dangerous" as they had no closed toe or heel support.

The dress code helped to limit expressions of socioeconomic wealth or difference that could be represented through name brand clothing and shoe apparel, and in this way also served to unify the students in the school. By unifying students in this way the dress code served to homogenize ethnic, racial, and cultural differences as well.

However, the Méxicano presence at Myers was unmistakable and Méxicano ELLs could count on seeing siblings, cousins, best friends, and neighbors during class, in the halls between classes, as well as hearing Spanish spoken by their peers throughout the day. This would come to be a relevant theme in the school, while students' physical bodies were disciplined and almost always under surveillance, the Spanish language flowed freely in the school hallways although participants in study stated that "teachers scold us when we speak Spanish in front of them or in their classes because they don't like that they can't understand us."

The dress code abolishment of white t-shirts was the first gang-related issue to surface during my initial data collection. The issue of gangs was one that the administration addressed the first week of school in an official student body meeting. In this meeting students from each grade were brought into the cafeteria with their teachers at various times of the day and the principal, vice principal, and security officer spoke to the students about the disciplinary code, dress code, and gang activity. The security officer spoke about gangs, taking the students through a slide show that depicted various gang signatures, dress codes, and graffiti that had been

recorded throughout Myers. While the security officer was gruff and spoke with a no- holds-barred attitude about gangs and gang membership, the principal presented a gentler, more reassuring face to students urging them that they were "safe in the school" and that if they spotted gang activity or had any concerns to "please come talk to me, my door is always open." In a formal interview the principal stated that there had been no gang activity in the school, but Ellen, the focal ESOL teacher, and the security officer seemed to believe quite differently, stating that a small outbuilding on the edge of the school grounds had been 'tagged' (graffiti sprayed on it) although evidently not in a gang-related pattern. The principal expressed the belief that this was just some mischievous kids and not "real gang activity."

When the focal students at Myers were interviewed, three out of five students claimed that there were signs of gangs in the school and one child, Domingo, grew visibly upset, his thin shoulders shaking with the discussion of the topic. Another focal student, Enrique, had just joined Myers that year after gangs in his old neighborhood marked him for membership. Enrique's mother feared that he would become mired in gang activity and moved with Enrique to Walker Heights in order to escape this potentially grave danger. In his interview, Enrique stated that he believed that while there were not active gangs at Myers, there were active gangs at the Myers High School and this concerned him as he was scheduled to graduate in less than two years from Myers and enter Myers High.

Unfortunately, the security officer's power point Gang Show only seemed to whet students' appetite as it unwittingly glamorized gangs and gang activity to students. Even I, quite unexpectedly, found myself noticing all sorts of "gang signs" after the meeting when one of the gangs mentioned during the presentation were symbolically identified as (8). Walking through the main hallway after the presentation, I noticed, for the first time, that the hallway past the 9/11

Memorial was the 8th grade hall with an enormous eight in a circle (Figure 3.8), much like the gang emblem the security officer had identified.

Figure 3.8. Eight Ball

It was also during the disciplinary address by the assistant principal that students were reminded that they were not allowed to write gang-related graffiti or signs on their person, their books or notebooks, any personal belongings, bathroom walls, or desks in the schools. Due to this heavy surveillance of students, the school bathrooms were a site of contestation as students learned that this space in the school ecology was the only space that they could ever experience reduced surveillance. Teachers and administration knew this and therefore kept bathrooms under vigilant surveillance, rarely sending students to the bathrooms alone. After lunch, I regularly saw teachers standing at the door of the bathrooms calling out to students to "hurry up" and making sure that there was no spare time for students to engage in any unsurveilled activity. When I asked teachers about this behavior I was told that gang-related, and other graffiti, had shown up on both boys' and girls' bathrooms walls and so surveillance of bathroom visits increased. In addition, any student caught with gang graffiti on his or her person or belongings was given In School Suspension (ISS) and if repeated ISS terms did not resolve the issue, then the student would be remanded to an alternative school in the county.

Discussion

Examining and interpreting Myers Middle School from an ecological perspective allows us to analyze the ways that the materiality of the school environment is intentionally used to shape symbolic spaces in order to create an ecology that transmits a specific school ethos and culture. The school is creating a "cultural model" (Reese, 2002, p. 38) which motivates and guides student beliefs about their place within the school ecology and conversely, within the nation-state. It has been argued that the goal of the classical nation-state project is to align social habits, culture, attachment, and political participation (Anderson, 1991; Ong, 1999). By viewing the school ecology though a social semiotic lens, we can how students are being aligned with the school ideology through various semiotic modes. van Leeuwen (2005) posits that semiotic resources are often deployed in a manner that fosters connection and/or disconnection through color, rhyme, segregation, separation, permanence, and impermanence. The semiotic resources of color and logo, organized through the school dress code, serve to diminish perceived separation between students and foster unity, harmony, and affiliation with the school through the 'rhyme' of color (van Leeuwen, 2005). This 'rhyme' of color (van Leeuwen, 2005) was then echoed throughout the school, linking student bodies with the red, white, and blue located on banners, signs, and messages. In contrast, the injunction of low riding, baggy pants, white t-shirts, and any logo other than the school logo, served to deter student affiliation with gangs, hip-hop, and stratified socioeconomic culture. By doing this, the school hoped to create strong school-oriented ties among students; the principal often referring to the students and the school as 'family' in order to compete with other(s) who might seek the child's allegiance, such as gangs. In this manner, the dress code, banners, photomontages, and color are salient items in

creating a school ethos that could potentially deflect any attraction to gang membership while reinforcing a sanctioned 'school membership ethos' and a patriotic sensibility.

Thus, semiotic systems of signification such as the school banners, signs, and messages shown in this study, offer a pervasive mode of surveillance over students in order to affect student exposure to given ideologies. Within the school ecology, semiotic modes such as banners, announcements, and other signs offer an anonymous voice with which to address and position students. A voice that by its very positioning presence in symbolic spaces is imbued with institutional force, thereby serving to de-privilege student voices, yet eliciting a defense from students that is internal, confined to the mind, with its only expression in the emitting of bodily signs (Foucault, 1995).

Moreover, it is these bodily signs (Foucault, 1995) that give evidence that students have moved from spectators to those that exhibit institutional, or nation-state, norms disguised as cultural ones. Signs within the school ecology then create a top-down monologue that privileges institutional beliefs and messages while drastically reducing opportunities for student dialogue, such as disagreement, with the notions insinuated through these systems.

Implications for Future Research

Studies such as this one reveal the need to shift ethnographic "background data" to a central focus of study. Traditionally, in ethnographic research, background data has served to provide a 'rich, thick description' of the backdrop of participant's lives. However, viewing the data in this way can de-emphasize the way that these elements, as semiotic resources, are intentionally deployed and therefore have a significant impact upon the messages, beliefs, and ideologies that participants are exposed to in regular, mundane ways. It is almost as if the monotony of these signs renders them invisible, or the very least innocuous, in ethnographic research.

However, vital questions remain such as to why schools are allowed to implement ideologies such as the ones represented in this study? Why is this practice considered a normative part of U.S. schooling and therefore uncontested? More research is needed in this area that addresses, and explicates, how the school ecology is constituted through the use of signs, banners, and other visual resources, as well as how these messages could be classified, how frequently they are employed, and how might students take up these messages, resist them, or respond with signs of their own? How can these practices be changed to reflect a more inclusive ethos, and reflect the ethnic, racial, cultural, and linguistic diversity that abounds in U.S. public schools?

Conclusion

The underlying issue though is that all these actions, both symbolic and material, reveal the way that the school attempted to control sign-making by students. However, the infiltration of student sign-making continued to emerge, on bathroom walls, students' notebooks, and their bodies. As most institutions do, the administration at Myers was attempting to control all sign making due to their understanding of their role as active agents in developing a nation-state orientation in children, as well as ones given authority for character shaping. The school then seeks to control any sign-making that might be gang related: they understand that in many ways they are in an ideological battle. This is representative of much of 21st century culture where the image is given primacy in everyday life. But sign-making, and signs, continue to seep in and around school borders- entering where they are not invited and seeking to take up residency since they already reside in students' minds, culture, and personal ecosystems.

One can also argue this point by viewing one important aspect of signs in institutions: they do not operate in the same way as an image would in the everyday world such as an art

gallery or street corner. The context is in many instances one of a captive audience. This context alone is important. To look or not to look is not truly an option and the school as a societal institution has been given authority both explicitly and tacitly to define and employ the space of the school for all purposes related to the formation of students into citizenry.

The visual plays an enormous role in human cultural life as it is primarily through our eyes as biological beings that we navigate the world. Culture itself is transmitted regularly through visual media so it is expected that the school, as an institution, would exploit this sense to shape students. In addition, the visual media and various semiotic modes employed in the school become an important way of holding one-way conversations. By that I mean that the message, by virtue of the schools right to employ it, is top-down and one-sided. This serves in many ways to de-privilege students' voices and maintain ongoing surveillance of student embodiment of ideologies.

From this perspective it is reasonable to surmise that the creation of a school ecology and ethos by such mundane, everyday modes such as banners, signs, dress codes, and photos, creates a subtle yet effective picture of what students are expected to become through their years of schooling. Méxicano students in the study did not view many of these strictures and disciplines over them as necessarily bad, but one must question the right of institutions, as holders of captive audiences, to the ongoing dominance of student personal identities and ideologies at the cost of personal histories, cultures, and languages. By creating such a strong cultural ethos, students enter the school ecology and are sent persistent messages that their personal histories, beliefs, and familial practices should be left at the door.

CHAPTER FOUR:

”I’VE GOT AN IDEA!”: A SOCIAL SEMIOTIC PERSPECTIVE ON THE USE OF GESTURE DURING ONLINE L2 COMPOSITION WITH ADOLESCENT TRANSNATIONAL ELLS [2]

[2] Pinnow, R.J. 2008. To be submitted to *TESOL Quarterly or Applied Linguistics*.

This study, a year long ethnography, uses social semiotic theory and the related tools of systemic functional linguistics to examine and interpret the multimodal, complex, and elegant semiotic means that participants employ in negotiations of meaning during the process of online composition in an ESOL middle school classroom. Using conversation and multimodal analysis, I show how gesture evolves in ELL contexts as participants move from textbooks to online composition as the basis of knowledge for negotiation. I also show how transgressional acts are often located in social interactions between teacher and student whereby tacit notions of 'immigrant' and 'transnational' are contested.

[ELLs, SLA, L2 writing, CMC, Latino/a, Méxicano, middle school, multimodal analysis, conversation analysis, systemic functional linguistics, social semiotic theory, transnational, immigrant]

Introduction

While the role of gesture in human thought and language (Goodwin, 2001; Kita, 2003; McNeill, 1992, 2005) has been well documented over the last few decades, the role of gesture in second language acquisition (SLA) has only recently come under the scope of inquiry in second language research (Lazaraton, 2004; McCafferty & Stam, 2008). This is due, in part, to the traditional focus in SLA research on linguistic output, which viewed gesture as a 'para' linguistic resource in language learning interactions. In addition, much of the research on gesture and SLA has been framed within a Vygotskyan perspective. In this study I contend that a social semiotic perspective and the related tools of systemic functional linguistics (SFL), offer a useful and fresh perspective on gesture in the L2 classroom. This study offers three illustrative examples with which to demonstrate the shifting role of gesture and its impact on negotiation and meaning

making regarding issues of culture and nationality with transnational ELLs during online L2 composition.

Transnational ELLs and Second Language Studies

Current research shows that by the year 2025 Latinos will make up almost 20 percent of the total U.S. population (Marlino & Wilson, 2006). Other research has noted that the number of Latino/a students in U.S. public schools has risen by more than 55 percent (Fry, 2002) with roughly two thirds of these students of Méxicano birth or descent. What is most notable amid these statistics is that these people do not subscribe to traditional, and often romanticized, norms of linguistic, cultural, and nation-state allegiance that contribute to the marked position of *immigrant.* Instead, they maintain a transnational identity (Ong, 1999; Portes et al., 1999) and literacy practices (Bruna, 2007; Hornberger, 2007; McGinnis, Goodstein-Stolzenberg, & Saliani, 2007; Sánchez, 2007; Warriner, 2007) that privileges cultural orientation over nation-state allegiance.

However, this transnational orientation and cultural identity is not always reflected in current ESOL (English to Speakers of Other Language) curriculum and classroom praxis. Recent scholarship (Motha, 2006) has argued for a postcolonial view of ESOL that deprivileges ways of knowing and being that reproduce monolinguistic and monocultural ESOL in favor of nuanced notions of identity, education, and membership. Given a language-learning environment that often serves to reproduce institutional sanctions in regard to nationality, culture, and nation-state allegiance, monolinguistic/monocultural ESOL is at odds with modern transnational notions of identity and the lived experiences of Méxicano students in U.S. public schools.

This study shows how issues of culture and transnational identity emerged during online second language (L2) composition and the elegant way that one transnational student employed

semiotic resources, including gesture, to negotiate a bridge between his own transnational identity and dominant culture ideology.

Social Semiotic Theory, Systemic Functional Linguistics, and Gesture

Social semiotic theory (Halliday, 1978; Halliday & Hasan, 1989; Hodge & Kress, 1988) emerged from the Paris school of semiotics (Jewitt & Oyama, 2001) which viewed language as structural codes that humans learn thereby allowing us to communicate with one another. However, social semiotics takes the view that all signification systems can be viewed as social resources rather than codes, that are available for meaning making in varying degrees to members of society and culture (Halliday, 1978). Unlike traditional semiotics, which focused on structural codes, social semiotics focuses on the process of sign making or *semiosis*.

Social semiotic theory (Hodge & Kress, 1988; Kress & van Leeuwen, 2003; van Leeuwen, 2005) does not privilege one set of resources, or modes, over another which means that language is considered only one of many resources available in meaning making. This view of language as social semiotic (Halliday, 1978) orients to the mapping of relations between language and social structures and relations (Fairclough, 1995) such as the interactions in English Language Learner (ELL) classrooms whereby "the pattern of social relations can be the motor for definitions of reality and truth" (Hodge & Kress, 1988, p.144).

A social semiotic perspective has a great deal to offer TESOL research as it frames language as "the exchange of meanings in interpersonal contexts of one kind or another" (Halliday, 1978, p. 2). In social semiotic theory (Halliday, 1978; Halliday & Hasan, 1989; Hodge & Kress, 1988) language is viewed as functional, meaning that people speak and write not just to express personal thoughts and interests, but in order to commit social actions in order to affect their social worlds (Morgan, 2006). In order to achieve these social effects, people must take into

account their immediate environment (the context of situation) and the broader cultural aspects within which all human interaction is taking place (context of culture).

The school itself can provide an excellent example of the interplay between context of situation and context of culture (Halliday & Hasan, 1989). The context of situation can be carried out in teacher-student talk, classroom assignments, student work, lessons from textbooks and workbooks, and lesson plans with their concepts of what should be achieved in a particular class period. These activities can in turn be viewed as making up the school as an institution within a broader cultural framework. From this perspective, academic knowledge, language, and activities are imbued with the intricate roles and structures of students, teachers, principals, state departments, national education aims, national and global citizenship. It is through these various levels of interaction that the context of culture is produced and reproduced, as well as the way that context of situation is interpreted by participants, thus affecting the choices that students and teachers make in interactions with one another.

Systemic Functional Linguistics

System Functional Linguistics (SFL) has had a lengthy and extensive influence on TESOL research. It has been particularly influential in the area of academic genre studies (Christie, 1999; Flowerdew, 2003; Johns et al., 2006; Swales, 1990; Swales & Feak, 1994), communicative language teaching (Savignon, 1991), the mediating role of context in SLA (Gebhard, 1999), and content-based instruction (Mohan & Huang, 2002; Mohan & Slater, 2005; Schleppegrell, Achugar, & Oteiza, 2004). This study extends the focus of SFL by examining the process of semiosis through gesture in an ESOL classroom.

Social semiotic theory has benefited from the tools of systemic functional linguistics (SFL) (Eggins, 1994; Halliday, 1994) wherein components of semiotic structures are framed to

represent immediate interactions (context of situation) and concerns with world influences (context of culture) that can be either abstract or material. In SFL, context of situation is derived from register theory which describes the influence of context of situation on how language is used in particular language events. The concept of genre is used to describe the overall architecture of context of situation social processes. In this way, register is concerned with context of situation while genre addresses context of culture (Table 4.0).

Table 4.0

System Functional Linguistic Framework

Dimension	Description	Context
Genre	Architecture of social processes realized through register	Context of culture
Register	Social functions of language	Context of situation

In SFL, register is organized by three contextual variables: field, tenor, and mode (Muntigl, 2002). Field refers to the institutional setting in which language occurs, tenor refers to the relationship between participants such as the social distance between people, and mode refers to the channel of communication (Halliday, 1978). These three contextual variables are then structured by three metafunctions: ideational, interpersonal, and textual functions of language (Halliday, 1978) (Table 4.1).

Table 4.1

Metafunctions (Halliday, 1994)

Register → ***Context of situation*** →	***Metafunctions***
Field	*Ideational function*
Tenor	*Interpersonal function*
Mode	*Textual function*

In Halliday's framework, mode is a contextual variable that organizes the part that language plays in social action (Muntigl, 2004). Mode is responsible for the organization of both field and tenor and thus the semiotic resources that may be deployed in any given interaction. Currently, multimodal research and analysis (Baldry & Thibault, 2006; Kress, 2001b; Kress & van Leeuwen, 2001; Kress & van Leeuwen, 2003; Norris, 2004; O'Halloran, 2004; Ventola, Charles, & Kaltenbacher, 2004) has extended the original description of both mode and text to include architecture and production of space (O'Halloran, 2004), multimedia components such as those in use in websites blogs (Erstad et al., 2007; Hull & Nelson, 2005; Walsh, 2007), second language contexts (Royce, 2002, 2007; Royce & Bowcher, 2007; Stein, 2000), classroom interactions and pedagogy (Bourne & Jewitt, 2003; Jewitt, Moss, & Cardini, 2007; McGinnis, 2007; Vincent, 2006) and more recently in gesture studies (Muntigl, 2004). Halliday's (1994) metafunctions are easily applied to all modes as they readily address the role that semiotic resources play in social interaction, as well as the way that these resources are organized by participants. Kress and van Leeuwen (2003) have argued that every semiotic mode fulfills both the ideational and interpersonal metafunctions, with the ideational function representing the "the world around and inside us" (Kress & van Leeuwen, 2003, p.13) while the interpersonal function

enacts social interactions as social relations (Kress & van Leeuwen, 2003), including hierarchies, power, and participant roles.

In Halliday's (1978) initial structure, the relationship between genre, register, and language was the one under consideration. However, developments in social semiotics and the advent of computer technology have resulted in an expansion of what is considered mode and text so that we could argue that we are now exploring the relationship between genre (context of culture), register (context of situation) and semiotic mode, including language but also gaze, gesture, and proxemics. Regardless, the relationship of genre, register, and mode is considered one of *realization* (Muntigl, 2002). This refers to the potential of semiotic resources (i.e. language, gesture, gaze, proxemics), represented through the ideational, interpersonal and textual metafunctions, to realize context of situation (i.e. field, tenor, mode) and context of situation to realize genre (Muntigl, 2002). However, moving from genre to semiotic resources, such as language choice, operates under constraint (Muntigl, 2002) as genre can constrain what semiotic modes are acceptable in any given context of situation. This is an important point in regard to the present study, which examined how the genre of institutional schooling affects the available choices by a transnational student in his interactions with his ESOL teacher. It also shows how gesture can be used to serve important ideational and interpersonal functions while maintaining the genre of the interaction.

Gesture

Gesture studies (Kendon, 1994) have traditionally helped to shed light on the interplay between language and thought, thus providing a more complete insight into the speaker's thinking (McNeill, 1992) by mapping language and thought through acoustic-temporal (speech) and visual-spatial (gesture and sign languages) patterns. Research on gesture within second

language studies (Gullberg, 1998; Lazaraton, 2004) has often been viewed from a Vygotskyan framework (McCafferty, 2002; McCafferty & Stam, 2008; McCafferty & Ahmed, 2000; Sueyoshi & Hardison, 2005) and more recently from a SFL perspective (Muntigl, 2004) as the metafunctions of SFL allow for a nuanced exploration of the role of gesture in meaning making.

Building upon Kendon's (Kendon, 1988) account of various types of gesticulation, McNeill (1992, 2005) arranged gestures upon a continuum ranging from gesticulation, wherein speech is obligatory to the gesture, to sign language wherein there is an obligatory absence of speech (McNeill, 2005). Four of the most commonly used gestures are: iconic, metaphoric, deictic, and beat gestures (McNeill, 1992). Iconic gestures are those that present images of concrete things and/or actions. Iconic gestures look like the material object or action they are referencing. Metaphoric gestures are pictorial in appearance but reference an abstract idea rather than a material object. Deictic gestures are pointing gestures that can be performed with various body parts such as the hand and finger, foot, head, etc. Beat gestures are those that look like the beat to musical time and are often used to index a specific word or phrase accompanying speech as relevant to pragmatic content (McNeill, 1992).

Gesticulation, as used by McNeill, is "a motion that embodies meaning relatable to the accompanying speech" (2005, p. 5). Describing the relatable meaning of each gesture is beyond the scope of this article (see McNeill, 2005) as I will focus on the relatable meaning and use of metaphoric gesture. Metaphoric gestures, which are culture specific, expand the human conceptualization of some abstract idea by reproducing it in a material image, thereby extending imagery beyond depictions of concrete entities. In this way, "the image is the vehicle of the metaphor" (McNeill, 2005, p.45) and provides a window into the way that participants draw upon cultural knowledge in context specific interactions in order to communicate their own ideas

while attending to the requirements of the immediate interaction. The metafunctions of SFL provide a useful tool for describing and interpreting how gesture is used by participants in second language contexts in ways that help us understand how participants are orienting to interactions, what portions of the context of culture they are drawing from, and how they are using gesture to establish specific context of situation patterns.

Multimodality and Transformative Semiosis

In recent years language and literacy studies have undergone significant shifts as digitized technologies, such as computer-mediated communication (CMC) and Internet and Communication Technologies (ICTs), have re-conceptualized what we consider text (Kress, 2003) and literacy (Cope & Kalantzis, 2000). Digital technology, via binary code, has made possible the production of various modes (i.e. images, written language, sound, music, video, color) and the hosting of these resources in the same digital venues such as websites, weblogs, wikis, etc. In doing so, the combined effect of various modes is multiplicative rather than simply additive (Thibault, 2004) and has extended our understanding of the role of semiosis in learning and representation in the classroom (Kress, 2001a; Kress et al., 2005; Stein, 2000). In the production of multimodal texts, students are viewed within semiotic theory as designers of their own meaning-making by marshalling semiotic resources such as visual, written, spoken, performative, and gestural (Stein, 2000) resources in order to communicate in context of situation. Not only *is* the text that is produced a sign, but the way and means with which it is communicated by students serves as signification also. Understanding the creation and use of semiotic resources in the language learning classroom requires a view of semiosis that is transformative (Kress, 1997) and views student creation and negotiation of multimodal texts as a "dynamic process of redesigning signs in response to other signs: This semiotic "work" produces

change both in the object being transformed and in the individual who is the agent of transformation" (Stein, 2000, p. 334).

In this article I show how the ESOL classroom is a space in which sign-making, text creation, and the transformation of signs is a process by which histories, cultures, ideologies, languages, and discourses are taken-up and reshaped in response to situated understandings.

The Research Study

This study is part of a larger, year long, ethnographic study that took place from 2006-2007. In an effort to respond to research indicating that there still remains a digital divide that affects Latino/a ELL academic success (Attewell, 2001; Crews, 2000; Fairlie, 2005; Light, 2001; McKee, 1999; Servon, 2002), and that ELLs development in multiliteracies can benefit from peer-to-peer online interactions (Black, 2005; Lam, 2000), I instigated a study to examine how Latino ELLs negotiated the affordances of on online environment with their ELL peers. This study asks these research questions: (1) How do adolescent Latino/a ELLs negotiate the affordances of an electronic environment? (2) How does the metalanguage about certain topics affect the L2 composition process?

Methods

This was a qualitative research study (Merriam, 2002) that brought together ELLs who were novice authors in English, from two separate middle schools, in order to write and give one another peer-feedback on their writing in the electronic environment of WebCT (a course management system). In the spring of 2006, I recruited middle school ESOL teachers from the state of Georgia via an ESOL listserv in order to locate possible candidates for a study examining two separate middle school ESOL classrooms together so that students could post original writing online and receive peer feedback about their writing.

Initially 14 ESOL teachers from various counties in the state responded with enthusiasm to the listserv message, inviting me to contact them about the study. As interviews unfolded with this candidate pool, I selected two ESOL teachers based upon: (1) teacher motivation and enthusiasm towards using technology in the ESOL classroom and (2) availability and reliability of technological access in the school. The two ESOL teachers chosen for the study were Cindy Broward and Ellen Miller (pseudonyms).

In addition, I chose WebCT, an online course management system, as the electronic forum for student online writing. I chose WebCT because both teachers had regularly used WebCT in their graduate degree coursework at a local university and were comfortable using this forum. I also chose WebCT because it provided a password protected electronic space, on a secure server, that supported the safety protocols required by Cindy and Ellen's schools.

In May of 2006 I met with Cindy and Ellen at Ellen's school, Myers Middle School (a pseudonym), and we discussed the online project. Cindy and Ellen decided that they would begin the project by teaching students how to introduce themselves online, give a brief lesson on 'netiquette' (polite online behavior), and then have students post original writing, reports, and other academic work during the school year in order to provide students with practice writing for an authentic audience of their peers, as well as learning how to give and receive peer feedback online.

Given the breadth of this project and space limitations, this article will examine the online writing and teacher-student face-to-face (f2f) interactions of one of these teachers, Ellen, and her ESOL students. Ellen chose her fifth and sixth period classes, 15 students total, to take part in the study. As the study progressed, five students were chosen as focal participants due to:

1) a minimum of three years residing in the United States, 2) novice status as readers and writers of English, and 3) a desire to participate in online writing activities.

Setting

The setting of the study was Myers Middle School (a pseudonym) which resided in a wooded, suburban neighborhood, approximately 10 miles by automobile from the urban, industrial city of Walker Heights (a pseudonym). Walker Heights' agriculture, poultry and textile industries were thriving due to an influx of immigrant labor beginning in the early 1990s. The majority of these laborers were originally from México; willing to work long days for low-wages and in quite difficult working conditions. Myers Middle School had just over 900 students registered with 40 % of the student body composed of transnational students, of which all but four students were from México.

Myers made consistent efforts to create a school environment where all students felt that they belonged, were welcomed, and were expected to excel both academically and socially. Ellen hosted a monthly Latino Parent Night (LPN) in order to encourage positive ties between Latino parents and the school, as well as create a foundation for understanding, an open forum for parent questions, and resources that might benefit Latino students and parents. Ellen was supported by the administration at Myers who provided the resources necessary for the event such as food, transportation, a bilingual Latino parent liaison, and faculty volunteers to host entertaining games in the gym for younger children while selected speakers spoke to Latino parents on topics ranging from Hispanic Scholarship Funds available for college, state healthcare options, to online access of student grades.

Myers had an extremely patriotic sensibility that was reflected in the school colors of red, white, and blue, and the school dress code which was also oriented to the colors of red, white,

and blue. U.S. flags were the backdrop to many signs and banners throughout the school, and the school mascot was a revolutionary war figure named The Patriot. Myers' students were referred to as patriots in school fliers, the school newsletter, and various signs hanging on the walls of the school. Although 40 % of the student body were Latino, only two small signs were posted in Spanish in the main office.

Participants

The six focal participants in the study consisted of Ellen, the ESOL teacher, and five focal students: Angélica, Chuy, Domingo, Enrique, and Roberto (Table 4.2). Four of the five focal students were born in México and immigrated to the U.S. before, or during, elementary school. Four of the five participants were novice online writers and did not have access to the Internet at home.

Table 4.2

Focal Participant's Background Information

Name	Age	Gender	Age at arrival in U.S.	Country of Origin	English Oral Fluency	Spanish Oral Fluency
Ellen	59	F	U.S. born	U.S.	NS	None
Angélica	12	F	7	México	NS fluency	NS
Chuy	12	M	U.S. born	U.S.	NS fluency	NNS
Domingo	12	M	8	México	NS fluency	NS
Enrique	12	M	4	México	NS fluency	NS
Roberto	12	M	2	México	NS fluency	NS

F = Female; M = Male; NS = Native Speaker; NNS = Nonnative Speaker

Ellen.

Ellen was a 59-year-old, white, non-Spanish speaking ESOL teacher who had been teaching for 32 years. Born and raised in the United States, Ellen had begun her career as a special education teacher in an institutional hospital setting, two years later transferring to a public school setting where she was a mainstream middle school teacher for the next 15 years. Ellen had been teaching ESOL at Myers for the last fifteen years, since the school had originally opened. Ellen had attained masters' and specialist degrees in education, an ESOL endorsement from the state, and a certification in language arts that was well used in her capacity as an ESOL teacher. With short red hair and blue eyes, Ellen had a diminutive build with a high pitched, almost childlike, voice that sometimes barely penetrated the din of the classroom.

Ellen had studied Spanish briefly in college but had not pursued any foreign language study beyond college. Ellen expressed in an informal conversation early in the study that she felt she "should probably learn some Spanish" in order to communicate better with her students and their families.

At the time of the study Ellen was pursuing her doctoral degree in TESOL from an online university and spent several nights a week online, communicating with her instructors and fellow-students in her online courses. Ellen was comfortable using technology for email, online chat, and composing documents for submission to her instructors. Ellen frequently used Word and Power Point software programs in order to create documents for her online college courses, ESOL lesson plans, and administrative reports due to a committee that she served on at Myers. Ellen also habitually used her cell phone, pulling it out to make calls between classes and after school.

Being an excellent writing teacher to her students was important to Ellen as she felt that excellent literacy skills were vital to engaging in a highly digitized modern world. This sensitive and caring aspect of her character, combined with her enthusiasm, was matched only by her seemingly boundless energy outside the classroom. In addition to her teaching position at Myers, Ellen also worked as a waitress a few times a week at a prestigious restaurant in Walker Heights, and bred award-winning horses that she presented at regional and national shows throughout the year. Ellen's ESOL teaching ethos was strongly influenced by her belief that developing a strong sense of "belonging" was the key to academic achievement for ELLs, especially Latino/a students who she felt strongly valued social ties and interactions in every aspect of life. Ellen was deeply influenced by Thomas Friedman's The World is Flat, as she believed that students of the 21st century needed to know how to work together in groups, manage projects, and use technology well. These beliefs were primarily what led her to join my study as she felt her students could use practice with online communication, as well as practice in navigating communication with peers outside of their regular, everyday lives at Myers Middle School.

One aspect of Ellen's teaching that emerged during data collection was her belief that she needed to handle any problems in her classroom by herself. During the entire school year, Ellen never sent one student to the vice principal's office to receive discipline, preferring to discipline students within the walls of her own classroom. However, Ellen's desire to avoid unnecessary contact with Myers' administration kept one student, Domingo, from possibly receiving the social support team (SST) care that he needed early in the school year. While Ellen stated that she believed that Domingo needed to be "SST'd", she never followed up on this observation and at the end of the school year Domingo had never received any care in the form of social support from the school.

Ellen's desire to avoid handling classroom problems through administrative channels was in contrast to her sometimes fiery and direct responses to one of the vice principals in the school. Ellen was at heart a contrarian but after 32 years in the school system, she was very careful to keep her battles limited to circumscribed areas where she felt she would not be harmed by institutional norms should she directly contradict stated goals, policies, and aims.

Angélica.

Angélica was a 12-year-old girl who was born in México and came to the United States when she was seven years old. Angélica was fluent in English and spoke very little Spanish. She was not literate in Spanish, and had not yet attained grade level literacy in English. Angélica lived with her mother, father, and brother in Walker Heights. Angélica was very fond of Ellen and frequently came by Ellen's classroom to give Ellen a hug or get candy from the candy basket that sat on Ellen's desk. Angélica had medium brown hair, light brown eyes, and dressed like a much younger child, wearing cotton dresses and sneakers with ankle socks. Angélica was very respectful to Ellen and obedient in class to the point that she rarely raised her hand, and never interrupted the teacher.

Angélica's family owned a computer and a printer but the printer did not work and she rarely spent any time one the computer, either for games or schoolwork. Angélica's family did not have Internet access but were planning on getting a dedicated service line (DSL) in the future. Angélica mentioned that she played on her brother's Game boy with him sometimes and enjoyed this.

Enrique.

Enrique was a 12-year-old boy who was born in México and moved to the United States with his mother and three brothers when he was four years old. Enrique had recently moved to Walker

Heights and entered Myers in the fall of 2006, at the beginning of the study. At his previous school, located in the same county as Myers but 45 minutes away by automobile, Enrique had been targeted for recruitment by gangs leading his mother to move to Walker Heights to remove Enrique from gang influence. Enrique was fluent in spoken Spanish and English, and was gaining literacy in English although he struggled academically. With close-cropped hair and large brown eyes, Enrique displayed impressive social acumen, to the point of being somewhat of a 'ladies man' and attracting the attention and flirtation of many of the female students in the class. Ellen mentioned this aspect of his character with amusement several times over the course of the study and Enrique regularly appears in classroom video dancing, laughing, smiling, and teasing girls in the class. As a struggling student and L2 writer, Ellen frequently chastised Enrique for "blurting out" answers in classroom discussions. Enrique often called out any answer to Ellen's questions, only to align himself with the correct answer once it had been revealed. Enrique did not show great enthusiasm for preparing academic L2 writing assignments to post online to his peers, but did enjoy online L2 writing that was social in orientation. In his online writing Enrique attended well to social talk, and under the eye of the teacher, was careful to respond within the stated limits of the online forum.

Roberto.

Roberto was a 12-year-old boy who was born in México and moved to the United States with his mother, father, and twin sister when he was two years old. Roberto had been a student at Myers for two years and carried himself with the air of the 'good student' and scholar. With short curly hair and a tall lanky build, Roberto had an exceedingly neat and tidy appearance, and walked and moved with an almost military precision in his speech and movements. Roberto regularly used the computer and Internet at home but his parents monitored his use closely out of fear that he

might be approached by unsavory character. Roberto was the most technologically proficient student in the study. Roberto was fluent in spoken Spanish and English, and approaching grade level literacy in English. Roberto's English and Spanish language skills were some of the best in the class and he became Ellen's unacknowledged peer liaison whom other students looked to for guidance when they did not understand class instructions. However, over time it became apparent that Roberto used his power in the classroom to sometimes lead his peers astray by using Spanish to mask his use of foul language and off color joking from Ellen, while encouraging other students to do the same.

Chuy.

Chuy was a 12-year-old boy born and raised in the United States. Small and compact with dark dancing eyes and an impish smile, Chuy was the jokester of the class and could make anyone laugh when the sound of his chortling giggle filled the room. Chuy's parents had been farmers in México and now worked in one of Myers' most well-known textile factories. Chuy traveled to México and Texas to visit family each year during summer vacation. Chuy's family did not have a computer at home and he was eager to practice his online skills during the study. Chuy was fluent in oral English but his Spanish was the poorest of the group and to compensate he had developed a hybrid language that blended the Spanish he did know with Spanish words and phrases he learned from his peers. Chuy also frequently created his own words from a blend of Spanish sounds that held no direct meaning in Spanish but that his peers had come to accept as his way of speaking Spanish. Since speaking Spanish was an important part of being a member of the ESOL group at Myers, Chuy used his Spanish language frequently and his peers took up his utterances regardless of their technical correctness. Chuy was one student that frequently

tested Ellen's patience with his overt chatter and reliance upon argument to make his voice heard in the classroom.

Domingo.

Domingo was a 12 twelve-year-old boy who was born in México and came with his father to the United States when he was eight years old. Domingo, with his thin physical build and fifties flat-top hairdo, presented himself as a retro, hip hop urban boy who wanted to be a pilot when he grew up, and used both English and Spanish to maintain this self presentation. Domingo's family did not have a computer at home but were planning on buying one within the next year. Domingo struggled academically and behaviorally at times in Ellen's classroom, leading Ellen to make the comment early in the year that he "needed to be SST'd" (social support team). Ellen believed that Domingo might be the child of migrant workers and that they relocated so frequently that Domingo had difficulty keeping up academically. At the time of the study, Ellen was working with Domingo to help him learn his multiplication tables and catch up on content material in his science class. Domingo was fluent in spoken Spanish and English, but not yet on grade level in English. Domingo often parroted whatever Ellen said in class in frequent attempts to align with her power. This sort of piggyback behavior allowed him to 'pass' as a 'knowing other' and ride on Ellen's expertise as teacher to be a knowing member in classroom interactions. The following table (Table 3.0) summarizes the background information of the research participants.

Data Collection

Data collection followed ethnographic research procedures including field notes (DeWalt & DeWalt, 2002; Emerson, Fritz, & Shaw, 1995; Sanjek, 1990), digital audio and visual video recordings, digital still images, archival data of student work, lesson plans, grades, and L2

classroom and online writing, formal and informal interviews (Patton, 2002), and participant observation (DeWalt & DeWalt, 2002) of school activities such as school Spirit Rallies, Latino Parent Night, after-school athletic events, and administrative addresses to the student body.

Data Analysis

To analyze the data (Table 4.3) in this study I use Multimodal Analysis (MMA) and Conversation Analysis (CA) in order to offer a comprehensive interpretation of the social actions taken by each participant (Table 4.3). This study asserts that gesture, gaze, and proxemics are not 'para' in L2 interactions, but rather vital components in ELL meaning-making and deployment of signification systems from a semiotic perspective. In face-to-face interactions, participants regularly access and employ a large array of visual and kinesic phenomena (Bolden, 2003) therefore, to provide transcripts that only represent vocal behavior can make "talk appear more opaque than it actually is to the participants themselves" (Bolden 2003, p.195). Providing transcripts that account for multimodal behaviors (Norris, 2004) offers a more comprehensive and emic perspective on participant planning and orientation during interactions than linguistic utterance alone.

The analysis of each excerpt alternates, line by line, between participant moves, which include participant use of linguistic utterance, gesture, posture, gaze, and proxemics. By examining how various modes are employed by participants for the purpose of meaning making we can see how participants take up one another's social actions, contest, and negotiate the broader context of culture.

CA seeks to take on participant perspectives (Psathas, 1995) and therefore analyzes only topics that participants themselves index in their speech. In this area, MMA and CA are highly compatible analytic constructs as "in interactional multimodal analysis, we are not much

concerned with the perceptions, thoughts, and feelings that people are experiencing, but we are concerned with the perceptions, thoughts, and feelings that people are *expressing*" (Norris, 2004, p.3, *emphasis mine*).

Table 4.3

Data Collection and Analysis Methods

Data Collection Methods	Data Collected & Generated	Data Analysis Methods
Classroom Observations	Fieldnotes from 40 Observations	Open Coding*
School Site Observations	Fieldnotes from 15 Observations	Open Coding*
Interviews	Transcripts from 8 SSI	Conversation Analysis
	Fieldnotes from 87 II	Open Coding*
Audio Data	Transcripts	Conversation Analysis
Video Data	Transcripts	Conversation Analysis Multimodal Analysis
Digital Data	175 photos	Multimodal Analysis
Documents	419 WebCT postings	Conversation Analysis
Archival Data	School fliers, news-papers, newsletters, announcements	Open Coding*

*Notes: *Open coding refers to coding employed by Strauss & Corbin (1990) and Patton (2002)*
SSI = Semi-structured Interviews; II = Informal Interviews

Findings

Multimodal analysis (Norris, 2004; Baldry & Thibault, 2006) uses social semiotic tools to analyze various semiotic resources in participant interactions, as well as those deployed in the creation of multimodal texts (Baldry & Thibault, 2006; Royce & Bowcher, 2007). I contend that

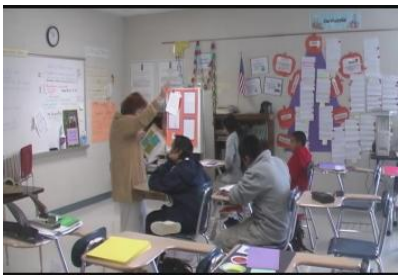
multimodal analysis and transcription (Norris, 2004) offers a fresh perspective on how participants use multiple modes such as gesture, gaze, language, and proxemics to position themselves in social interactions. I show through this study that multimodal and conversation analysis offer a unique and vital perspective on how second language acquisition is facilitated through semiotic resources, such as gesture, and how these modes operate to create opportunities for negotiation of meaning in the L2 (Lazaraton, 2004).

Studies exploring the use of gesture in the second language classroom (Lazaraton, 2004; McCafferty, 2002; McCafferty & Stam, 2008; McCafferty & Ahmed, 2000) have noted that one part of the language acquisition process is the uptake of culturally appropriate gestures in the L2. ELLs often begin employing culturally relevant gestures as means of semiotic mediation, but until now, locating the way participants orient to, and carry out semiotic resources in communication has been viewed primarily from a Vygotskyan perspective (McCafferty, 1998, 2000, 2002). While this has added a great deal to our understanding of the vital role gesture plays in language learning, a social semiotic perspective can provide a fresh insight to our understanding of how local meaning-making practices are employed by ELLs in agentive acts in the ESOL classroom.

In this first example (Table 44), we can examine a traditional way that gesture is used in the ESOL classroom: as an aid to demonstrate the material properties of a scientific word. In the following example, the ESOL teacher Ellen is explaining to her ELL student, Domingo, the definition and function of the word *flagellate*.

Table 4.4 (Refer to Appendix I for transcript conventions)

Flagellate

Participant	**Linguistic Utterance**	**Gesture**	**Image**
Ellen:	1 (4.0) or I've 2 got em' so 3 they're only in 4 one side↓. (3.0) 5 and you're 6 going to do:: 7 (2.0)flagellate 8 he::re↑	points to word on paper	
Domingo:	9 (2.0) okay		
Ellen:	10 kay' and what 11 I would do I 12 would take 13 this and put 14 this over 15 there while 16 you're 17 working on 18 okay (2.0) 19 so it stays 20 nice so it 21 looks to me 22 like you're 23 doing 24 flagellate or 25 flagellum I 26 really don't 27 know how to 28 say i- let's 29 look in the 30 back they give 31 you a 32 pronunciation 33 (5.0) 34 fla::gellate 35 single celled 36 organism that 37 has <u>whip</u> like 38 antenna like 39 flagellate 40.(flagellum)	picks up his book and reads from it turns her body as she flips to the back of the book so that he can see voice goes up on 'whip like' and raises right arm waving it around in a whipping motion as she speaks	

Domingo:	41 (1.0) mmm		
Ellen:	42 (3.0) which it 43 used for 44 movement (1.0) 45 it's kind of 46 like little 47 oars		

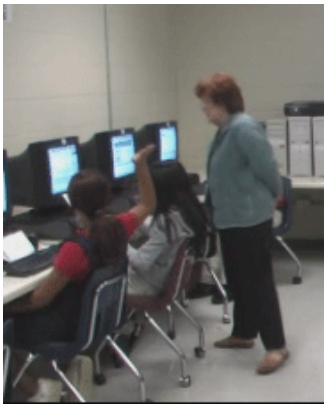
In this example we can see that Ellen's use of iconic gesture (37-40) plays a pivotal role in displaying for Domingo both the substance of flagellate and the motion associated with this organism when viewed under a microscope. This example is important to this study because the type of gesture used in this ESOL classroom would shift significantly once Ellen and her students began writing online.

In instances such as the one above, the textbook anchors the interaction, providing a stable platform for Ellen to embody the *iconic* characteristics of the term she is trying to make real and understandable for Domingo. From an SFL perspective, she uses the mode, or channel of communication, of gesture, to assist in explaining a material object that is located via image right there in front of Domingo in his textbook. The ideational metafunction and the channel of communication via gesture play vital roles in this excerpt as they demonstrate specific real-world properties that flagellate display, but are not presented to Domingo via his textbook. The use of iconic gesture is often a pivotal component in face-to-face ESOL instruction wherein the referent is a concrete, material object. The use of iconic gesture in this excerpt (Table 4.4) was in contrast to the types of gestures employed once students began composing online wherein the mode of communication necessitated the use of gestures that could accommodate and represent abstract knowledge and ideas.

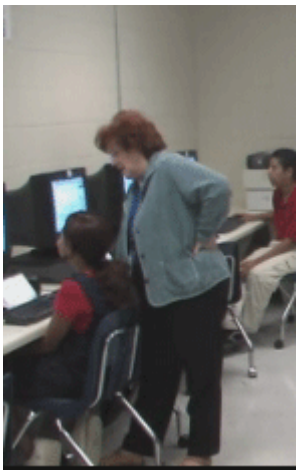
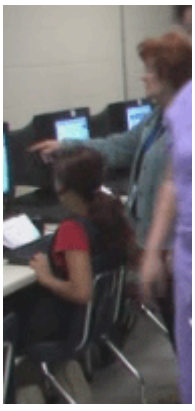
In the next two excerpts, the use of *metaphoric* gestures would come into play as Ellen attempted to guide students into comprehending and using correct forms of irony and identity regarding the linguistic utterances posted online. In the following excerpt (Table 4.5) students have posted their first introductory assignment called: Two Truths and a Lie. This assignment assisted students in getting to know one another online and practice communicating mainly through their L2 of English. In this interaction, Angélica, an ESOL student who has taken the online moniker of 'lil crazy', has posted as one of her lies, "I hate my brother!" This excerpt focuses on the interaction between Ellen and Angélica as they negotiate the affordances of meaning in the L2 of English, and the associated comprehension and use of irony in online writing. In this interaction, online writing is treated as an utterance.

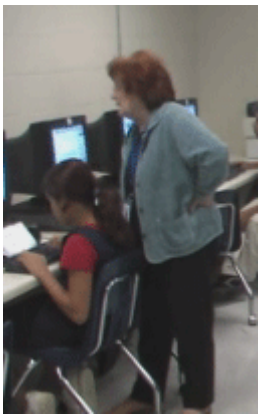
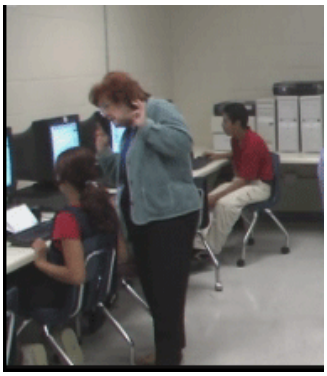
Table 4.5

I hate my parents

Participant	**Linguistic Utterance**	**Gesture**	**Gaze**	**Image**
Angélica:	1	raises her hand	towards ellen	
Ellen:	2 o::kay	starts walking over to angélica	looks at angélica's computer screen	
Angélica:	3 4	lowers hand starts giggling		

		and looking at ellen's face		
Ellen:	5 kay (1.0) 6 this is 7 not really 8 good thing 9 to have on 10 here		reading from angélica's computer screen	
Angélica:	11 why[::↑		looking at computer screen	
Ellen:	10 =[okay↑ 11 (1.0) 12 because 13 it's just 14 it it it's 15 ah not 17 appropriate 18 let's 19 think of 20 another 21 one			
Angélica:	22 mmm I 23 don't know			
Ellen:	24 okay			

Angélica:	25 (5.0) mmm 26 (4.0) I 27 hate my 28 parents 29 that's a 30 lie 31 because I 32 love my 33 parents		looks at computer screen	
Ellen:	34 oh well 35 that's not 36 that's not 37 a good one 38 either 39 (1.0) 40 alright 41 let's do 42introduction↑ 43 capital i-n- 44 t-r-o (2.0) 45 capital↑	reaches down to type for angélica but removes her hands in a moment	looking at keyboard	
Angélica:	46 (2.0) oh	begins to type		
Ellen:	47 n-t-r-o			

Angélica:	48	starts pecking at the keyboard as ellen speaks		
Ellen:	49 now what you 50 could say 51 is I lo::ve 52 my parents 53 because 54 that's a 55 truth↑(3.0) 56 but you 57 don't wanna 58 say anything 59 like I hate 60 my parents 61 cause some 62 might people 63 might think 64 that is a 65 true(2.0) 66 and you're 67 gonna give 68 um a hint 69 when you're 70 tellin a 71 lie I'll 72 I'll show 73 you how to 74 do it okay 75 so↑ type in 76 there I 77 lo::ve my 78 parents	moves hands and fingers up near shoulders as if in a quotation motion and twists down to show her gesture to angélica		
Angélica:	79	starts typing		
Ellen:	80	moves over to		

		speak to another student seated next to angélica		

To initiate the interaction with Ellen, Angélica raises her right hand (1) and turns and looks at Ellen. Angélica has initiated the interaction by using a gesture that is often used in institutional discourse, such as schools, wherein Angélica demonstrates that she is employing "cultural logic" (Baker, 1992, p.11) specific to the classroom setting. Using the semiotic mode of a raised hand indicates that Angélica understands classroom discourse conventions that require her to engage with Ellen in the terms of politeness and as a good community member in the classroom ecology (Baker, 1992).

Angélica also looks over her right shoulder, resting her gaze upon Ellen at the same time that she raises her right hand to signify that she needs Ellen's help. This particular coupling of emblematic gesture and gaze would prove to be very important in this study as students who raised their hands for help but continued to position their gaze towards the computer screen were always less successful in gaining Ellen's attention.

Ellen responds verbally at this point with a prolonged 'ok::ay' (2) and shifts her body towards Angélica moving over to Angélica's seat in the computer lab. Angélica then lowers her hand and releases a giggle as Ellen reads Angélica's post on her computer screen (4).

CA relies upon sequential order and adjacency pairs to make sense of what social action participants achieve in talk-in-interaction sequences. Ellen's utterance (5-10) is an adjacency pair responding sequentially to Angélica's online post. CA asks the questions, "Why this, in this way, right now?" Angélica's question of 'why' (11) is in contrast to the gesture and laughter she used initially in the interaction to cue Ellen in that she anticipated that her comment would be taken

up as funny or ironic. When Ellen labels the written comment as “not really a good thing” (7-8) Ellen has positioned it now from a moral stance and Angélica’s attempt at humor is erased and she takes up an unambiguous stance of innocence. Her ‘why’ (11) now suggests that she does not understand why her online post is not being taken up as funny by Ellen. However, Ellen takes up Angélica’s ‘why’ (11) as genuine and attempts to answer it on two separate occasions (10-21; 34-38) appearing to disregard Angélica’s laughter at the beginning of the interaction.

As the sequence unfolds from this point Angélica states (22) that she cannot think of a new sentence but then she offers up a fresh sentence, “I hate my parents”, that she defends as one that meets the criterion of being a lie (25-33). This utterance serves two purposes: it maintains the spirit of irony or humor of her original sentence and it covertly resists acquiescing to Ellen’s concern (17) that her first statement is not appropriate. Angélica is attempting to take up the affordance of first person authorship that online writing provides. She also is exploiting the opportunity to make choices that reflect her own sense of cultural perspective on humor and playfulness even as Ellen attempts to steer Angélica away from her statement about her parents. It is quite possible that Angélica understands her audience, most of whom are Latino/a adolescents, better than her teacher, so she takes up the unique affordance offered her in L2 authorship here in an attempt at intentional adolescent joking and humor that any other Latino/a adolescent could understand. However, her choice fell dangerously outside institutional comfort zones as designated by Ellen.

From a conversation analytic perspective we can see that Ellen responds to Angélica’s failed attempt to come up with a more acceptable sentence by refocusing Angélica’s attention on spelling and grammar issues (42). Ellen’s utterances now are directing Angélica away from general communicative competence and back to the unambiguous zones of grammar and

spelling. By refocusing Angélica on spelling out the word ‘introduction’, it is possible that this action buys Ellen time to contemplate how to explain and direct Angélica to a more suitable course of action in her writing. So intent is Ellen upon moving the interaction back onto safe territory that she reaches down physically (42) to start typing on Angélica’s keyboard herself. One line later Ellen removes her hand from the keyboard and Angélica beings to type out the word ‘introduction’.

From this segment (50) Ellen uses the mode of *tone of voice* to emphasize the words *could* and *love* in order to scaffold Angélica into choosing less charged and less ambiguous statements to post. Ellen’s statements (50-78) are actually orienting to Angélica’s “why” (8) as Ellen explains that “some people” might think that Angélica’s statement is true and not an attempt at irony. Ellen then begins (49-78) to explain very briefly why certain statements are not acceptable in this online forum and scaffolds Angélica into learning how to use irony in this situation.

From a multimodal perspective, Ellen marks the word "hint" by raising her hands and making quotation marks in the air (50), a metaphoric gesture (Norris, 2004) indicating irony. Ellen twists her upper body and bends down to position her irony gesture to make sure that Angélica can see this metaphoric gesture. Coupled with her tonal stress on the word ‘hint’ this semiotic mode helps to mark an important moral message that we are not to lie without a wink and a hint that clues our audience in that we *are* in fact lying to them. However, the linguistic utterance that she guides Angélica to write (i.e. I love my parents) lacks any hint of irony (Figure 4.0).

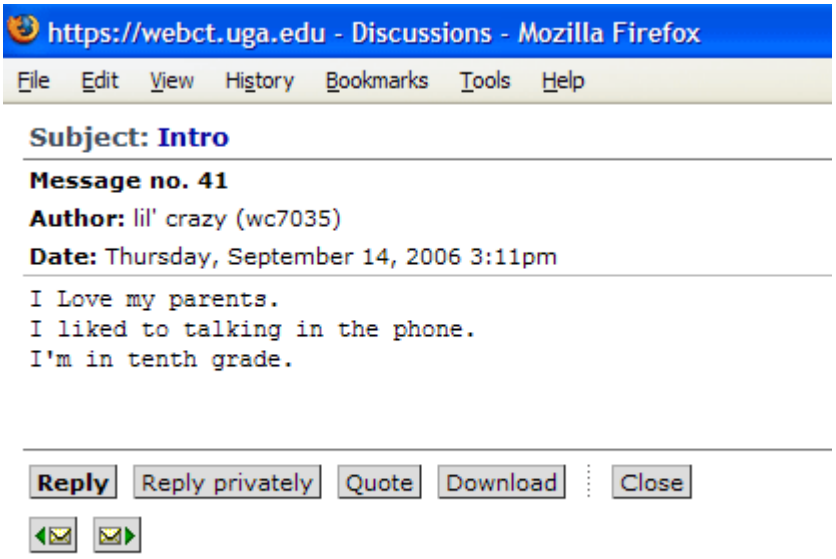


Figure 4.0. Angélica's Post

We can see by Angélica's capitalization of the word love that she has marked this sentence in response to Ellen's tonal emphasis (77). However, ultimately, Angélica is moved away from any statements that are too edgy or difficult to comprehend online and posts the statement, "I'm in tenth grade" that any other middle school student will easily recognize as false.

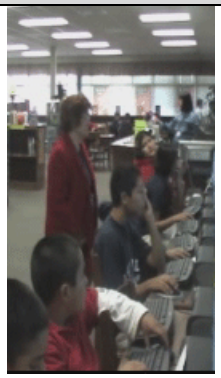
Through this excerpt we can see how the role of gesture was made to carry a substantial amount of the burden of meaning making in order to explain the abstract concept of irony to Angélica. In this way, Ellen indexes the ideational function of register wherein the "world around us and in us" (Kress & van Leeuwen, 2003) is expressed in context of situation in order to apprentice Angélica into what Ellen feels is an appropriate register in online communication. Other options might have been for Ellen to extend her use of asterisk or parenthesis to the online space so that this type of punctuation does the work that Ellen's gesture did in expressing the register of irony (e.g. I *hate* my parents).

In the following segment (Table 4.6), we can see how the use of gesture by one ELL is deployed for important and strategic meaning making in negotiation of culturally contested

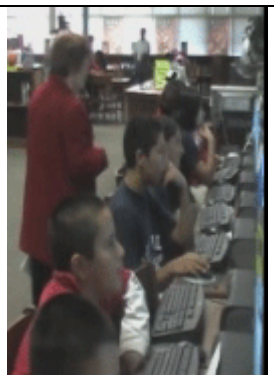
issues of nationality and membership. In this excerpt Ellen and her ESOL class are writing online in the school's media center. One of the focal students, Enrique, is sitting at his computer reading a question that has been posed to him online by another ELL named Dina that asks: "Where are you from?" Enrique does not ask for Ellen's help, but Ellen walks up behind him and initiates the negotiation of Dina's question by reading Dina's question aloud from Enrique's computer screen. The proxemic moves in this excerpt are labeled with line numbers in the transcript as they indicate the initial moves on Ellen's part in the social interaction that ensues. Dina's online question is treated as the first utterance in this excerpt, therefore Ellen's actions start at line *two*.

Table 4.6

I was born in Mexico

Speaker	Utterance	Gesture/ Proxemics	Gaze	Image
Ellen:	2 3 4 where you from↑	walks down to enrique's desk stands behind him reads from his computer screen	 on computer screen	
Enrique:	5(2.0) mexico↓			
Ellen:	6 no you're 7 no:t↑ 8 you're from 9 (.) walker 10 heights 11 georgia↓			
Enrique:	12 (2.0) I was 13 born in 14 mexico↑			

Ellen:	15 but she 16 didn't ask 17 you where 18 you were born 19 she says 20 where you 21 fro:m↑		looks to the right to roberto	
Roberto:	22 ((guffaws))	left hand partially covers mouth and chin	smiles behind his hand	
Ellen:	23(5.0) she 24 doesn't 25 want to know 26 where you 27 were born 28 she wants to 29 know where 30 you are 31 no::w↓			
Enrique:	32 33 (4.0) oh 34 I'll put I 35 was born in 36 mexico but I 37 live in 38 georgia	turns to his right and speaks up at ellen lifts right hand and index finger in pointing gesture ("I have an idea"!)	looks directly at ellen	
Ellen:	39 excellent ↑ ((boisterous tone)) 40	points at enrique walks away as she is speaking		

Enrique:	41	retracts arm to original position turns body back completely towards the computer screen		

Traditionally in CA, we must first begin by deciding what part of this interaction accounts for the first turn (Sacks, Schegloff, & Jefferson, 1974). The online question posed by Dina is counted as the first turn in this interaction since both Ellen and Enrique orient to it. Ellen initiates her social actions in this interaction by walking down (2), standing behind Enrique (3), and recasting Dina's online question as "Where you from?" (4). By initiating this talk-in-interaction sequence through questioning, Ellen is embodying institutional, classroom rules about who may question and who must answer (Baker, 1992; Heap, 1992).

After Ellen recasts Dina's online question, Enrique pauses for two seconds and then answers definitively "Mexico" (5) with his tone falling at the end of the word indicating that this is a factual statement. In her next utterance (6-11), Ellen disagrees with Enrique and uses the mode of tone of voice to attempt to distance him from his interpretation of Dina's question. From a multimodal analytic perspective, Bourne and Jewitt (2003) argue that tone of voice is very important in classroom instruction for it is through vocal tone that teachers commit social actions that can distance themselves from students, or close the social gap. Here Ellen employs the mode of tone of voice to attempt to distance Enrique from his interpretation, as if the true meaning of the question 'where are you from' is not open to translation or perspective but rather is obvious with only one correct answer. This is further supported by the next sequence of events

wherein after Enrique argues for his own interpretation of the question (12-14), Ellen reiterates her stance (15-21) using a high tonal pitch and elongated stress on the word 'from' and then turning her right shoulder and gaze towards Roberto, which elicits laughter from him (22). In this way, Ellen has teamed with Roberto to create social pressure on Enrique to accept her interpretation of Dina's question. Ellen once again reiterates her position (23-31) after a five second pause.

These pauses between utterances are important evidence of the impact of the institutional environment on Ellen and Enrique's exchanges, and the institutional power that permeates and is engendered by this talk-in-interaction sequence. For instance, Enrique pauses for two seconds before he defends his response to Ellen (12-14). However, we can see that Ellen does not pause at all in her stated disagreement of Enrique's stance (15-21). Ellen *does* pause for five seconds after her last utterance (15-21) however, she orients to Enrique's silence as an indication that he is in disagreement with her, or possibly has misunderstood her question (Davidson, 1984; Pomerantz, 1984; Pomerantz & Fehr, 1997), and reiterates her stance in lines 23-31 as if he *has* uttered a disagreeing statement. Analyzing these pauses and silences can reveal several important things about the work of institutional talk between teacher and student.

Hesitations, gaps, pauses, and silences in talk-in-interaction sequences primarily indicate that a dispreferred action is about to take place (Davidson, 1984; Pomerantz, 1984). Pomerantz (1984) posits that analysis of talk-in-interaction carried out in non-institutional settings reveals that participants usually prefer to avoid disagreeing with one another. They will often "assert new positions that lessen the differences between their own positions and presumed contrary positions" (Pomerantz, 1984, p.76). This is contrary to talk-in-interaction in institutions such as the classroom, where the teacher's role as one who may question students and evaluate student

answers (Mehan, 1985) is sanctioned by the institution and re-created in interactions with her students. In this way, this talk-in-interaction sequence reveals the way that institutional talk shapes the role of teacher and student (Baker, 1992) in that we can see that Ellen uses her institutionally sanctioned power as teacher to remain the one who poses questions and does not need to soften her stance to close the social gap between she and Enrique when it is clear that they disagree with one another. However, later in the interaction we can see the semiotic resources Enrique employs to protect Ellen's face (Goffman, 1995) as his institutional role as student leaves him with the responsibility to attend more closely to the social gap created between them when he initially expressed disagreement with Ellen's stance regarding Dina's online question (12-14) and Ellen maintained her dispreferred action in relation to his claim.

Enrique has oriented to the question in English, "where are you from?" as "where were you born?" This is due to the fact that in Spanish, "to be" has two forms: *ser* and *estar*. The verb *ser* indicates a permanent state or situation, such as origin. *Estar* indicates a temporary state or situation, such as temporary residency. When native Spanish speakers see the question "where are you from?" in English, this is often translated using *ser*, indicative of origin which is considered a permanent state. This analysis of how Enrique has taken up Dina's online question provides insight into Enrique's orientation as someone who views himself as only temporarily living in the United States, who views his true origin as México and permanent state as Méxicano.

From an SLA perspective, the question "where are you from?" in English is ambiguous and usually requires clarification to determine whether the meaning is "where were you born?" versus "where do you live now?". However, Ellen does not unpack this issue for Enrique, possibly because she does not speak Spanish and therefore is unaware of the differences in

meaning that exist as resources in Enrique's mind when interpreting this type of question in English. Instead, Ellen orients to what Dina's question is doing *socially* (Halliday, 1978), which is to elicit from Enrique an identity clarification.

At this point in the sequence Enrique begins to invoke his own agency. From a CA perspective we can see that Enrique pauses (33) for four seconds before responding to Ellen which indicates that he is about to state a dispreferred action (Pomerantz, 1984). This is the third indication that Enrique is actively resisting Ellen's interpretation. The first indication was when he paused for two seconds in line 12 and stated his disagreement with Ellen's stance (6-11). The second indication was when he remained silent in the face of Ellen's argument (15-21 and 23-31). In that instance, Enrique uses silence (Pomerantz, 1984) to express disagreement, and his silence *is* taken up as disagreement by Ellen in line 23. In this third instance, Enrique's next action is socially astute and an elegant solution to the negotiation impasse. Turning and looking up at Ellen, using the metaphoric gesture (McNeill, 1992, 2005) of a slightly raised arm and pointer finger ("I've got an idea!"), he states that he will write that he was born in Mexico but lives in Georgia (32-38) in a tone of voice indicating that he has thought it over and arrived at a solution.

In his utterance and online writing, Enrique preserves his own agency by maintaining his original position of being from Mexico, while marginally adopting enough of Ellen's perspective to satisfy her. However, Ellen is pleased with his statement and energetically voices this as she points to him (39) and utters 'Excellent' with a rising tone, which then brings the interaction to a close. Enrique has successfully merged his own initial assertion and Ellen's perspective while maintaining the 'face' (Goffman, 1995) of both parties involved.

Discussion

These excerpts reflect multiple instances throughout the data of the shift from iconic uses of gesture by the teacher, to metaphoric uses of gesture as online communication resulted in classroom talk about abstract concepts and ideas. The microanalysis of these interactions shows the difficulty of teaching students concepts such as irony, and the register used in online talk.

More importantly, the microanalysis reveals the way that underlying ideologies about nationality and membership shaped the way that ELLs navigated intricate negotiation impasses with regard to cultural, societal, and national identity orientations. In her discussion with Enrique about his claim of being from México, Ellen's actions are actively and aggressively steering Enrique away from affiliating with what she considers to be his past, pressing him instead to adopt a U.S. national identity.

Another difficulty lay in how online questions were treated by the teacher Ellen. In the interaction with Enrique, the role that Dina's online question plays in this interaction is not treated as material; a voice that must be negotiated with or answered to by Ellen or Enrique. Dina is not there physically, but her online question to Enrique serves to require a response, while her physical absence allows Ellen to argue for her own interpretation of what the questions means, or should mean, to Enrique. Ellen's recasting of Dina's formal online question, "Where are you from?" into "where you from?" (4) is the vehicle that allows Ellen to initiate this talk-in-interaction sequence through questioning, thereby allowing Ellen to embody traditional, institutional, classroom norms about who may question and who must answer (Baker, 1992). In addition, by initiating and then evaluating Enrique's response, Ellen has initiated the interaction as one that will remain within traditional norms for classroom interaction that preserve her role as an institutional authority and therefore as one imbued with the power to *ask* and *evaluate*,

while Enrique is relegated as one who must *answer* and *defend*. From there, Ellen re-enacts the traditional IRE (Mehan, 1985) sequence of classroom face-to-face (f2f) interaction.

From a social semiotic and SFL perspective, Ellen is also reconstituting context of culture such that the genre of IRE (Mehan, 1985) constrains Enrique's possible responses. While Ellen is allowed, under institutional authority, to argue for her position three times in this interaction (Baker, 1992; Mehan, 1985), Enrique, as student, must use the semiotic resources available to him inside of the IRE genre instituted by Ellen.

From this perspective we can see how Enrique's use of gesture fulfills the ideational and interpersonal functions of the genre and register that Ellen has instituted through her social actions. However, through his use of gesture, Enrique also preserves his own agency and stance in regard to Dina's question. By employing the "I've got an idea" gesture, Enrique gives a magnificent display of a metaphoric gesture meant, on one hand, to make it appear that he has come up with the solution himself, yet also meant for Ellen's eyes, to show a flash of enlightenment. The metaphoric gesture that Enrique uses, an index finger pointing upward, parallel to his face, is often used in Western culture to show enlightenment, a flash of insight, or a new idea. This metaphoric gesture represents an internal, mental state of possible genius or brilliance. By employing the gesture in this way, Enrique enacts the ideational function, representing "the world around us and inside us" (Kress & van Leeuwen, 2003). In employing the gesture as semiotic resource, Enrique has shown his understanding of the Western concept of academic knowledge wherein insight and intelligence come to a person quickly, like lightening or a light bulb going on inside the human mind.

From an SFL perspective, the interpersonal function also allows us a glimpse into how participants are orienting to the interaction and what efforts they take to communicate to one

another their own understanding of the interaction. Enrique uses this specific gesture to fulfill the interpersonal function in that he shows Ellen through his gesture that he is attending to his role as learner within a traditional IRE learning interaction. By this I mean that Enrique shows Ellen with this enlightenment gesture that it is *she* who has led him as the learner, to enlightenment, and now he embodies her ideas as his own. The role of the teacher here is conceived by both participants as one who must bring about knowledge, thus Enrique shows through the mode of gesture, that Ellen has succeeded in teaching him.

However, while Enrique uses the mode of gesture to remain within the boundaries of the IRE sequence and his role as learner in institutional schooling, he preserves his identity as an agentive person with the gesture as well ("***I've*** got an idea!"). His utterance (33-38) also shows that he maintains his stance as a person from Mexico (36) while only marginally adopting Ellen's stance that he is now from Georgia (6-11). In this way, Enrique has remained inside the IRE sequence, maintained the stance that the context of situation requires, yet artfully defends his own identity as a transnational person through skilful negotiation and communication via culturally specific gesture. It would seem that Ellen orients more to Enrique's gesture than his words as she also adopts a pointing gesture of her own (39) with which to take-up and evaluate his stance as "excellent" (39).

Implications for pedagogy

The findings of this study suggest that online writing does afford ELLs opportunities for authentic authorship and choices in L2 writing. The abstract concepts that emerged when students switched from primarily classroom-based composition to online composition provided them with real-world opportunities to navigate meaning for themselves; making choices in their online writing that reflected their unique cultural and lifeworld knowledge. However, these

excerpts, which represent regular and consistent themes throughout the data, reveal that while students had greater choices in online composition, the metalanguage around the interpretation of meaning between students and teacher constrained students. Implications for pedagogy indicate that ESOL teachers could benefit from careful analysis and reflection on their own classroom practices with students and the ways that their voices may silence the lively, creative, and independent engagement of their students. Moreover, ESOL teacher training could benefit from careful examination of video excerpts, such as the ones illustrated in this study, to show how micro, talk-in-interaction moments can effectively silence students thereby discouraging them from the very literacies practices that we wish to encourage in ELLs.

Conclusion

The research questions of this study asked: (1) How do adolescent Latino/a ELLs negotiate the affordances of an electronic environment? and (2) How does the metalanguage about certain topics affect the L2 composition process? By analyzing specific instances such as the ones described in this study, it is possible to see how the online L2 composition process brought about more metaphoric uses of gesture in order to help students negotiate the affordances of online writing. The online writing process evoked abstract ideas such as irony and identity that were not readily describable through linguistic utterance alone. However, these abstract ideas required negotiation between student and teacher with students seeking to promote their own interpretations and authorship. While Angélica ultimately followed through with an online post that mimicked Ellen's position, Enrique preserved his own stance and posted a response that reflected his initial claim almost entirely. More importantly, the use of gesture in these instances reveals the difficult work of attempting to scaffold students into understanding and employing more complex issues around register and genre in online writing and communication.

Through the analysis of these excerpts I've shown the vitality and power of using social semiotic theory and the related tools of SFL, through the combination of CA and MMA, to explicate the dynamic interaction and often underlying, hidden dynamics of ESOL classroom negotiations. This method shows how a teacher and ELLs use these affordances to negotiate genre, register, and identity in one classroom and community. While previous studies have relied heavily upon Vygotskyan perspectives to explicate teacher and student uses of gesture, the gestures used in this study, were better explicated through a social semiotic perspective that gives primacy to the functional aspect of semiotic resources in the ESOL classroom.

CHAPTER FIVE

LOW RIDER AND THE SCIENTIST: AN ECOLOGICAL PERSPECTIVE ON TRANSNATIONAL LIVES, SEMIOTIC MEANING MAKING, AND MULTIPLE LITERACIES RESEARCH[3]

[3] Pinnow, R.J. To be submitted to *Research in the Teaching of English*.

This year long ethnographic study examines the literacy resources of transnational bilingual adolescents against the backdrop of institutional beliefs about U.S. nation-state orientation to membership. Using ecological theory and multiliteracies design framework (New London Group, 2000) this study argues that multiliteracies are more than home or classroom literacies practices, but are active, agentive practices, beliefs, and lifeworld orientations that students enact in their everyday lives.

Several studies have been conducted recently that address the interplay between adolescent multiliteracies practices and the way these practices are negotiated in the language arts classroom. This study extends multiliteracies research by framing students' literacies practices within an ecological perspective in order to show how student multiliteracies are immediate, affected by context, and yet internal to their ways of interacting in their lifeworlds (New London Group, 2000).

In an effort to bridge the digital divide (Fairlie, 2005; Servon, 2002; Warschauer, 2003) among Latino/a middle school students (Fairlie, 2005), this study explored the multiliteracies practices of transnational Latino/a learners within a school environment that preserves an overtly patriotic ethos. The ESOL classroom provides a microcosm of the interplay between personal, institutional, and societal ecologies, thereby providing a rich nexus for interpreting and understanding the complex interplay among these issues in classroom literacy events.

In addition, this study addressed the shifting construct of immigrant and the cultural orientation of transnational Méxicano adolescents in schooling and literacy practices in the United States, in an effort to show how student orientation to culture, language, and membership affect their opportunities to be involved in multiliteracies practices as well as have their literacies recognized as viable avenues of academic success.

Rationale for the Study

Over the past decade the evolution of Internet and Communication Technologies (ICTs) has revolutionized what it means to be literate in the 21st century. ICTs have escorted an information-driven, global market economy into the lives of people all over the world, bringing diverse cultures, languages, economies, knowledge, and technologies to bear on almost every facet of modern life. This revolution has directly impacted K-12 public schooling efforts by shifting educational aims from traditional print-based literacy to the multiliteracies (Cope & Kalantzis, 2000; New London Group, 2000) necessary to aid societal members in meeting the challenges of a globalized world. The term multiliteracies is used to reflect an "emerging cultural, institutional, and global order" (Cope & Kalantzis, 2000, p. 5) and the multiple channels of communication and media, as well as the multiplicity of languages and cultural diversity that have resulted from this new world order (Cope & Kalantzis, 2000).

This triumvirate of language, culture, and technology in multiliteracies studies has been keenly recognized in language studies as desktop computing, laptops, the Internet, hypermedia, multimedia, and language learning software such as Rosetta Stone, can substantially affect the trajectory of first and second language learning (Chapelle, 2001; Salaberry, 2001; Warschauer & Healey, 1998). However, within this body of research, studies in K-12 ESOL (English to Speakers of Other Languages) classrooms has only just begun to touch upon the issues that are normative in other language learning environments, leading to the notion that there is a "digital divide" (Servon, 2002; Warschauer, 2003) separating learners with access to modern technologies and those without such access.

I became interested in the implications of the digital divide for Latino adolescent multiliteracies practices as the literature on the topic emerged from NTIA reports (National

Telecommunication and Information Administration, 1995; National Telecommunications and Information Administration, 1995, 2004) and other research which noted that the digital divide was indicative of "cyber-segregation" (Gates Jr., 2000; Light, 2001) wherein access to technology was linked to race, socioeconomic status, and geographic conditions. Fairlie (Fairlie, 2005) found that only 48.7 percent of Latino/a families had access to computers at homes and only 38.1 percent had access to the Internet. Recent research on public ICT access (Sandvig, 2006) reveals that computer use is interwoven throughout almost all levels of modern U.S. society except those in the lowest socioeconomic strata who are relegated to computer use in public libraries and community centers where public policy dictates "a kind of moral language about what ought to be done with computers" (Sandvig, 2006, p. 952). This is problematic given the strong link between computer literacies and Internet access to accessing educational, marketplace economy, employment, government, and commercial opportunities hosted online (Fairlie, 2005).

Given the well-documented importance of technological access to academic (Attewell, 2001) and global socioeconomic progress and change (Gee, Hull, & Lankshear, 1996) the K-12 public school has therefore become the lynchpin for Latino/a adolescent access and apprenticeship in the multiliteracies necessary for global citizenship. However, current research (Attewell, 2001) indicates that there is a "first and second digital divide" (p.252) with the first divide representing access to technologies, but the second residing in how these technologies are used in schools. Attewell (2001) found that minority students were more likely to have teachers with the least technological expertise, yet spent more time on a computer in a given school day than their white counterparts, most often using computers for "drill and kill" (p. 254) exercises that were far from academically challenging.

To remedy this dearth of access and meaningful interaction, research suggests that non-native speaker to non-native speaker interactions offer more opportunities for negotiation of meaning (Varonis & Gass, 1986), especially peer interactions in online forums (Fernández-García & Martínez-Arbelaiz, 2002; Sullivan & Pratt, 1996) as they offer language learners excellent opportunities for composition in the target language (Beauvois, 1992), peer feedback that improves English language writing (Black, 2005) and for bilingual students, opportunities for identity construction (Lam, 2000, 2004) often denied them in classroom interactions where cultural and linguistic differences in the processes of 'doing school' are not always valued and taken up.

Moreover, Latino/a transnational students are often viewed primarily through a deficit perspective (Ochoa & Cadiero-Kaplan, 2004) that only assesses them for skills privileged within Western, dominant culture academic norms rather than valuing and taking up the world knowledge and literacy skills that they bring to classroom literacy events (Moll, Amanti, Neff, & Gonzalez, 2001). Orellana and Gutiérrez (2006) have argued succinctly that current research on students traditionally referred to as English Language Learners (ELLs), is a misnomer given that all students in U.S. public schools are English language learners. This study addresses cultural and linguistic diversity as beneficial resources for semiotic meaning making, especially in regard to multiliteracies activities.

Throughout this article I refer to the students in my study as Méxicano, the cultural identity they use when referring to themselves. This is in order to attempt to distinguish, as best I can, the full weight and measure of their cultural orientation and to stress the shift away from nation-state orientation that can be inferred by the term immigrant. I view the students in my study as transnational (Portes et al., 1999) peoples for several reasons. First, students and their

families expressed an intense and abiding concern and orientation to their Méxicano culture and home country. This stance was evident in student speech through cultural references and the use of Spanish to maintain relational ties with each other at school and at home. Second, many of these students and their families made border crossings at least once a year in order to offer financial and relational support to family and friends that remained in México. For these students and their families, nation-state loyalties were contested and in their place lived a thriving cultural orientation as Latino and Méxicano; people strengthened by their orientation to cultural practices, language, social affiliations, and community.

Given the rationale for the study, this study was guided by these research questions: (1) how do transnational students negotiate the affordances of an online writing environment in the target language of English? and (2) How do the interactions and metalanguage around online posts affect the L2 composition process?

Theoretical Framework

Multiliteracies

Theories on multiliteracies have been broadly conceptualized in order to incorporate social, cultural, and historical influences on individual and group meaning making with regard to how semiotic resources are used in our modern, highly digitized world. Multiliteracies research has more recently been tied to research in multimodality (Kress, 2003; Kress & van Leeuwen, 2001) as text creation has increasingly come under the influence of ICTs. The multiliteracies perspective has the potential to uncover bilinguals students' "hidden literacies" (Villalva, 2006) and ways of orienting to classroom literacy practices that reflect their culturally and linguistically diverse lifeworlds. This study uses a multiliteracies perspective in order to identify the ways that

transnational students negotiate identity in literacy events and attempt to transfer this negotiated meaning in online writing.

However, one limitation of a multiliteracies perspective is that it does not offer concrete methods with which to analyze and interpret data. In this regard, ecological systems theory offers the means with which to analyze semiotic signification used in institutional, classroom, and individual ecologies.

Ecological Theory

The notion of viewing human development from an ecological perspective is not new. Ecology, as a biological field of study was instituted in the 19th century by German biologist Ernst Haekel in order "to refer to the totality of relationships of an organism with all other organisms with which it comes into contact" (Van Lier, 2004, p. 3). The linguist Einer Haugen (1972) introduced the metaphor, "ecology of language" (1972, p. 325) in an effort to address the poverty of representation apparent in much linguistic research of that time period. Gregory Bateson (1972) approached the evolution of human mind from an ecological perspective but within educational studies it was not until Russian-born developmental psychologist Urie Bronfenbrenner (1979, 1989, 2005) introduced *ecological systems theory* that a formal theory was posited that encompassed psychological, social, biological, cultural, identity, and time in the trajectory of human development.

Ecological systems theory approaches child development from the standpoint of ecosystems that directly contain the child (microsystem) such as home, school, and community, as well as larger societal structures that do not necessarily affect the child directly but influence events that can determine future courses of action (exosystem), and the culture, values, principles, and societal laws (macrosystem) that influence all other systems (Berk, 2000). These

systems are connected by various structures (mesosystem) and reflect time and historic changes of societies and cultures (chronosystem) (Bronfenbrenner, 2005). One of the primary strengths of this model is that it recognizes culture, ideologies, societal principles, values, and laws as having a powerful role in the shaping of all other ecosystems.

Ecological theory and related perspectives have regularly emerged in language and literacy research. Second language researchers have evoked the term *ecology* as a metaphor to shift the focus in SLA research from mechanistic models of language acquisition to ones that encompass the multifaceted nuances of second language learning (Haugen, 1972; Kramsch, 2002; Lankshear & Knobel, 2003; Leather & van Dam, 2003; van Lier, 2004). Within literacy studies, an ecological perspective has also been used to create a critical perspective (Moje et al, 2000) for extending literacy studies outside of the school environment and into homes and communities in order to understand and interpret multiple literacies practices (Barton, Hamilton, & Ivanic, 2000; Hawkins, 2004, 2005; Neuman & Celano, 2001; Villalva, 2006), community maintenance (Matusov, 1999), and parental engagement (Barton, Drake, Perez, St. Louis, & George, 2004). These studies employ an ecological perspective in the manner of the New Literacy Studies (Barton et al., 2004; Barton, 2007; Gee et al., 1996; Lankshear & Knobel, 2003; Pahl & Roswell, 2006; Street, 1993) in order to extend examination of literacy practices beyond the school ecology, and also situate our understanding of literacy practices within cultural and societal contexts.

The term ecology has been raised in education research in order to evoke the biological meaning of the word (Moje et al 2000) and as metaphor (Kramsch, 2002) in order to offer a perspective that invokes linkages, relations, and discursive, dialectical understandings of school, family, and community literacy and language learning. Ecological theory and multiliteracies

research are highly compatible constructs with which to examine Bronfenbrenner's (2005) triadic model (person-process-context) as they view the multifaceted contexts of children's lives as vital influences on the processes that children experience in any given day. However, this triadic model views the person as an agent of change with multiple ways of knowing, and in this way, context and process remain elements that can be reshaped through semiotic means by the child.

Background of the Study

Research on Multiliteracies

Since the advent of desktop computing, computer-mediated communication (CMC) and Internet and Communication Technologies (ICTs) have come to the fore in literacy research. Technological advances have changed communication, education (Gee et al., 1996) and definitions of literacy, giving rise to multiliteracies (Cope & Kalantzis, 2000; Lankshear & Knobel, 2003; New London Group, 2000) and multimodality (Jewitt, 2006; Jewitt & Kress, 2003; Kress, 2001b, 2003; Kress & van Leeuwen, 2001) research concerned with all facets of English language learning. During the last decade researchers have increasingly explored the intersection of ICTs, multiliteracies, and second language writing (Harklau & Pinnow, 2008) in an effort to move away from traditional "drill and kill" (Warschauer & Healey 1998, p.1) approaches and embrace a multiliteracies perspective (Kist, 2005).

In research, *multiliteracies* as terminology refers to the perspective of multiliteracies researchers (Cope & Kalantzis, 2000; New London Group, 2000) which reflects an "emerging cultural, institutional, and global order" (Cope & Kalantzis, 2000, p. 5) and the multiple channels of communication and media, as well as the multiplicity of languages and cultural diversity, that have resulted from this new world order (Cope & Kalantzis, 2000). In addition, research within

the New Literacies Studies (Lankshear & Knobel, 2003; Pahl & Roswell, 2006; Street, 1998) evokes notions of home-school literacies as part of multiliteracies broader visions of what constitutes literacy in the 21st century.

Beginning in 2005, terminological shifts from CMC to ICTs reflected the changing nature of communication technologies available for personal and in school use (Godwin-Jones, 2005). Educational research in general, and language learning research in particular, began reflecting this shift by investigating how ICTs could affect the writing process of language learners (Parks, Huot, Hamers, & Lemonnier, 2005) and effective design and use of ICTs in language learning (Richards, 2005). This research built upon the multiliteracies notion of *design* (New London Group, 2000), which frames semiotic activity as creative combination of available resources, that through the process of Design, transforms semiotic resources even as it reproduces them (New London Group, 2000). From the concept of *design*, teachers and students approach literacy events, including those involving ICTs, as culturally and linguistically diverse discourse community members with agency in communicative contexts.

Multiliteracies research has investigated scientific curriculum (Lemke, 2000), ecological perspectives on multiliteracies (Moje et al., 2000; Villalva, 2006), digital storytelling (Hull & Katz, 2006; Hull & Nelson, 2005), identity (Del-Castillo et al., 2003; Lam, 2000; Rubinstein-Ávila, 2007), student multiliteracies profiles (Leino et al., 2004), popular culture as resource for multimedia designing (Ranker, 2006), ICTs as cultural tools (Parks et al., 2005), multiliteracies metalanguage (Unsworth, 2007), third space hybridity (Moje et al., 2004), research with preservice teachers (Trier, 2006), and multimodal literacies and discourse (Bourne & Jewitt, 2003; Erstad et al., 2007; Hull & Nelson, 2005; Jewitt et al., 2007; Matthewman & Triggs, 2004;

McGinnis, T., 2007; Mór, 2006; Royce, 2002, 2007; Schwartz & Rubinstein-Ávila, 2006; Vincent, 2006; Walsh, 2007).

Multiliteracies research abroad has focused on adolescent learners (Erstad et al., 2007; Leino et al., 2004; Mills, 2006a, 2006b) and reveals that student critical media literacies often far outpaced those of the teacher resulting in student knowledge that was vital to technology-based classroom projects, but discounted in classroom interactions. In the U.S., multiliteracies research has begun to focus on transnational language learners and the multiliteracies expertise these adolescents hold that is not valued in classroom and school interactions (Rubenstein-Ávila, 2007; Villalva, 2006),

ICTs and Second Language Writing

Research investigating ICTs and L2 writing reveals that certain characteristics particular to ICTs benefit second language writers. Studies exploring ICTs and L2 writing have found that ICTs promote a wider range of vocabulary use among second language learners (Fitze, 2006), provide a resource for form-focused instruction (Mills, D., 2000), provide a forum for communities of practice (Shin, 2006), provide room for hesitant or shy learners to gain conversational turns in online communication (Freiremuth, 2001), provide additional composition time (Beauvois, 1992), allow for more equitable gaining and maintaining of the conversational floor (Beauvois, 1998; Kern, 1995), improve grammar and writing (Hegelheimer, 2006), and improve quality of writing (Sullivan & Pratt, 1996). Other research has found that dyads of nonnative speakers (NNS) of the target language (TL) negotiate more in oral and written discourse than dyads of native speakers (NS) and NNS (Fernández-García & Martínez-Arbelaiz, 2002).

Research investigating ICTs and adolescent second language learners is more scarce. Much of this research focuses on ESOL classrooms and learners and explores the effects of computer-enhanced vocabulary lessons (Kang and Dennis, 1995), verbal interaction between learners during computer book reading (Liaw,1997), reading skills (Williams & Williams, 2000), surveys of K-12 ESL teacher technology (Meskill & Mossop, 2000), Internet Relay Chat as a vehicle for potential language enhancement (Coniam & Wong, 2004), use of computers to teach academic language (Meskill, 2005) and investigated child-to-child interaction and corrective feedback online (Morris, 2005).

Recent research that looks specifically at ICTs and adolescent L2 writing has shown that online forums offer social identity development opportunities (Lam, 2000) as well as global practices of bilingual identity (Lam, 2004), and improved L2 writing through peer-to-peer feedback on fanfiction web sites (Black, 2005), and affinity spaces (Black, 2007).

Methods

This was a qualitative research study (Merriam, 2002) that brought together ELLs who were novice authors in English, from two separate middle schools, in order to write and give one another peer-feedback on their writing in the electronic environment of WebCT (a course management system). In the spring of 2006, I recruited middle school ESOL teachers from the state of Georgia via an ESOL listserv in order to locate possible candidates for a study examining two separate middle school ESOL classrooms together so that students could post original writing online and receive peer feedback about their writing.

Initially 14 ESOL teachers from various counties in the state responded with enthusiasm to the listserv message, inviting me to contact them about the study. As interviews unfolded with this candidate pool, I selected two ESOL teachers based upon: (1) teacher motivation and

enthusiasm towards using technology in the ESOL classroom and (2) availability and reliability of technological access in the school. The two ESOL teachers chosen for the study were Cindy Broward and Ellen Miller (pseudonyms).

In addition, I chose WebCT, an online course management system, as the electronic forum for student online writing. I chose WebCT because both teachers had regularly used WebCT in their graduate degree coursework at a local university and were comfortable using this forum. I also chose WebCT because it provided a password protected electronic space, on a secure server, that supported the safety protocols required by Cindy and Ellen's schools.

In May of 2006 I met with Cindy and Ellen at Ellen's school, Myers Middle School (a pseudonym), and we discussed the online project. Cindy and Ellen decided that they would begin the project by teaching students how to introduce themselves online, give a brief lesson on 'netiquette' (polite online behavior), and then have students post original writing, reports, and other academic work during the school year in order to provide students with practice writing for an authentic audience of their peers, as well as learning how to give and receive peer feedback online.

Given the breadth of this project and space limitations, this article will examine the online writing and teacher-student face-to-face (f2f) interactions of one of these teachers, Ellen, and her ESOL students. Ellen chose her fifth and sixth period classes, 15 students total, to take part in the study. As the study progressed, five students were chosen as focal participants due to: 1) a minimum of three years residing in the United States, 2) novice status as readers and writers of English, and 3) a desire to participate in online writing activities.

Setting

The setting of the study was Myers Middle School (a pseudonym) located 45 miles by automobile from a major metropolitan southeastern city. Myers resided in a suburban neighborhood approximately 10 miles from the urban, industrial city of Walker Heights (a pseudonym). Walker Heights' agriculture, poultry and textile industries were thriving due to an influx of Latino labor beginning in the early 1990s. The majority of these laborers were originally from México; willing to work long days for low-wages and in quite difficult working conditions.

Myers had just over 900 students registered and 40 percent of those students were of Méxicano first or second-generation families. The school had an active athletics program with boys' and girls' cross country, track and field, basketball, and soccer teams. Cheerleading and spirit teams were popular as well as choral and band programs. Méxicano students were well represented across all athletic teams, as this was an important avenue to school belonging and membership.

Myers made consistent efforts to create a school environment where all students felt that they belonged, were welcomed, and were expected to excel both academically and socially. Ellen hosted a monthly Latino Parent Night (LPN) in order to encourage positive ties between Latino parents and the school, as well as create a foundation for understanding, an open forum for parent questions, and resources that might benefit Latino students and parents. Ellen was supported by the administration at Myers who provided the resources necessary for the event such as food, transportation, a bilingual Latino parent liaison, and faculty volunteers to host entertaining games in the gym for younger children while selected speakers spoke to Latino

parents on topics ranging from Hispanic Scholarship Funds available for college, state healthcare options, to online access of student grades.

Myers had an extremely patriotic sensibility that was reflected in the school colors of red, white, and blue, and the school dress code which was also oriented to the colors of red, white, and blue. U.S. flags were the backdrop to many signs and banners throughout the school, and the school mascot was a revolutionary war figure named The Patriot. Myers' students were referred to as patriots in school fliers, the school newsletter, and various signs hanging on the walls of the school. Although 40 % of the student body were Latino, only two small signs were posted in Spanish in the main office.

Participants

The six focal participants in the study consisted of Ellen, the ESOL teacher, and five focal students: Angélica, Chuy, Domingo, Enrique, and Roberto (Table 5.0). Four of the five focal students were born in México and immigrated to the U.S. before, or during, elementary school. Four of the five participants were novice online writers and did not have access to the Internet at home.

Table 5.0

Focal Participant's Background Information

Name	Age	Gender	Age at arrival in U.S.	Country of Origin	English Oral Fluency	Spanish Oral Fluency
Ellen	59	F	U.S. born	U.S.	NS	None
Angélica	12	F	7	México	NS fluency	NS
Chuy	12	M	U.S. born	U.S.	NS fluency	NNS
Domingo	12	M	8	México	NS fluency	NS
Enrique	12	M	4	México	NS fluency	NS
Roberto	12	M	2	México	NS fluency	NS

F = Female; M = Male; NS = Native Speaker; NNS = Nonnative Speaker

Ellen.

Ellen was a 59-year-old, white, non-Spanish speaking ESOL teacher who had been teaching for 32 years. Born and raised in the United States, Ellen had begun her career as a special education teacher in an institutional hospital setting, two years later transferring to a public school setting where she was a mainstream middle school teacher for the next 15 years. Ellen had been teaching ESOL at Myers for the last fifteen years, since the school had originally opened. Ellen had attained masters' and specialist degrees in education, an ESOL endorsement from the state, and a certification in language arts that was well used in her capacity as an ESOL teacher. With short red hair and blue eyes, Ellen had a diminutive build with a high pitched, almost childlike, voice that sometimes barely penetrated the din of the classroom.

Ellen had studied Spanish briefly in college but had not pursued any foreign language study beyond college. Ellen expressed in an informal conversation early in the study that she felt she "should probably learn some Spanish" in order to communicate better with her students and their families.

At the time of the study Ellen was pursuing her doctoral degree in TESOL from an online university and spent several nights a week online, communicating with her instructors and fellow-students in her online courses. Ellen was comfortable using technology for email, online chat, and composing documents for submission to her instructors. Ellen frequently used Word and Power Point software programs in order to create documents for her online college courses, ESOL lesson plans, and administrative reports due to a committee that she served on at Myers. Ellen also habitually used her cell phone, pulling it out to make calls between classes and after school.

Being an excellent writing teacher to her students was important to Ellen as she felt that excellent literacy skills were vital to engaging in a highly digitized modern world. This sensitive and caring aspect of her character, combined with her enthusiasm, was matched only by her seemingly boundless energy outside the classroom. In addition to her teaching position at Myers, Ellen also worked as a waitress a few times a week at a prestigious restaurant in Walker Heights, and bred award-winning horses that she presented at regional and national shows throughout the year. Ellen's ESOL teaching ethos was strongly influenced by her belief that developing a strong sense of "belonging" was the key to academic achievement for ELLs, especially Latino/a students who she felt strongly valued social ties and interactions in every aspect of life. Ellen was deeply influenced by Thomas Friedman's The World is Flat, as she believed that students of the 21st century needed to know how to work together in groups, manage projects, and use technology well. These beliefs were primarily what led her to join my study as she felt her students could use practice with online communication, as well as practice in navigating communication with peers outside of their regular, everyday lives at Myers Middle School.

One aspect of Ellen's teaching that emerged during data collection was her belief that she needed to handle any problems in her classroom by herself. During the entire school year, Ellen never sent one student to the vice principal's office to receive discipline, preferring to discipline students within the walls of her own classroom. However, Ellen's desire to avoid unnecessary contact with Myers' administration kept one student, Domingo, from possibly receiving the social support team (SST) care that he needed early in the school year. While Ellen stated that she believed that Domingo needed to be "SST'd", she never followed up on this observation and at the end of the school year Domingo had never received any care in the form of social support from the school.

Ellen's desire to avoid handling classroom problems through administrative channels was in contrast to her sometimes fiery and direct responses to one of the vice principals in the school. Ellen was at heart a contrarian but after 32 years in the school system, she was very careful to keep her battles limited to circumscribed areas where she felt she would not be harmed by institutional norms should she directly contradict stated goals, policies, and aims.

Angélica.

Angélica was a 12-year-old girl who was born in México and came to the United States when she was seven years old. Angélica was fluent in English and spoke very little Spanish. She was not literate in Spanish, and had not yet attained grade level literacy in English. Angélica lived with her mother, father, and brother in Walker Heights. Angélica was very fond of Ellen and frequently came by Ellen's classroom to give Ellen a hug or get candy from the candy basket that sat on Ellen's desk. Angélica had medium brown hair, light brown eyes, and dressed like a much younger child, wearing cotton dresses and sneakers with ankle socks. Angélica was very

respectful to Ellen and obedient in class to the point that she rarely raised her hand, and never interrupted the teacher.

Angélica's family owned a computer and a printer but the printer did not work and she rarely spent any time one the computer, either for games or schoolwork. Angélica's family did not have Internet access but were planning on getting a dedicated service line (DSL) in the future. Angélica mentioned that she played on her brother's Game Boy© with him sometimes and enjoyed this.

Enrique.

Enrique was a 12-year-old boy who was born in México and moved to the U.S. with his mother and three brothers when he was four years old. Enrique had recently moved to Walker Heights and entered Myers in the fall of 2006, at the beginning of the study. At his previous school, located in a nearby county, Enrique had been targeted for recruitment by gangs leading his mother to move to Walker Heights in order to remove Enrique from gang influence. This 'backstory' would follow Enrique into Myers to the point that the security officer at the school was aware of Enrique's story, as was Ellen and other teachers in the school. When I asked one teacher how Enrique was doing in school she responded, "Well, he's not in ISS (in-school suspension)". Enrique was never in ISS during the entire year that I was at Myers. In my final interview with Enrique I asked him to describe his experiences as a student at Myers. Enrique mentioned several incidents that created difficulties for him during the school year. Enrique recounted being assigned "silent lunch" as a punishment for speaking Spanish in his non-ESOL classes. He said, "they scold us for speaking Spanish because they don't like that they don't understand us". Some incidents left him baffled as to what he had done wrong. For instance, one teacher looked at him as he was sitting at his desk silently and reprimanded him for the "hard"

look on his face. He had no reply for that and resorted to fixing a blank look on his face to satisfy the teacher, a look he demonstrated in the interview with him. Enrique also mentioned that he had drawn a picture of a mariachi in one class but the picture was taken away when the teacher saw that Enrique had included in his drawing the traditional bullet vest that mariachis are often depicted as wearing. These instances, and others, indicated that Enrique's affiliation with certain aspects of his culture and language caused many problems for him with those in authority.

With close-cropped hair and large brown eyes, Enrique displayed impressive social acumen, to the point of being somewhat of a 'ladies man' and attracting the attention and flirtation of many of the female students in the class. Ellen mentioned this aspect of his character with amusement several times over the course of the study and Enrique regularly appears in classroom video dancing, laughing, smiling, and teasing girls in the class.

Enrique's family owned a computer but did not have Internet access and Enrique did not use the computer very frequently when he was at home. He stated that he preferred spending time after school playing and hanging out with other Méxicano friends, as many of his school buddies lived in the same neighborhood as he did. Enrique did not show great enthusiasm for preparing academic writing assignments to post online to his peers, but did enjoy online writing that was social in orientation.

Roberto.

Roberto was a 12-year-old boy who was born in México and moved to the United States with his mother, father, and twin sister when he was two years old. Roberto had been a student at Myers for two years and carried himself with the air of the 'good student' and scholar. With short curly hair and a tall lanky build, Roberto had an exceedingly neat and tidy appearance, and walked and moved with an almost military precision in his speech and movements. Roberto was

fluent in spoken Spanish and English, and approaching grade level literacy in English. Roberto's English and Spanish language skills were some of the best in the class and he became Ellen's unacknowledged peer liaison whom other students looked to for guidance when they did not understand class instructions. Roberto wanted to be a scientist when he grew up as he liked math, and used the computer and Internet often at home for games and academic assignments. However, over time I found that Roberto used his technological and linguistic skills in undesirable ways in Ellen's classroom, attempting to lead his peers astray by using foul language and off color joking in Spanish, flaming other students and encouraging contention between students online.

Domingo.

Domingo was a 12 twelve-year-old boy who was born in México and came with his father to the United States when he was eight years old. Domingo, with his thin physical build and fifties flat-top hairdo, presented himself as a retro, hip hop urban boy who wanted to be a pilot when he grew up, and used both English and Spanish to maintain this self presentation. Domingo's family did not own a computer but were planning on purchasing one within the next year. Domingo enjoyed playing on his cousin's Game Boy© with them when he visited them on weekends. Domingo told me that he enjoyed writing online and looked forward to logging onto his WebCT account to see what posts the other students had left for him. Domingo struggled academically and behaviorally at times in Ellen's classroom, leading Ellen to make the comment early in the year that he "needed to be SST'd" (social support team). Ellen believed that Domingo might be the child of migrant workers and that they relocated so frequently that Domingo had difficulty keeping up academically, which meant that he did know grade level math and struggled academically to keep up with content material in all his courses. Domingo

was fluent in spoken Spanish and English, but not yet on grade level in English. Domingo often parroted whatever Ellen said in class in frequent attempts to align with her power. This sort of piggyback behavior allowed him to 'pass' as a 'knowing other' and ride on Ellen's expertise as teacher to be a knowing member in classroom interactions.

Chuy.

Chuy was a 12-year-old boy born and raised in the United States. Small and compact with dark dancing eyes and an impish smile, Chuy was the jokester of the class and could make anyone laugh when the sound of his chortling giggle filled the room. Chuy's parents had been farmers in México and now worked in one of Myers' most well-known textile factories. Chuy traveled to México and Texas to visit family each year during summer vacation. Chuy was fluent in oral English but his Spanish was the poorest of the group and to compensate he had developed a hybrid language that blended the Spanish he did know with Spanish words and phrases he learned from his peers. Chuy also frequently created his own words from a blend of Spanish sounds that held no direct meaning in Spanish but that his peers had come to accept as his way of speaking Spanish. Since speaking Spanish was an important part of being a member of the ESOL group at Myers, Chuy used his Spanish language frequently and his peers took up his utterances regardless of their technical correctness. Chuy was one student that frequently tested Ellen's patience with his overt chatter and reliance upon argument to make his voice heard in the classroom.

My Role in the Study.

My role as a researcher and participant observer began when I initiated the current study by recruiting ESOL teachers in order to implement an online writing project designed to apprentice middle school ELLs into online communication. Having read a great deal of research

about the digital divide affecting Latino middle school students, and noticing the rapid increase in Latino students in Georgia public schools, I wanted to implement a study to address the technological access and quality issues (Attewell, 2001) affecting this particular group of students.

During the study I was solely responsible for managing all the technological components of WebCT, including managing the electronic bulletin board discussion postings, naming upcoming online discussion sections, and uploading any images or other documents that the teacher wanted me to upload throughout the study. I also helped students to login to their accounts in WebCT and answered both technology, and language-related questions, throughout the study.

Data Collection

Data collection followed ethnographic research procedures including field notes (Emerson et al., 1995; Sanjek, 1990), formal and informal interviews (Patton, 2002), and participant observation (DeWalt & DeWalt, 2002) of school activities such as school Spirit Rallies, Latino Parent Night, after school athletic events, and administrative addresses to the student body. Digital photographic still images and video were taken of signs, banners, advertisements, posted school announcements and fliers, images of the school mascot, the school mission statement, and the dress code instituted by the school for all students. Student participants were interviewed according to their choice of Spanish or English (Table 5.1).

Table 5.1

Data Collection and Analysis Methods

Data Collection Methods	Data Collected & Generated	Data Analysis Methods
Classroom Observations	Fieldnotes from 40 Observations	Open Coding*
School Site Observations	Fieldnotes from 15 Observations	Open Coding*
Interviews	Transcripts from 8 SSI	Conversation Analysis
	Fieldnotes from 87 II	Open Coding*
Audio Data	Transcripts	Conversation Analysis
Video Data	Transcripts	Conversation Analysis Multimodal Analysis
Digital Data	175 photos	Multimodal Analysis
Documents	419 WebCT postings	Conversation Analysis
Archival Data	School fliers, news-papers, newsletters, announcements	Open Coding*

*Notes: *Open coding refers to coding employed by Strauss & Corbin (1990) and Patton (2002)*
SSI = Semi-structure Interviews; II = Informal Interviews

Data Analysis

The ethnographic data related to the school ecology was analyzed using social semiotic inquiry (van Leeuwen, 2005; van Leeuwen & Jewitt, 2001) and multimodal analysis (Kress & van Leeuwen, 2003; Norris, 2004). Social semiotic inquiry views semiotic resources such as images, linguistic messages, color, sound, etc. as vital to meaning making; resources that operate on their own set of rules in order to affect viewer beliefs and ideas about a given topic. By analyzing Myers' use of the school colors, the mascot, school signs, banners, and dress code I

could see how semiotic signification was employed to influence student beliefs about various topics, thereby creating a cultural ethos around the notion of patriotism.

To analyze the video excerpts from this study, two forms of analysis were used: Conversation Analysis (CA) and Multimodal Analysis (MMA). CA provides analytic concepts and methods that enable fine-grained analysis of prosodic features of interactions. CA, or *talk-in-interaction,* emerged as a field of sociological study in the early 1960s under the auspices of Harvey Sacks, Emanuel Schegloff, and Gail Jefferson. Building on the work of Harold Garfinkel (1967) who advocated an ethnomethodological approach to social science research that looked at people's "common sense reasoning and practical theorizing in everyday activities" (Have, 1999, p.6), Sacks was able to show that conversational exchanges between people were not random, unruly, chaotic events but rather had underlying rules, structure and principles at work in even the most mundane conversations. More importantly to SLA research, Sacks was able to show that conversational turns and talk-in-interaction were *doing something (*Pomerantz and Fehr, 1997*)*, achieving important actions and vital aims between social actors. Therefore in CA, the basic unit of analysis can be characterized as the *social action.* A defining feature of CA is that it does not examine talk in general, but rather treats actual talk as prima-facie evidence of what participants are orienting to and therefore what participants say is used as the foundation for analysis (McHoul & Rapley, 2001, p. xii). This is vital to research within institutional settings, such as schools, where institutional and pedagogical goals are "talked into being" (Have, 2001, p.4).

CA has been used to investigate talk in mundane settings where turn-taking, repair, pauses, and gaps in conversation are considered the normative structure of talk that make social interaction possible (Heritage, 2005). CA is also used in institutional settings (McHoul &

Rapley, 2001; Have, 2001) such as courtrooms, medical institutions, mass media, and educational settings (Baker, 1992; Baker, 1997; Carlsen, 1992; McHoul, 1978; Mehan, 1985). Institutional CA is interested in how talk achieves the reinforcement or 'keeping' of institutional values and beliefs, as well as how the setting of the institution itself requires certain kinds of talk. For instance, in school settings, such as an ESOL classroom, there are institutional standards, rules, or regulations that delineate who may pose questions and who must answer them. Inherent in institutional CA is the assumption that institutional talk exhibits three main characteristics: (1) institutional talk is oriented to the aims of the institution and in institutionally relevant ways, (2) institutional talk is constrained by what are considered acceptable contributions to the 'business at hand', and (3) institutional talk is defined and shaped by the frameworks and procedures that are specific to that institution (Drew & Heritage, 1992).

Along a separate continuum is research on gesture (McNeill, 1992, 2005), gaze (Goodwin, C, 1980), and proxemics (Hall, E. T., 1990). Due to modern developments in digital video recording, classroom interactions can now be recorded and carefully analyzed in order to explore how participants employ the modes of spoken language, gesture, gaze, and proxemics for the purpose of meaning making in a second language (McCafferty & Stam, 2008). Research on classroom interactions traditionally focuses on either talk, or other modes of meaning making (e.g. gesture, gaze, proxemics), but almost always privileges linguistic output in analysis over the ubiquitous "paraverbal" (van Dijk, 2001) features of talk. However, McNeill (2005) argues that "language is inseparable from imagery" (p. 4) and that it is a profound "error to think of gesture as a code or 'body language', separate from spoken language" (McNeill, 2005, p. 4) This study asserts that gesture, gaze, and proxemics are not 'para' in L2 interactions, but rather vital

components in meaning-making and deployment of signification systems from a semiotic perspective.

Mirroring the focus of McNeill's research (McNeill, 1992, 2005) multimodal analysis (MMA) focuses on the semiotic modes that participants employ in an effort to "step away from the notion that language always plays the central role in interaction, without denying that it often does" (Norris, 2004, p.2). Kress et al (2001) further argue that language is only one mode among many but that it does not always take a central role in interactions in moment-by-moment interaction. Multimodal analysis (MMA) as an analytic and representational construct of data (Norris, 2004) is useful for analyzing classroom interactions in that it allows for careful and specific re-construction and analysis of the ways that participants combine modes to commit social actions, thus shedding light on how the work of multiliteracies is negotiated. Norris (2004) has described the basic unit of analysis in MMA as the social action. In this way, CA and MMA are complementary analytic methods with MMA regularly employing CA to analyze linguist utterances of video recorded talk (Norris, 2004).

Findings

The Myers Middle School colors were red, white, and blue and their mascot was the *Patriot*, a revolutionary war figure waving a United States flag. Red, white, and blue signs and U.S. flags abounded throughout the school, including the lobby which hosted a Christmas tree in December with red, white, and blue ornaments. The main office, counseling center, and media center were decorated in shades of red, white, and blue with U.S. flags posted on walls and windows. The gymnasium and cafeteria had the school mascot painted on the walls along with the school mission statement. The hallways of the school were rife with directions regarding the school

dress code, posters, signs, announcements, fliers, and messages related to the school's stated mission and patriotic theme.

The dress code at Myers also echoed the patriotic theme of the school. The dress code was made up of specific colors: red, white, blue, and gray for all clothing, with the addition of the color black for heavy winter coats, and khaki and blue jean material for pants, shorts, and skirts. Specific styles of pants, jeans, skirts, shoes, and tops were designated as well. Students could wear various mixes of the designated colors with two notable exceptions: no white *t-shirts* and no logos except for the Myers Patriot logo were allowed. T-shirts could be worn in red, blue, or gray but not white, as a white t-shirt was considered a gang symbol.

The prohibition of white t-shirts was the first gang related issue to surface during my initial data collection. The issue of gangs was one that the administration addressed the first week of school in an official student body meeting. In this meeting students from each grade were brought into the cafeteria with their teachers at various times of the day and the principal, vice principal, and security officer spoke to the students about the disciplinary code, dress code, and gang activity. The security officer spoke about gangs, taking the students through a slide show that depicted various gang signatures, dress codes, and graffiti that had been recorded throughout the Walker Heights community. While the security officer was gruff and spoke punitively about gangs and gang membership, his power point Gang Show only seemed to whet students' appetite as it unwittingly glamorized gangs and gang activity to students. In contrast, the principal stated that there had been no gang activity in the school, but Ellen and the security officer seemed to believe quite differently stating that a small outbuilding on the edge of the school grounds had been 'tagged' (graffiti sprayed on it) although evidently not in a gang-related pattern.

When the focal students at Myers were interviewed, three out of five students claimed that there were signs of gangs in the school and one child grew visibly upset, his thin shoulders shaking with the discussion of the topic. In his interview, Enrique, who had been targeted by gangs for membership at his previous school, stated that he believed that there were no active gangs at Myers, but he had heard there were active gangs at Myers High School and this concerned him as he was scheduled to graduate in less than two years from Myers and enter Myers High.

Through the use of color (red, white, and blue), U.S. flags, signs, the Patriot mascot, and slogans (i.e. Patriot Pride!) Myers' effectively created a school ethos that was patriotic in the extreme. This ethos consistently referred to students as "patriots" and used "we" statements in order to create a unifying front in school messages and slogans. Most notably, references to Méxicano culture were almost entirely absent except for two small bilingual signs in the school office and a bilingual version of the school mission statement outside the gymnasium.

While students freely used Spanish in the hallways, at least two focal students stated that they had been scolded for using Spanish in their classes when speaking in front of monolingual English speaking teachers. In effect, the culturally and linguistically diverse literacies that students embodied and carried with them in their everyday lives were shunted to the extent that Spanish was viewed as a social language among students and English the academic one.

Throughout the study many instances emerged revealing the underlying tensions associated with the culturally and linguistically diverse multiliteracies practices of students. Students drew readily upon their own semiotic resources, including multiple ways of knowing and lifeworld knowledge, in their classroom and online writing. However, while Ellen acknowledged some student indexes of culture, language, and nationality, others were treated as

illegitimate within the classroom sphere. In this first excerpt (Table 5.2), Ellen is in front of the class, reading aloud a story that one student, Angélica, has written about her trip to the mall the weekend before. In the narrative, Angélica indexes Méxicano culture, language, and familial practices through her narrative and these are given primacy in the class through Ellen's reading them aloud to everyone. However, one student, Enrique, attempts to intercede with additional knowledge about the Spanish language and this is not taken up.

Table 5.2 (Refer to Appendix I for transcript conventions)

Quinceañera

Participant	Linguistic Utterance	Gesture	Gaze	Digital Image
Ellen	1 how many go 2 shopping and 3 don't buy 4 anything↑	raises right hand		
Students		raise hands in response		
Domingo	5 u::h			
Enrique	6 me↑			
Ellen	7 except at 8 the grocery 9 store you 10 always buy 11 stuff at 12 the grocery 13 store but 14 if you go 15 shopping for 16 clothes 17 sometimes 18 you just 19 don't y- you			

	20 just [look			
Domingo	21[you just 22 look			
Ellen	23 yeah↑ 24 (2.0)the 25 reason I 26 went this 27 last 28 weekend was 29 because my 30 cousin 31 jasmine 32 cannot go by 33 herself↑ 34 (2.0) so::↑ 35 I went but 36 didn't 37 buy anything 38 because I 39 didn't have 40 any money 41(1.0) spent 42 all my money 43 on Saturday 44 on clothes 45 fo:r and we 46 don't know 47 how to spell 48quinceañera 49 do we↑			
Angélica	50[no:			
Ellen	51[we're workin 52 on that			
Enrique	53=[quinceañera↑			
Ellen	54 yep (1.0) I 55 still need to 56 buy my crown 57 as I am going 58 to be as I am 59 to be the 60 godmother of 61 the crown for			

	62 my cousin 63 maria who has 64 just crown 65 for my cousin 66 maria who has 67 just come 68 from mexico 69 the last 70 movie we saw 71 was click 72 (1.0)I 73 li::ked it 74 when the men 75 spoke spanish 76 it was 77 funny and my 78 cousin was 79 lau::ghing 80 and going to 81 the bathroom			
Students	82 ((laughing))			
Ellen	83 (5.0)=[alma 84 and janet 85 were tickling 86 jasmine as 87 usual because 88 (2.0) and we 89 forgot to put 90 she she is so 91 short(2.0) 92 all these 93 things happen 94 at the 95 mall its a 96 place where 97 friends get 98 together↓			

In this excerpt we can see that several important Méxicano norms and values are indexed through Angélica's writing about her trip to the mall. Ellen engages with the class by asking a question at the beginning of the interaction and raising her own right hand to indicate to students that she is expecting raised hands in response to her question (line 1-4). Several students raise their hands to indicate that they agree with Ellen's statement. However Domino and Enrique also offer utterances (5-6) but these are not taken up by Ellen as she continues reading from

Angélica's story. Throughout her narrative, Angélica indexes important Méxicano cultural events through talk of her cousin's quinceañera, and her own role as godmother. Angélica discusses the fact that she enjoyed hearing Spanish spoken during the movie Click and spending time with her family and friends. All these cultural affiliations are privileged in this classroom interaction through the fact that Ellen has chosen to read Angélica's story aloud to everyone.

However, when Enrique attempts to interrupt and correct Ellen's pronunciation of quinceañera (53), Ellen simply replies 'yep' (54) and continues to read. Since she does not correct her pronunciation of the word or take up Enrique's utterance, we can see that her 'yep' is not an agreement with him but a way of moving the interaction along and in a way, snubbing him (Heap, 1992).

Possibly one of the reasons that Ellen does not take up Enrique's utterance is that he has attempted to gain the conversational floor through illegitimate means (Baker, 1992). By interrupting Ellen, rather than raising his hand for permission to speak, he has reduced his chances at having his utterance recognized by Ellen. In addition, Enrique's correction of Ellen's pronunciation draws attention to the fact that she does not speak Spanish, thereby also drawing attention to an area where he has more knowledge than she does. CA research on classroom interactions of teachers who have less knowledge in a particular area (Carlsen, 1992) shows that when teachers enter an area of instruction wherein they do not have expert knowledge or control, they frequently will shut down talk rather than allow students to continue to question them. In this instance, while Ellen, as a native speaker of English has excellent knowledge of the English language, she does not have insider knowledge or status as a Spanish speaker. In this way, Enrique has located an area of classroom interactions where he can demonstrate his insider knowledge and language skill. However, by not attempting to gain the conversational floor

through legitimate means, he is not granted space as an interlocutor. It is possible that even if Enrique had raised his hand, his correction of Ellen's utterance might not have been take up due to its function as an attention device to an area where Ellen is not expert. However, this excerpt (Table 5.3), along with the ones that follow, and others throughout the data, revealed that when Ellen's students indexed certain portions of Méxicano culture, language, and nationality, these literacies were not always taken up.

In the following excerpt (Table 5.3), Ellen is working in the ESOL classroom with her students as they compose reports during that month's ongoing Hispanic Heritage Celebration. Students in the class were assigned famous Hispanic figures to research, compose a report about, and post online. Some of these figures included Jaime Escalante, Pam Muñoz Ryan, Roberto Clemente, and Juan Seguín. As Ellen is helping a group of students, she comes across the term 'Chicano' and this initiates an interaction with her students that reveals some of the underlying tensions around the naming of cultural, national, and ethnic identity.

Table 5.3

Part Gringo, Part Mexican

Participant	**Linguistic Utterance**	**Gesture**	**Gaze**	**Digital Image**
Ellen:	1 (3.0)that's 2 California 3 term (5.0) 4 have you 5 heard (1.0) 6 people 7 being 8 called 9 chicano 10 much (1.0) 11 in 12 georgia?	sits in back of room near students	looks at students when she poses question	
Chuy:	13 ye[a::			

Enrique:	14 [yea::::			
Ellen:	12 =[it's 13 pretty 14 much a 15 california 16 term (.) 17 so how do 18 y- what do 19 mexican 20 people 21 think a 22 chicano 23 is?		looks down at paper	
Chuy:	24 (2.0) part 25 gringo and 26 part 27 mexican			
Domingo:	28 [gringos			
Ellen:	29 [pa:rt 30 ameri:ca:n 31 and part 32 yeah	nods head in a beat gesture towards chuy		
Chuy:	33 I'm part 34 gringo and 35 part eh 36 mexican			

Ellen:	37 we- (1.0) 38 well and 39 you know 40 you live 41 here long 42 enough 43 that (1.0) 44 you end up 45 being 46 just that↑ 47 okay↑ 48 you're all 49 set		looks back down at paper	

In the first turn in the interaction, Ellen identifies the term 'Chicano', classifies it as a Californian term, but asks students if they have heard the term used much in Georgia (1-12). Students respond with enthusiasm indicating that they have heard the term used in Georgia (13-14). However, using CA we can see that Ellen quickly attempts to take back the floor through interruption (12) and reiterates that it is a Californian term even though it is clear her Georgia students know it well.

In the next adjacency pairing (17-28), Chuy defines Chicano using the Hispanic/Latino slang 'gringo' and the national term Mexican (24-27). His terminology reveals that he indexes Chicano as a blend of a cultural (gringo) and national (Mexican) identity. Domingo echoes Chuy's talk of 'gringos' (28) giving added emphasis to Chuy's assertion. Ellen shows in her next utterance (29-32) that she has taken up the cultural slang gringo as 'American' (also a cultural identity) but does not repeat the term Mexican, stating rather, "and part yeah" (32) but she shows vigorous attentiveness to Chuy's talk by using the beat gesture (McNeill, 1992; Norris, 2004) of a repeated nod of her head that signals her encouragement of his utterance. Norris (2004) posits that head beats, which she defines as quick up/down or back/forth movements, are iconic in Western culture as they indicate yes/no in face-to-face interaction. In

addition, head beats that are prolonged and repetitive without moving back to a resting position reveal a stronger message (Norris, 2004) such as "yes, go on."

From this point in the interaction Chuy completes his utterance revealing his identification as a person who is Chicano (33-36). Ellen then closes down the interaction by completing the head beat and looking down at her desk which ends eye contact with Chuy, as well as her final linguistic utterance that with enough time "you end up being just that" (37-49) which serves to shift to a safer course of action by relying upon vague pronouns (*you* in the general sense/*that*) which do not assign identity or culture to anyone specifically.

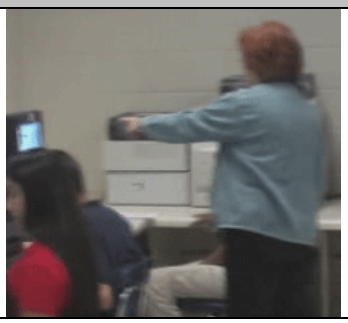
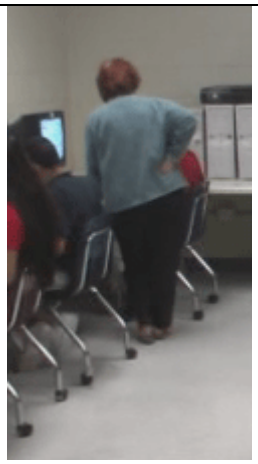
This interaction was typical of the way that culture and national identity was taken up in this classroom. These terms, Chicano, Gringo, Mexican, American, can be socially and politically intense terms and their use in classroom talk was often truncated even as Ellen attempted to take up student responses and students showed enthusiasm regarding talk about these topics. It is possible, given this and other evidence in the data, that the school's strong American Patriotic theme, while avoiding viewing anyone as 'different', also made talk about culture and identity more difficult.

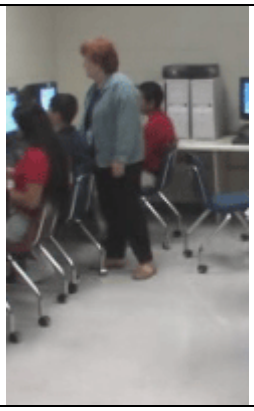
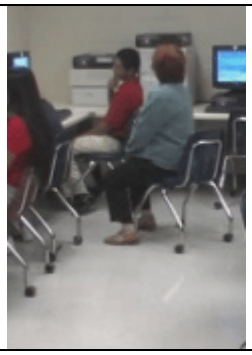
In this final excerpt (5.4), the underlying tensions of culture and social class emerge as Ellen interacts with two students during their online writing assignment. Using CA and MMA, the following representative example shows one instance of these tensions and how they were negotiated by participants as they begin their online writing by introducing themselves to one another by posting "two truths and a lie" on an electronic bulletin board in WebCT. The two students in this excerpt, Enrique and Roberto, had already chosen their online monikers which represented the identities that wanted to be associated with online. Enrique chose *Lowrider Boy* and Roberto, unable to decide, allowed Ellen to choose his moniker, *Hooper*, as he seemed to

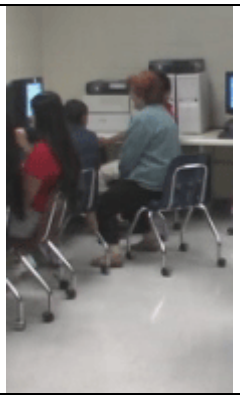
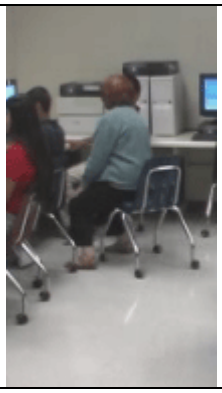
enjoy basketball a great deal. The truth/lie statements gave students the most freedom they would enjoy during the entire project regarding how they wished to write and represent themselves in an ICT setting. In this excerpt, Ellen and her students are in the computer lab composing their truth/lie statements. Roberto is sitting at his computer and has composed this sentence: "I am very rich and have an elevator in my house". Ellen initiates the interaction by reviewing Roberto's online "lie" that he is "rich" with the evaluative statement that this is "good" (1) urging him to add more information.

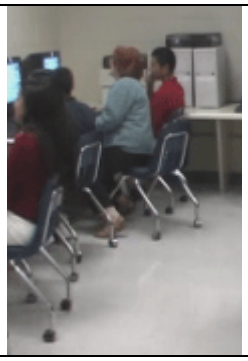
Table 5.4

Low rider

Speaker	Utterance	Gesture/ Proxemics	Gaze	Image
Ellen	1 that's a good 2 one okay add 3 a little bit 4 more than I 5 am rich	points to screen	looks at compute r screen	
Roberto	6 okay			
Ellen	7 how would 8 somebody 9 know that 10 you're 11 rich? (5.0) 12 how would 13 somebody 14 know by 15 looking at 16 you↑ or 17 seeing you 18 (1.0)how 19 would they 20 know you're 21 rich?	right hand on right hip and left foot resting on top of right foot left hand rests on computer table		
Roberto	22 (6.0) I 23 don't know			

Ellen	24 yes you do 25 otherwise 26 you wouldn't 27 put that↓ 28 (4.0)what's 29 one way 30 you could 31 tell if 32 somebody 33 was rich?	moves to get a chair to sit down by roberto		
Enrique	35 (3.0)( )		looks at ellen	
Ellen	36 but you you 37 are that 38 right↑	stands next to enrique	looks at compute r screen	
Enrique	39 no oh yeah I 40 am			
Ellen	41 so you can't 42 be th[at		looks at enrique	
Enrique	43 [oh yeah			
Ellen	44(6.0) how 45 could 46 you tell if 47 somebody was 48 rich? (15.0) 49 could you 50 tell by 51 their car	sits in chair next to roberto		
Roberto		nods his head		
Ellen	52 okay what 53 kind of car 54 do rich 55 people 56 drive?			
Roberto	57 (3.0) ( )			
Ellen	58 huh↑			

Roberto	59 lamborghini			
Ellen:	60 I don't know 61 how to spell 62 that 63((laughs))			
Roberto	64 ((laughs))			
Enrique	65 [you don't 66 know to 67 spell what?	moves close to ellen as he speaks		
Ellen	68 [((laughs))			
Roberto	69 ( )			
Enrique	70 huh↑			
Roberto	71 lamborghini			
Ellen	71 [but you're			
Enrique	72 [( )			
Ellen	73 but you're 74 on the 75 right track 76 (3.0)okay	puts her face close to roberto's		
Enrique	77 =[I know how 78 to spell it			
Ellen	79 I know how 80 to spell 81 porshe			
Enrique	82 (2.0) I know 83 how to spell 84 impala 85 (1.0)you 86 like 87 impal[as?			

Ellen	88 [impala is 89 not a rich 90 person's car	turns towards enrique and lifts left hand in a small gesture as she says impala shakes head in 'no' gesture	looks at enrique	
Roberto	91 heh heh			
Enrique	92 yes it is			
Ellen	93 no it's no:t			
Enrique	94 lowriders 95 ((short 96 breathy 97 laugh)) 98 lowriders 99 are			
Ellen	100 (1.0) but 101 we're not 102 talkin 103 about 104 that we're 105 [talkin 106 about 107 a rich 108 person			
Roberto	109 [((laughs))			
Enrique	110 miss you 111 like 112 lowriders?			
Ellen	113(3.0) 114 yep((spoken 115 very very 116 softly 117 in a 118 whisper))	leans body far over towards roberto and away from enrique	looks intently at roberto's computer screen	

The interaction begins with Ellen and Roberto's initial talk about his 'lie' statement that indicates that he is rich. Ellen takes up this online utterance (1-5) and urges him to expand upon the idea. From a multimodal perspective she uses the deictic gesture of pointing to further indicate that Roberto should continue developing this theme. Roberto's 'okay' (6) however, does not convince Ellen that he can adequately expand upon this topic and she begins a questioning sequence (7-21) and adopts a waiting posture while standing over Roberto. This however, does not produce further linguistic utterances from Roberto but rather an attempt on his part to terminate the sequence (22). It is possible that Ellen's mode of standing over Roberto with her hand on her hip, in close proxemics to him, sends a semiotic message of pressure to Roberto that he must answer for himself rather than a cooperative writing stance which Ellen adopts later (36). Enrique interrupts Roberto and Ellen's talk (35) and Ellen shifts her attention to Enrique (41) but resumes talk with Roberto in the next sequence (44).

Ellen takes up her line of question regarding "rich" people (48) but at this point in the interaction she lowers herself in a chair and sits next to Roberto taking a more cooperative stance in negotiating the topic. When Roberto is still not forth coming with an adequate response, but only a nod of his head, Ellen's questions become more pointed and leading in a stronger attempt to help scaffold Roberto into writing specific things that will further his claim of being rich (48). Roberto takes this up with his response about Lamborghini's (59) and this leads to a brief segment of laughter which incites Enrique to join in their discussion. Ellen does not respond to Enrique although Roberto does (69). Ellen further encourages Roberto (73-76) in his choices here with Enrique continuing to vie for the floor (77) which Ellen does not grant him although she indirectly cites his comment in hers (79-81). This leads to the Impala/Low-rider sequence of the interaction.

In this sequence, Enrique asks Ellen (82-87) if she likes Impalas but Ellen's response indexes that she is orienting to an Impala as it relates to her discussion with Roberto about cars that rich people would drive (88). This leads to a short argument structure, a "verbal duel" (McDowell, 1985) in which Enrique successfully appropriates Ellen's attention from Roberto as he bandies back and forth with Ellen. Ellen uses the mode of gesture at this time (88) to also heighten her stance regarding Enrique's choice of cars in relation to Roberto's online message. Enrique then indexes Low riders (94) that Ellen refuses to name referring to them as 'that' (104) which serves several purposes in this interaction.

First, by referring to Enrique's topic of low riders through the deictic 'that', Ellen is refusing to take up his utterance as a topic option in their interaction. If she had said, "we are not going to talk about low riders" she would have effectively spoken about them, which possibly could have acted to open the topic of low riders up between herself and Enrique. This is an important analytic point because by referring to low riders as 'that' she is refusing to name them which serves as a sort of twice studded negation depersonalizing low riders as an insignificant topic to the interaction.

Second, Ellen's deployment of the deictic term 'that' instructs the "hearer to attend to something beyond the talk itself" (Goodwin, 2003, p.7). The deictic 'that' in this interaction points toward a referent that lies outside the participant's immediate environment. An abstracted referent has now been indexed but what 'that' means for each participant is quite different. For Ellen, the deictic 'that' is employed to semiotically indicate that low riders are not indicative of wealth (107). Enrique continues to pursue Ellen at this point in the sequence (110) forcing her to answer whether or not she likes low riders. Her extremely soft and slow response negates her affirmation (113-118).

Through this particular example, the lifeworlds and ecologies of students and teacher are made visible. While previous interactions around named identity and cultural knowledge avoided negotiation of these constructs (Table 6.2), it is now brought to the fore through the online composition process as students must pass their online meanings through Ellen's lens first. Each student, Enrique and Roberto, has chosen very different avenues with which to orient their online identities. Roberto has taken up dominant culture ideology and one that Ellen can readily respond to as it reflects her own lifeworld knowledge and the ecologies that she inhabits on a daily basis. However, in indexing low riders and low riding, Enrique has indexed a cultural artifact that represents his own ecologies and literacies yet represents something far different to his teacher.

In this instance, Enrique is attempting to bring into play cultural artifacts, Impalas and low riders, which are signification of wealth and cultural power in Méxicano culture. Low riders are cars that have been modified with aesthetic principles in mind so that they are "identified with a certain social context and memory which privileges Mexican American, working class, barrio knowledge" (Chapell, 2003). Through Enrique's indexing of low riders and Ellen's 'that' we can speculate that there are two separate ecologies at work in this interaction. Although Ellen refuses to name 'low rider' due to her stated position that Impalas are not what rich people drive, low riders actually require substantial amounts of money and time to create and maintain; to drive a low rider is a Chicano symbol of wealth and masculine identity (Plescencia, 1983). However, Plascencia (1983) also points out that for some, low riding represents an "antisocial, gang-related, drug-promoting, crime-inducing, degenerative, self-indulgent, gaudy, and wasteful activity" (p.141) even as it can also offer an antithetical position whereby low riders and low riding represent "conscious rebellion against middle class ideology, a positive cultural assertion

and identity, and an activity that will reduce the level of crime and gang fights and thus prepare the path for a lasting peace and brotherhood in the barrios" (p.141).

In addition, low riders and low riding in the Southwestern United States "are predominantly associated with individuals of Mexican descent" (Plascencia, 1983, p.142) and index working-class Mexican youth (Plascencia, 1983). Thus by invoking the term low rider in his interaction with Ellen, Enrique is invoking a symbol of Méxicano youth, membership, prestige, and masculine power even as it evokes an uncomfortable response from his teacher who might only be informed about low riders from mass media images that invoke stereotypical images of low riding as gang related (Plascencia, 1983).

It would be easy to view Enrique as a sort of "social dupe" (Psathas, 1995, p. 34) from this point of the analysis but his breathy laugh (95) between saying Low rider twice (94-98) indexes the humor he sees in the situation. Enrique continues to bait Ellen a bit with his direct question (110) and heightens his possible manipulation with a polite 'miss' at the beginning of his question which also serves to make sure that his question is meant only for Ellen and no one else which makes it harder for her to dodge. Ultimately, Ellen completes the adjacency pairing preserving the surface social order of this exchange but her incredibly soft affirmative response of 'yep' (114) and her shift in modes of gesture and gaze away from Enrique negate her affirmative linguistic utterance. Goodwin posits that "within interaction the body is a dynamic, temporally unfolding field that displays a reflexive stance toward other coparticipants, the current talk, and the actions in progress" (2003, p. 9). Ellen's shifting of her body to almost extend over Roberto's keyboard and away from Enrique shows a strong emphasis on where her attention has shifted, which is back to Roberto and her interaction with him. By adopting this postural configuration Ellen is indicating that the locus of her activity framework (Goodwin,

2003) is now on Roberto. Given how hard Enrique has campaigned for Ellen's attention, effectively pushing Roberto out of the talk completely, Ellen's shift in gaze and proxemics is an important indicator to Enrique that his turn at talk is over.

Discussion

Interactions such as these reveal the complex social, cultural, and socioeconomic issues at play in classroom multiliteracies activities. Speculating from an ecological perspective, we can see that the school ecology has privileged an assimilationist perspective wherein there are not multiple distinct cultures, languages, and histories at work, but rather a unifying account of students as patriots. This perspective creates a cultural ethos in the school wherein differences are not named. This is echoed in the school's choice of the Hispanic Heritage materials that position Hispanic culture, ethnicity, and familial ties as heritage, or in the *past*. Moreover, the choice of Hispanic figures such as Roberto Clemente and Juan Seguín begs the questions, who are these figures to modern day Latino adolescents? Given the Latino explosion in the entertainment industry alone over the last five years, far more successful and relevant figures could be named and in doing so, provide models of cultural, linguistic, and ethnic significance for students.

These choices on the part of the school and administration create and ecological constraint on Ellen's choices, leaving her with few resources with which to navigate her students' multiple literacies practices and lived experiences as culturally and linguistically diverse people. By this I mean that multiliteracies is more than outward ways of talking about and enacting literacy events in the language classroom, but rather, a semiotic potential that lives within each student; resources that they draw upon in navigating and reshaping social interactions.

Theorizing from an *ecosemiotic* perspective, for a teacher trained in teacher-led pedagogy, when students begin to introduce their lived experiences and ecologies into social interactions, it brings to the fore the boundaries of the teacher's knowledge in these areas and if the teacher is going to maintain a teacher-fronted classroom, this talk must be shut down. By indexing low riders, Enrique has placed Ellen in a complex position as low riding is an index of Méxicano masculine culture and is often erroneously identified among white, middle class Western culture as blue collar and gang related (Chappell, 2000). Given the stance of the school administration on gang related *anything*, Enrique's indexing of low rider initiates his insider knowledge of an ecology that he knows and can expound upon with some authority. However, in doing so he has shifted the topic to dangerous waters as low riding carries with it a loaded backdrop of culture, class, and socioeconomic perspectives that Ellen cannot speak to and possibly may feel unable to manage given Enrique's backstory of potential gang involvement and the school's stance and fear in regard to gang membership.

Halliday (1978) has argued that language mediates culture, whereby teachers, in using the target language, are modeling societal and cultural norms, beliefs, and values. Cultural and class transmission is occurring in this interchange between Ellen and her students. As their separate ecologies collide, they are also meeting institutional boundaries about what constitutes acceptable academic topics and literacies practices. Writing online to improve academic writing is 'good' by institutional standards, but initiating talk that would invoke students' lived experiences and home-life ecologies, especially where these highlight the teachers lack of knowledge, or ecologies the school does not approve of, is problematic and thus shut down.

Implications for Pedagogy and Research

The excerpts offered in this article represent regular and consistent patterns of interaction around issues of culture, nationality, and membership that emerged during the classroom interactions between Ellen and her students. By using a microanalytic perspective, and framing these excerpts from an ecological and social semiotic framework, we can see important pedagogical and research implications.

The pedagogical implications indicate that more intentional framing of a culturally and linguistically inclusive TESOL pedagogy would benefit Ellen and her students. However, given the larger school ecology, Ellen is heavily constrained by what she, as a recognizable institutional authority, can allow to circulate as knowledge in her classroom. I speculate that Ellen, and other TESOL educators, would benefit from reframing student literacies as important aspects of *semiosis* that exist as powerful and vital resources for meaning-making and learning in student's lives. Rather than shutting down student talk that shifts her from a central position of power, Ellen would benefit from taking up her student's knowledge about their lives and endorsing their lived experiences so that they can use the literacies they already possess to leverage the technological and academic literacies that they seek to gain.

From a research perspective, careful explication of classroom interactions, such as the methods of CA and MMA used in this study, help to provide a nuanced and powerful view of how student beliefs about their role in the classroom, their school, and the world are brought into existence through interactions such as the ones illustrated in this article. Microanalytic perspectives on student and teacher talk-in-interaction, including how gesture, gaze, and proxemics situate people in negotiations around meaning, would heavily benefit second language

and TESOL research by revealing the often hidden ways that students' claimed identities are downgraded within classroom interactions.

Conclusion

The larger issue here is, who controls the flow of language? What topics are allowed and where do students go when routes or avenues of communication have been cut off? How do students respond when their funds of knowledge (Moll et al., 2001), located in cultural and linguistic ways of knowing, are made taboo? Angélica's narrative is privileged within the classroom interaction because she frames her Méxicano affiliation within normative practices of the dominant culture (e.g. shopping, attending a party, going to the movies with friends). Angélica's narrative also allows Ellen to maintain her position as teacher, one who instructs about misspelled words and grammar. However, when Enrique attempts to draw attention to an area of language where Ellen is not the expert, his utterance is not taken up or recognized as a possibly profitable classroom interaction.

Another issue at stake is Roberto. He has chosen a cultural way of enacting identity that is aligned with the dominant culture and institutional and classroom ecological values. He wants to be a scientist when he grows up, he affiliates with academic and technological literacies, is bilingual and uses his Spanish language skill to cooperate with Ellen to the point that she makes him the unofficial classroom liaison between herself and Spanish speaking students. The underlife of the situation goes unnoticed. By that I mean that while Roberto held many multiliteracies practices in his home and school life which made him a leader in Ellen's eyes, in reality, he sometimes used his expertise to mislead students, commit online flaming, and cause online havoc until this was revealed to Ellen by another student midway through the project. Even then, his transgressions were treated as out of the norm and his freedom was not inhibited.

In contrast, Enrique's backstory seemed to follow him through his schooling experience in Myers to the point that his open affiliation with Méxicano culture, language, and semiotic signification were rebuffed, re-routed, and ignored. Semiotic resources that were rich opportunities for aiding him in gaining more experience in using these resources for authentic multiliteracies communication, both online and in face-to-face interactions, were shunted. However, in his online communication, Enrique had more opportunities for negotiation of meaning than Roberto, primarily because he did not flame students, incite tensions, or refuse to respond to other students. Enrique's online writing and facile communication skills provided ample resources and potential for exploiting the affordances of online multiliteracies communication. However, due to his material affiliation with certain aspects of Méxicano culture, many of his efforts were shunned in classroom interactions.

Multiliteracies research within an ecological framework allows us to examine how students' lifeworlds are taken up or discouraged in classroom multiliteracies activities often on the basis of whether or not they fit into a broader cultural ecology in the classroom, institution, or society. The issue now in ecological perspectives on multiliteracies pedagogy is the need to interrogate assumptions about what student affiliations semiotically signal in order to delve more deeply into how literacy events are being shaped by our preconceived notions about students. Multiliteracies inquiry is not just an attempt to link student cultural and linguistic literacies to classroom activities, but rather an opportunity to find the fractures in mundane events that encourage students to engage in multiliteracies from the richness of their often untapped lifeworld ecologies.

CHAPTER SIX

IMPLICATIONS FOR FUTURE RESEARCH AND PEDAGOGY

Summary of the Study

The present study examined five focal participants, one ESOL teacher and four focal ELLs in the process of negotiating the affordances of online writing in the second language of English. The overarching research questions guiding the study were:

(1) How do adolescent Latino/a ELLs negotiate the affordances of an electronic environment?

(2) How do the interactions and metalanguage around online posts affect the L2 composition process?

(3) How are semiotic modes employed to create a cultural ecology in the school?

I adopted a social semiotic and ecological perspective as my theoretical perspectives to understand the phenomenon under inquiry. These theories provided me with specific lenses with which to consider how the work of negotiating identity, cultural transmission, and the affordances available in an electronic environment with transnational Latino/a second language writers. This encompassing perspective allowed me to think in a fresh way about the roles of ESOL teachers and ELLs when ICTs are introduced in the language-learning classroom.

I observed and investigated ELLs and their ESOL teachers at two separate middle schools in the southeastern United States, ultimately focusing my final analysis on one school and the focal participants therein. The methodology employed was a qualitative ethnography. I employed intensity sampling and maximum variation sampling in order to select the focal participants of my study as well as account for students that were not the focus of the ESOL teacher. The six participants consisted of one 59-year-old ESOL teacher, four 12-year-old Latino

ELLs, and one 12-year-old Latina ELL. The data collection methods for the study involved classroom and school site observations, online documents, video and audio recordings, archival data and digital still photos. These methods collectively yielded 56 observations carried out over one year, 175 digital photos, 188 pages of field notes, 419 WebCT online posts, eight semi-structured interviews, and 87 informal interviews. The data collected were analyzed using open coding, multimodal analysis, and conversation analysis. Open coding was employed to review the raw video data in order to locate pertinent sequences for detailed transcription. All interview data were transcribed and analyzed using conversation analysis methods. Video data were analyzed using conversation analysis and multimodal analysis in order to answer the research questions.

Findings derived from the conceptual analysis indicate that the ESOL teacher re-enacted traditional IRE classroom interaction sequences to order the negotiations with students regarding the online questions that students posed and answered. Specifically, the results of the conceptual analysis revealed three major themes: (1) the focal school used semiotic resources in a multimodal fashion in order to influence student ideological beliefs about membership, patriotism, and nationality, (2) the use of gesture in the ESOL classroom evolved as participants began online writing, shifting from iconic to metaphoric gestures, as abstract ideas and concepts emerged during online writing. The online writing also revealing underlying cultural and linguist tensions between school and teacher sanctioned ways of being a student and student lifeworlds, and (3) focal student multiliteracies were taken up in accordance with their affiliation with school and ESOL classroom dominant ideology.

Pedagogical Implications

The present study explicates how "hidden premises" are employed through semiotic means in order for cultural transmission of notions of patriotism, membership, and nation-state orientation. This study also examines how the school ecology produced a hegemonic stance that was reproduced in talk-in-interaction between teacher and students. Given the transnational orientation of many ELLs in U.S. public schools today, tacit ideological assumptions regarding an assimilationist stance toward students should be reassessed in light of evidence from this study that such notions contribute to a narrow interpretation of what constitutes acceptable multiliteracies on the part of students. This study provides ample evidence that ESOL teachers are often caught between students' expressed identity positions and institutionally sanctioned views on what language, symbols, and affiliation ELLs may draw upon inside school walls.

Drawing from social semiotic and ecological theory it is apparent that micro-instances of negotiation around issues of culture and identity need to be reframed so that both teachers and students can express affiliation and loyalty to multiple identities without repercussions that reduce opportunities not just for language learning, but for individual freedom and personal growth. By viewing teachers and students as *semioticians*, we have a better framework with which to view students and teachers as practiced sign makers, with the necessary agency to transform space and time with their own sign making. In this way, in instances where students emerge as *master* and teacher as *novice*, the choreography of learning shifts and in doing so offers all participants affordances for learning.

The pedagogical implications from such a stance would seem to indicate that language teachers should be encouraged to view themselves as teachers of *semiosis (*Kist, 2005*).* I speculate that teachers need explicit instruction in semiosis, which would help them to take up

sign making in the classroom as a co-learner, rather than one who is being edged from power. If teachers are taught that to be a 'teacher of semiosis' means that knowledge in a globalized world is always in flux, shifting throughout interactions, rather than a stable, known entity that must be handed down to future generations in a structural manner, it helps to reshape the roles that teachers, and students, feel they must preserve at the cost of genuine opportunities to be co-constructors of knowledge. Viewing pedagogy from this perspective in the language learning classroom could also reshape how teachers acknowledge student signification systems that emerge in the classroom; treating these significations as viable and vital to constructing meaning making.

Secondly, framing pedagogy from what I refer to as an *ecosemiotic* perspective also frames technology (ICTs, CMC, CALL) in the proper perspective for language learning, conceptualizing it as a tool to mediate comprehension and power in sign making, rather than a deterministic approach to technology where teachers and students are servants of the machine. A view of teachers and students as semioticians also helps all parties to draw upon their own expertise as sign makers in everyday life, cross institutional boundaries, and implement technology use in authentic ways that enhance sign making capabilities rather than approaching them as separate 'skills' that must be mastered to attain 'multiliterate' status.

Thirdly, viewing teachers and students as semioticians can also serve to dismantle dichotomies of Western traditions of knowledge in the ESOL classroom, identifying and honoring traditions from students' ecological lifeworlds without objectifying, essentializing, or stereotyping them, but rather taking them up as relevant, vital, and powerful signification that students use to navigate everyday life. In the present study one student consistently indexes low rider culture revealing that this signification is one way that he navigates his own identity within

the larger U.S. mainstream culture. But due to stereotypes about what that identity signifies, his sign making is shunted and blocked from being included as viable academic discourse. This only serves to quiet him and disquiet the teacher, both participants now struggling to find common ground with which to navigate online writing about this topic.

As Rymes (2004) has pointed out, we need a more nuanced perspective of classroom learning and a pedagogical stance that seeks to locate learning in student ways of making sense of the world and their lived expertise as practiced sign-makers. Given that so much of current culture in the United States is oriented towards the youth in our society, it is not surprising that adolescents arrive in schools with an emic understanding of technocultural paradigms. What is surprising is that this understanding and practice at sign-making, vital for navigating the social and cultural world students inhabit and re-create, goes untapped as a viable resource for academic learning.

Research Implications

In the present study, an ecosemiotic perspective provides the lens through which to understand how an ESOL teacher and her ELL students go about negotiating meaning making through different semiotic lenses. An ecosemiotic perspective reveals the deep embeddedness of traditional classroom sequences and institutional ways of 'doing school' such that when ICTs enter the educational fray, they emphasize the multimodal nature of modern writing and composition and de-emphasize the role of the teacher as all-knowing, yet without relieving her of institutional expectations that she *will be* all-knowing. This is problematic as language education teachers are frequently trained in IRE sequences (Mehan, 1987) and traditional written text L2 composition. To suddenly require a shift from that approach to a better suited model is complex and requires more research to find a broader range of how multiliteracies work is being

approached with Latino/a ELLs and how this designer knowledge is utilized after secondary school and in institutions of higher education and the workplace.

It was clear a decade ago, as cited in work by both The New London Group (1996) and Gee, Hull, & Lankshear (1996), that the global marketplace was changing and with these changes bringing new ways of imagining how work will be accomplished (Friedman, 2007). Current technological, educational, academic, pedagogical, medical, and corporate arenas, to name just a few areas of societal work, are based upon project- based, team-oriented approaches to meeting stated goals. Friedman (2007) argues that while much of the working population is spread globally, the highly technology-based communication and organization methods provide a framework for work that is project-based and team-oriented. Workers are expected to *enter* the job market with theses skills and have the flexibility to shift from various roles within the organization with little training (Gee, Hull, & Lankshear, 1996). However, this reality is only slowly coming to bear upon U.S. schooling (Kist, 2005) where project-based, team oriented approaches are replicated in the classroom to capitalize upon student knowledge while preparing them on multiple levels for the educational and work demands they will someday face.

For instance, while sociocultural notions of teaching and learning in the language classroom (Lantolf, 2000) clearly explicate the need for peer-to-peer interactions that can help scaffold student learning (van Lier, 2004), current research reveals that this is not privileged, even in project-based class work (Erstad, Gilje, & de Lange, 2007) where peer-to-peer negotiations are crucial to a successful project outcome (Kist, 2005).

Therefore a task for the educational researcher is to endeavor to more fully explicate the 'how' of multiliteracies, employing language and definitions that teachers and students can utilize in the service of their own learning. By doing so, we can begin to remove the hazy

understanding of multiliteracies that some hold, and replace this with ecologically generated knowledge about the extent of the literacies available as resources to students and teachers in classroom interactions. In that vein, more ethnographic research is needed that follows Latino/a ELLs from high school into broader educational and workplace arenas to investigate how current schooling methods are preparing these students for the demands of the 21st century. Research following new immigrant Latino/a ELLs from middle school to high school would also shed much needed light on the relationships between technology and academic demands from middle school to high school for these students.

In addition, current research on ICTs and L2 writing focuses extensively on adult and college level writers with only a narrow and thin focus on adolescent ELLs (Harklau & Pinnow, 2008). Much of this work focuses on identity and East Asian ELLs (Black, 2005; Lam, 2000, 2002) who are already identified as having the *most* access (Fairlie, 2005), both in and out of school, and therefore an easier research population with which to locate successful findings. Within adolescent ICTs and L2 research, Latino/a students make up a small percentage of the research agenda, even as their numbers are growing mercurially within the United States.

It has also been noted that much ICT and CMC research focuses only on successful outcomes (Salaberry, 2003), which is possible one reason that so little research on ICTs and adolescent ELLs finds its way into publication. However, we have as much to learn from what does not work, as from work that is deemed successful by editorial reviewers.

In closing, my argument is that we need a new framework with which to explore research with Latino/a ELLs and ICTs in public school classrooms in order to shift the burden of all leadership and meaning-making from the teacher to all members of a learning community. By adopting an *ecosemiotic* perspective of sign-making in the ELL classroom, we can begin to

explore the ways that student knowledge and agency can be exploited in the fullest sense of the term in all facets of school-based learning. At present, most ELL research relies upon a sociocultural perspective, with only a few studies employing an ecological approach to ELLs' literacies practices. Even fewer studies have situated the ESOL classroom within a social semiotic perspective. Social semiotics, along with the tools of systemic functional linguistics, offers a fresh and insightful framework with which to situate classroom-based second language inquiry as they provide the theoretical perspective and analytic tools for identifying, examining, and carefully explicating how semiosis occurs and the subtle opportunities for language learning that are often overlooked within traditional ethnographic frameworks. This leaves much room for fresh research employing ICTs with ELLs in order to build upon student cultural capital while seeking to more fully explicate how the work of multiliteracies gets done.

Final Remarks

This dissertation provides an insight into how ecological theory and a social semiotic perspective can provide a fresh view of how ideologies are transmitted in schools, how transnational Latino/a ELLs negotiate meaning making in online forums as novice writers and technology users, and how the work of multiliteracies gets done with Latino/a adolescent ELLs. By positing an *ecosemiotic* perspective on learning and ICTs, this study argues that this perspective would legitimize multiple ways of building knowledge in the classroom, draw from students' lived experiences in the world as practiced sign-makers managing multiple ecologies, and re-position the ESOL teacher as one who can easily and legitimately shift between roles as leader and co-learner.

Adolescent Latino/a ELLs are coming of age in a digital world and as such have native or insider understanding of many of the signification systems at work in the modern world. Much

research is needed in examining how Latino/a students, as transnational people, are taking up technologies in modern day society, how this is preparing them for institutions of higher education and the marketplace, and how their experience as practiced sign-makers in modern life can be leveraged for future success.

BIBLIOGRAPHY

Ahmed, K., Corbett, G., Rogers, M., & Sussex, R. (1985). *Computers, language learning and language teaching*. London: Cambridge University Press.

Althusser, L. (1999). Ideology and ideological state apparatuses: Notes towards an investigation. In J. Evans & S. Hall (Eds.), *Visual culture: The reader* (pp. 317-323). London: SAGE Publications.

Anderson, B. (1991). *Imagined communities: Reflections on the origins and spread of nationalism* (2nd ed.). London: Verso.

Anderson, E. (1964). Review and criticism. *Modern Language Journal, 48*(4), 197-206.

Attewell, P. (2001). The first and second digital divide. *Sociology of Education, 74*(3), 252-259.

Baker, C. (1992). Description and analysis in classroom talk and interaction. *Journal of Classroom Interaction, 27*(2), 9-14.

Baker, C. (1997). Ethnomethodological studies of talk in educational settings. In B. Davies & D. Corson (Eds.), *Encyclopedia of Language and Education* (Vol. 3: Oral Discourse and Education, pp. 43-52). Netherlands: Kluwer Academic Publishers.

Baker, C., & Keogh, J. (1995). Accounting for achievement in parent-teacher inteviews. *Human Studies, 18*, 263-300.

Baker, C. D. (1997). Transcription and presentation in literacy research. In J. Flood, S. B. Heath & D. Lapp (Eds.), *Handbook of research on teaching literacy through the communicative and visual arts* (pp. 110-120). New York: Prentice Hall.

Baldry, A., & Thibault, P. J. (2006). *Multimodal transcription and text analysis: A multimodal toolkit and coursebook with associated on-line course*. London: Equinox.

Barton, A., Drake, C., Perez, J. G., St. Louis, K., & George, M. (2004). Ecologies of parental engagement in urban education. *Educational researcher, 33*(4), 3-12.

Barton, D. (2007). *Literacy: An introduction to the ecology of written language* (2nd ed.). Malden, MA: Blackwell Pub.

Barton, D., Hamilton, M., & Ivanic, R. (Eds.). (2000). *Situated literacies: Reading and writing in context*. London: Routledge.

Bateson, G. (1972). *Steps to an ecology of mind: Collected essays in anthropology, psychiatry, evolution, and epistemology*. San Francisco, CA: Chandler Pub. Co.

Bax, S. (2003). CALL-past, present, and future. *System, 31*(1), 13-28.

Beauvois, M. (1992). Computer-assisted classroom discussion in the foreign language classroom: Conversation in slow motion. *Foreign Language Annals, 25*(1), 455-464.

Beauvois, M. (1998). Conversations in slow motion: Computer-mediated communication in the foreign language classroom. *Canadian Modern Language Review, 54*(2), 198-217.

Berk, L. E. (2000). *Child Development* (5th ed.). Boston: Allyn and Bacon.

Black, R. (2007). Fanfiction writing and the construction of space. *E-learning*, *4*(4), 384-397. Retrieved April 1, 2008, from http://dx.doi.org/10.2304/elea.2007.4.4.384

Black, R. (2005). Access and affiliation: The literacy and composition practices of English language learners in an online fanfiction community. *Journal of Adolescent & Adult Literacy, 49*(2), 118-128.

Blake, R. (2000). Computer mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology, 4*(1), 120-136.

Bolden, G. B. (2003). Multiple modalities in collaborative turn sequences. *Gesture, 3*(2), 187-212.

Bourne, J., & Jewitt, C. (2003). Orchestrating debate: A multimodal analysis of classroom interaction. *Reading: Literacy and Language, 37*(2), 64-72.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1989). Ecological systems theory. *Annals of Child Development, 6*, 187-249.

Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks: Sage Publications.

Brown, E. R., & Saltman, K. J. (2005). *The critical middle school reader*. New York: Routledge.

Bruna, K. R. (2007). Traveling tags: The informal literacies of Mexican newcomers in and out of the classroom. *Linguistics and Education, 18*(3-4), 232-257.

Cammarota, J. (2004). The gendered and racialized pathways of Latina and Latino youth: Different struggles, different resistances in the urban context. *Anthropology & Education Quarterly, 35*(1), 53-74.

Carlsen, W. S. (1992). Closing down the conversation: Discouraging student talk on unfamiliar science content. *Journal of Classroom Interaction, 27*(2), 15-21.

Chapell, B. (2003). What youth culture? Race, rubric, and the identified performance. *Politics and Culture*, *2*. Retrieved April 4, 2008, from http://aspen.conncoll.edu/politicsandculture/page.cfm?key=225

Chapelle, C. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.

Chapelle, C., & Jamieson, J. (1986). Computer-assisted language learning as a predictor of success in acquiring English as a second language *TESOL Quarterly, 20*(1), 27-46.

Charmaz, K. (Ed.). (2000). *Grounded theory: Objectivist and constructivist methods* (2nd ed.). Thousand Oaks, CA: SAGE.

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton.

Christie, F. (1999). Genre theory and ESL teaching: A systemic functional perspective. *TESOL Quarterly, 33*(4), 759-763.

Coniam, D., & Wong, R. (2004). Internet Relay Chat as a tool in the autonomous development of ESL learners' English language ability: An exploratory study. *System, 32*(3), 321-335.

Cope, B., & Kalantzis, M. (Eds.). (2000). *Multiliteracies: Literacy learning and the design of social futures*. London: Routledge.

Crews, C. (2000, February 8). Technology program works to close 'digital divide'. *Philadelphia Tribune,* p. 6G.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage.

D'Andrade, R. G., & Strauss, C. (1992). *Human motives and cultural models*. New York: Cambridge University Press.

Davidson, J. (1984). Subsequent versions of invitations, offers, requests, and proposals dealing with potential or actual rejection. In J. M. Atkinson & K. Heritage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 102-128). Cambridge: Cambridge University Press.

Del-Castillo, H., García-Varela, A. B., & Lacasa, P. (2003). Literacies through media: Identity and discourse in the process of constructing a web site. *International Journal of Educational Research*, *39*(8), 885-891. Retrieved March 3, 2006, from doi:10.1016/j.ijer.2004.11.010

Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: The New Press.

DeWalt, K. M., & DeWalt, B. R. (2002). *Participant observation: A guide for fieldworkers*. Walnut Creek, CA: AltaMira Press.

Drew, P. (2005). Conversation analysis. In K. L. Fitch & R. E. Sanders (Eds.), *Handbook of language and social interaction* (pp. 71-102). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Drew, P., & Heritage, J. (1992). Analyzing talk at work: An introduction. In P. Drew & J. Heritage (Eds.), *Talk at work: Interaction in institutional settings* (pp. 3-65). Cambridge: Cambridge University Press.

Eggins, S. (1994). *An introduction to systemic functional linguistics*. London: Pinter Publishers.

El Guindi, F. (2004). *Visual anthropology: Essential method and theory*. Walnut Creek, CA: AltaMira Press.

Emerson, R., Fritz, R., & Shaw, L. (1995). *Writing ethnographic fieldnotes*. Chicago: University of Chicago Press.

Erstad, O., Gilje, Ø., & de Lange, T. (2007). Re-mixing multimodal resources: Multiliteracies and digital production in Norwegian media education. *Learning, Media, and Technology, 32*(2), 183-198.

Evans, J., & Hall, S. (Eds.). (1999). *Visual culture: The reader*. London: SAGE Publications.

Fairclough, N. (1995). *Critical discourse analysis: The critical study of language*. London: Longman.

Fairlie, R. W. (2005). *Are we really a nation online? Ethnic and racial disparities in access to technology and their consequences* Retrieved April 1, 2008, from http://www.civilrights.org/issues/communication/digitaldivide.pdf

Fernández-García, M., & Martínez-Arbelaiz, A. (2002). Negotiation of meaning in nonnative-nonnative speaker synchronous discussions. *CALICO Journal, 19*(2), 279-294.

Fitze, M. (2006). Discourse and participation in ESL in face-to-face and written electronic conferences. *Language Learning & Technology, 10*(1), 67-86.

Flowerdew, L. (2003). A combined corpus and Systemic-functional analysis of the Problem-solution pattern in a student and professional corpus of technical writing. *TESOL Quarterly, 37*(3), 489-511.

Fotos, S., & Browne, C. (2004). *New perspectives on CALL for second language classrooms*. Mahwah, N.J.: L. Erlbaum Associates.

Foucault, M. (1995). *Discipline and punish: The birth of the prison* (2nd Vintage ed.). New York: Vintage Books.

Freiremuth, M. R. (2001). Native speakers or non-native speakers: Who has the floor? Online and face-to-face interaction in culturally mixed small groups. *Computer Assisted Language Learning, 14*(2), 169-199.

Friedman, T. L. (2007). *The world is flat: A brief history of the twenty-first century*. New York, NY: Farrar, Straus and Giroux.

Fry, S. (2002). Latinos in higher education: Many enroll, too few graduate. *Washington, D.C.: Pew Hispanic Center*

Gándara, P., Larson, K. A., Mehan, H., & Rumberger, R. W. (1998). Capturing Latino students in the academic pipeline. Retrieved April 1, 2008, from http://www.ucop.edu/cprc/documents/pipeline.pdf

Garcia-Reid, P., Reid, R. J., & Peterson, A. (2005). School engagement among Latino youth in an urban middle school context: Valuing the role of social support. *Education and Urban Society, 37*(3), 257-275.

Garfinkel, H. (1967). *Studies in ethnomethodology*. Cambridge: Polity Press.

Gates Jr., H. L. (2000, January 12). Black to the future? *Education Week, 19,* 72-74.

Gebhard, M. (1999). Debates in SLA studies: Redefining classroom SLA as an institutional phenomenon. *TESOL Quarterly, 33*(3), 544-557.

Gee, J. P. (2003). *What video games have to teach us about learning and literacy* (1st ed.). New York: Palgrave Macmillan.

Gee, J. P. (2005). *An introduction to discourse analysis: Theory and method* (2nd ed.). New York: Routledge.

Gee, J. P., Hull, G. A., & Lankshear, C. (1996). *The new work order: Behind the language of the new capitalism*. Boulder, CO: Westview Press.

Geertz, C. (1963). The ecological approach in anthropology. In C. Geertz (Ed.), *Agricultural Involution* (pp. 1-11). Los Angeles, CA: University of California Press.

Geertz, C. (1968). The ecological approach in anthropology. In C. Geertz (Ed.), *Agricultural Involution* (pp. 1-11). Los Angeles, CA: University of California Press.

Godwin-Jones, R. (2005). Emerging technologies: Messaging, gaming, peer-to-peer sharing: Language learning strategies & tools for the Millennial generation. *Language Learning & Technology*, *9*(1), 17-22. Retrieved March 1, 2005, from http://llt.msu.edu/vol9num1/emerging/default.html

Goffman, E. (1995). On face-work: An analysis of ritual elements in social interaction. In B. Blount (Ed.), *Language, culture, and society: A book of readings* (2nd ed., pp. 222-247). Long Grove, Ill.: Waveland Press.

Goodwin, C. (1980). Restarts, pauses, and the achievement of a state of mutual gaze at turn-beginning. *Sociological Inquiry, 50*(3-4), 272-302.

Goodwin, C. (2001). Practices of seeing visual analysis: An ethnomethodological approach. In T. van Leeuwen & C. Jewitt (Eds.), *Handbook of Visual Analysis* (pp. 157-182). London: SAGE.

Goodwin, C. (2003). Pointing as situated practice. In S. Kita (Ed.), *Pointing: Where language, culture and cognition meet*. Mahwah, NJ: Lawrence Erlbaum Associates.

Grisham, D. L., & Wolsey, T. D. (2006). Recentering the middle school classroom as a vibrant learning community: Students, literacy, and technology intersect. *Journal of Adolescent & Adult Literacy 49*(8), 648-660.

Gullberg, M. (1998). *Gesture as communication strategy in second language discourse*. Lund, Sweden: Lund University Press.

Hall, E. T. (1990). *The hidden dimension*. New York, N.Y.: Anchor Books.

Hall, S. (1999). Looking and subjectivity: Introduction. In J. Evans & S. Hall (Eds.), *Visual culture: The reader* (pp. 309-314). London: SAGE Publishers.

Halliday, M. A. K. (1978). *Language as a social semiotic: The social interpretation of language and meaning*. Baltimore: University Park Press.

Halliday, M. A. K. (1994). *An introduction to functional grammar*. London: Edward Arnold.

Halliday, M. A. K., & Hasan, R. (1989). *Language, context, and text: Aspects of language in a social-semiotic perspective* (2nd ed.). Oxford: Oxford University Press.

Harklau, L., & Pinnow, R. (2008). Adolescent second-language writing. In P. Smagorinksy & L. Christenbury (Eds.), *Handbook of Adolescent Literacy* (pp. 126-139).

Harrington, M., & Levy, M. (2001). CALL begins with "C": Interaction in computer-mediated language learning. *System, 29*(1), 15-26.

Haugen, E. I. (1972). *The ecology of language: Essays by Einar Haugen*. Stanford, CA: Stanford University Press.

Have, P. (1999). *Doing conversation analysis: A practical guide*. London: Sage Publications.

Have, P. (2001). Applied conversation analysis. In A. McHoul & M. Rapley (Eds.), *How to analyze talk in institutional settings: A casebook of methods* (pp. 1-11). New York: Continuum.

Hawkins, M. R. (2004). Researching English language and literacy development in schools. *Educational Research, 33*(3), 14-25.

Hawkins, M. R. (2005). Becoming a student: Identity work and academic literacies in early schooling. *TESOL Quarterly, 39* (1), 59-82.

He, A. W. (2004). CA for SLA: Arguments from the Chinese language classroom. *The Modern Language Journal, 88*(4), 568-582.

Heap, J. L. (1992). Seeing snubs: An introduction to sequential analysis of classroom interaction. *Journal of Classroom Interaction, 27*(2), 23-28.

Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. New York: Cambridge University Press.

Hegelheimer, V. (2006). Helping ESL writers through a multimodal, corpus-based, online grammar resource. *CALICO Journal, 24*(1), 5-32.

Heritage, J. (2005). Conversation analysis and institutional talk. In K. L. Fitch & R. E. Sanders (Eds.), *Handbook of Language and Social Interaction* (pp. 103-147). London: Lawrence Erlbaum Associates.

Herring, S. C. (1996). *Computer-mediated communication: Linguistic, social and cross-cultural perspectives*. Amsterdam: J. Benjamins.

Higgins, J., & Johns, T. (1984). *Computers in Language Learning*. London: Collins ELT and Addison-Wesley Publishing.

Hiltz, S. R., & Goldman, R. (Eds.). (2005). *Learning together online: Research on asynchronous learning networks*. Mahwah, N.J.: Lawrence Erlbaum Associates.

Hodge, B., & Kress, G. R. (1988). *Social semiotics*. Ithaca, N.Y.: Cornell University Press.

Holland, D. C., & Quinn, N. (1987). *Cultural models in language and thought*. Cambridge: Cambridge University Press.

Hornberger, N. H. (2002). Multilingual language policies and the continua of biliteracy: An ecological approach. *Language Policy, 1*(1), 27-51.

Hornberger, N. H. (Ed.). (2003). *Continua of biliteracy: An ecological framework for educational policy, research, and practice in multilingual settings*. Clevedon, UK: Multilingual Matters.

Hornberger, N. H. (2007). Biliteracy, transnationalism, multimodality, and identity: Trajectories across time and space. *Linguistics and Education, 18*(3-4), 325-334.

Hruby, G. (2001). Sociological, postmodern, and new realism perspectives in social constructionism: Implications for literacy research. *Reading Research Quarterly, 36*(1), 48-62.

Hruby, G. (2002). Social constructivism. In B. Guzzetti (Ed.), *Literacy in America: An encyclopedia of history, theory and practice* (Vol. 2). Santa Barbara, CA: ABC Clio

Hull, G. A., & Katz, M. L. (2006). Crafting an agentive self: Case studies of digital storytelling. *Research in the Teaching of English, 41*(1), 43-81.

Hull, G. A., & Nelson, M. E. (2005). Locating the semiotic power of multimodality. *Written Communication., 22*(2), 224-261.

Jewitt, C. (2006). *Technology, literacy and learning: A multimodal approach*. London: Routledge.

Jewitt, C., & Kress, G. (2003). *Multimodal literacy*. New York: P. Lang.

Jewitt, C., Moss, G., & Cardini, A. (2007). Pace, interactivity and multimodality in teachers' design of texts for interactive whiteboards in the secondary school classroom. *Learning, Media and Technology, 32*(3), 303-317.

Jewitt, C., & Oyama, R. (2001). Visual meaning: A social semiotic approach. In T. van Leeuwen & C. Jewitt (Eds.), *Handbook of Visual Analysis* (pp. 134-156). London: SAGE.

Johns, A. M., Bawarshi, A., Coe, R. M., Hyland, K., Paltridge, B., Reiff, M. J., et al. (2006). Crossing the boundaries of genre studies: Commentaries by experts. *Journal of Second Language Writing, 15*(3), 234-249.

Kang, S., & Dennis, J. R. (1995). The effects of computer-enhanced vocabulary lessons on achievement of ESL grade school children. *Computers in the Schools, 11*(3), 25-35.

Kasper, G. (2006). Beyond repair: Conversation analysis as an approach to SLA. *AILA Review, 19*, 83-99.

Kendon, A. (1988). How gestures can become like words In F. Poyatos (Ed.), *Cross-cultural perspectives in nonverbal communication* (pp. 131-141). Toronto: Hogrefe.

Kendon, A. (1994). *Gesture and understanding in social interaction*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Kern, R. (1995). Restructuring classroom interaction with networked computers: Effects on quantity and characteristics of language production. *Modern Language Journal, 79*(4), 457-476.

Kern, R., & Warschauer, M. (Eds.). (2000). *Online learning in second language classrooms: An ethnographic study*. New York: Cambridge University Press.

Kist, W. (2005). *New literacies in action: Teaching and learning in multiple media*. New York: Teachers College Press.

Kita, S. (2003). *Pointing: Where language, culture, and cognition meet*. Mahwah, N.J.: L. Erlbaum Associates.

Kramsch, C. J. (2002). *Language acquisition and language socialization: Ecological perspectives*. London: Continuum.

Krashen, S. (1979). The monitor model for second language acquisition. In R. Gingras (Ed.), *Second language acquisition and foreign language teaching* (pp. 1-26). Arlington, Va: Center for Applied Linguistics.

Kress, G. (1997). *Before writing: Rethinking the paths to literacy*. New York: Routledge.

Kress, G. (2000). Multimodality: Challenges to thinking about language. *TESOL Quarterly, 34*(2), 337-340.

Kress, G. (2001a). *Multimodal teaching and learning: The rhetorics of the science classroom*. London: Continuum.

Kress, G. (2001b). *Multimodal teaching and learning: The rhetorics of the science classroom*. London: Continuum.

Kress, G. (2003). *Literacy in the new media age*. London: Routledge.

Kress, G., Jewitt, C., Bourne, J., Franks, A., Hardcastle, J., Jones, K., et al. (2005). *English in urban classrooms: A multimodal perspective on teaching and learning*. London: RoutledgeFalmer.

Kress, G., & van Leeuwen, T. (2001). *Multimodal discourse: The modes and media of contemporary communication*. London: Arnold.

Kress, G. R., & van Leeuwen, T. (2003). *Reading images: The grammar of visual design*. London: Routledge.

Lam, E. W. S. (2000). Second language literacy and the design of the self: A case study of a teenager writing on the internet. *TESOL Quarterly, 34*(3), 457-483.

Lam, E. W. S. (2004). Second language learning socialization in a bilingual chat room: Global and local considerations. *Language Learning & Technology*, *8*, 44-65. Retrieved November 13, 2006, from http://llt.msu.edu/vol8num3/lam/default.html

Lankshear, C., & Knobel, M. (2003). *New literacies: Changing knowledge and classroom learning*. New York: Open University Press.

Lantolf, J. P. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 1-26). Oxford: Oxford University Press.

Lazaraton, A. (2004). Gesture and speech in the vocabulary explanations of one ESL teacher: A microanalytic inquiry. *Language Learning, 54*(1), 79-117.

Leather, J., & van Dam, J. (2003). *Ecology of language acquisition* (Vol. 1). Boston: Kluwer Academic Publishers.

Leino, K., Linnakylä, P., & Malin, A. (2004). Finnish students' multiliteracy profiles. *Scandinavian Journal of Educational Research, 48*(3), 251-270.

Lemke, J. (2000). Multimedia literacy demands of the scientific curriculum. *Linguistics and Education, 10*(3), 247-271.

Liaw, M. L. (1997). An analysis of ESL children's verbal interaction during computer book reading. *Computing in the Schools, 13*(3-4), 55-73.

Light, J. (2001). Rethinking the digital divide. *Harvard Educational Review, 71*(4), 1-28.

Lister, M., & Wells, L. (2001). Seeing beyond belief: Cultural studies as an approach to analyzing the visual. In T. van Leeuwen & C. Jewitt (Eds.), *Handbook of Visual Analysis* (pp. 61-91). London: SAGE.

Liu, J., & Randall, W. S. (2003). The effect and affect of peer review in electronic versus traditional modes on L2 writing. *Journal of English for Academic Purposes, 2*(3), 193-227.

Llegas, C., & Snyder, T. D. (2003). *Status and trends in the education of Hispanics*. Retrieved October 3, 2006, from http://purl.access.gpo.gov/GPO/LPS32922

Mallette, M., Henk, W. A., Waggoner, J., & DeLaney, C. (2005). What matters most? A survey of accomplished middle level educators' beliefs and values about literacy. *Action in Teacher Education, 27*(2), 33-42.

Markee, N. (2000). *Conversation analysis*. Mahwah, N.J.: L. Erlbaum Associates.

Markee, N., & Kasper, G. (2004). Classroom talks: An introduction. *The Modern Language Journal, 88*(4), 491-500.

Marlino, D., & Wilson, F. (2006). Career expectations and goals of Latina adolescents: Results from a nationwide study. In J. Denner & B. L. Guzman (Eds.), *Latina girls: Voices of adolescent strength in the United States* (pp. 123-140). New York: New York University Press.

Mathison, S. (1988). Why triangulate? *Educational Researcher, 17*(2), 13-17.

Matthewman, S., & Triggs, P. (2004). 'Obsessive compulsive font disorder': The challenge of supporting pupils writing with the computer. *Computers & Education, 43*(1-2), 125-135.

Matusov, E. (1999). How does a community of learners maintain itself? Ecology of an innovative school. *Anthropology & Education Quarterly, 30*(2), 161-186.
McCafferty, S. (2002). Gesture and creating zones of proximal development for second language learning. *Modern Language Journal, 86*(2), 192-203.
McCafferty, S., & Stam, G. (Eds.). (2008). *Gesture: Second language acquistion and classroom research*. New York, NY: Lawrence Erlbaum Associates.
McCafferty, S. G., & Ahmed, M. K. (2000). The appropriation of gestures of the abstract by L2 learners. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 199-218). Oxford: Oxford University Press.
McDowell, J. H. (1985). Verbal dueling. In T. A. van Dijk (Ed.), *Handbook of Discourse Analysis* (pp. 203-211). London: Academic Press.
McGinnis, T. (2007). Khmer rap boys, X-men, Asia's fruits, and Dragonball Z: Creating multilingual and multimodal classroom contexts. *Journal of Adolescent & Adult Literacy, 50*(7), 570-579.
McGinnis, T., Goodstein-Stolzenberg, A., & Saliani, E. C. (2007). "indnpride": Online spaces of transnational youth as sites of creative and sophisticated literacy and identity work. *Linguistics and Education, 18*(3-4), 283-304.
McHoul, A. W. (1978). The organization of turns at formal talk in the classroom. *Language Society, 7*, 183-213.
McHoul, A. W., & Rapley, M. (2001). *How to analyse talk in institutional settings: A casebook of methods*. London: Continuum.
McKee, P. (1999, September 22). Navigating the digital divide. *Washington Informer,* p. 10.
McNeill, D. (1992). *Hand and mind: What gestures reveal about thought*. Chicago: University of Chicago Press.
McNeill, D. (2005). *Gesture and thought*. Chicago, Ill.: University of Chicago Press
Meador, E. (2005). The making of marginality: Schooling for Mexican immigrant girls in the rural southwest. *Anthropology & Education Quarterly, 36*(2), 149-164.
Mehan, H. (1979). *Learning lessons: Social organization in the classroom*. Cambridge, MA: Harvard University Press.
Mehan, H. (1985). The structure of classroom discourse. In T. A. Van Dijk (Ed.), *Handbook of Discourse Analysis* (Vol. 3, pp. 119-129). London: Academic Press.
Mehan, H. (1991). The school's work of sorting students. In D. Boden & D. H. Zimmerman (Eds.), *Talk and social structure: Studies in ethnomethodology and conversation analysis* (pp. 71-90). Los Angeles: University of California Press.
Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis* (1st ed.). San Francisco: Jossey-Bass.
Meskill, C. (2005). Triadic scaffolds: Tools for teaching English language learners with computers. *Language Learning & Technology*, *9*(1), 46-59. Retrieved March 1, 2007, from http://llt.msu.edu/vol9num1/meskill/default.html
Meskill, C., & Mossop, J. (2000). Technologies use with ESL learners in New York State: Preliminary report. *Journal of Educational Computing Research, 22*(3), 265-284.
Mills, D. (2000). Web-based technology as a resource for form-focused language learning. *TESOL Quarterly, 34*(3), 603-615.
Mills, K. A. (2006a). 'Mr. Travelling-at-will Ted Doyle': Discourse in a multiliteracies classroom. *Australian Journal of Language and Literacy, 29*(2), 132-149.

Mills, K. A. (2006b). "We've been wastin' a whole million watchin' her doin' her shoes": Situated practice within a pedagogy of multiliteracies. *The Australian Educational Researcher, 33*(3), 13-33.

Mohan, B., & Huang, J. (2002). Assessing the integration of language and content in a Mandarin as a foreign language classroom. *Linguistics and Education, 13*(3), 405-433.

Mohan, B., & Slater, T. (2005). A functional perspective on the critical 'Theory/Practice' relation in teaching language and science. *Linguistics and Education, 16*(2), 151-172.

Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and Discourse. *Reading Research Quarterly, 39*(1), 38-70.

Moje, E. B., Young, J. P., Readence, J. E., & Moore, D. W. (2000). Reinventing adolescent literacy for new times: Perennial and millenial issues. *Journal of Adolescent & Adult Literacy, 43*(5), 400-410.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (2001). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice, 31*(2), 132-142.

Mór, W. M. (2006). Reading Dogville in Brazil: Image, language and critical literacy. *Language and Intercultural Communication, 6*(2), 124-135.

Morgan, C. (2006). What does social semiotics have to offer mathematics education research? *Educational Studies in Mathematics, 61*(1-2), 219-245.

Morris, F. (2005). Child-to-child interaction and corrective feedback in a computer mediated L2 class. *Language Learning & Technology*, *9*(1), 29-45. Retrieved March 1, 2006, from http://llt.msu.edu/vol9num1/morris/default.html

Motha, S. (2006). Decolonizing ESOL: Negotiating linguistic power in U.S. public school classrooms. *Critical Inquiry in Language Studies: An International Journal, 3*(2 & 3), 75-100.

Muntigl, P. (2002). Policy, politics, and social control: A systemic functional linguistic analysis of EU employment policy. *Text, 22*(3), 393-441.

Muntigl, P. (2004). Modelling multiple semiotic systems: The case of gesture and speech. In E. Ventola, C. Charles & M. Kaltenbacher (Eds.), *Perspectives on Multimodality* (pp. 29-50). Amsterdam: John Benjamins Publishing.

Murray, D. (2000). Protean communication: The language of computer-mediated communication. *TESOL Quarterly, 34*(3), 397-421.

National Telecommunication and Information Administration. (1995, December 2, 2007). *Falling through the Net: A survey of the "have nots" in rural and urban America.*

National Telecommunications and Information Administration. (1995). Falling through the Net: A survey of the "have nots" in rural and urban America. Retrieved December 2, 2007, from http://www.ntia.doc.gov/ntiahome/fallingthru.html

National Telecommunications and Information Administration. (2004). A nation online: Entering the broadband age. Retrieved April 1, 2007, from http://www.ntia.doc.gov/reports/anol/index.html

Neuman, S. B., & Celano, D. (2001). Access to print in low-income communities: An ecological study of four neighborhoods. *Reading Research Quarterly, 36*(1), 8-26.

New London Group. (2000). A pedagogy of multiliteracies: Designing social futures. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures* (pp. 9-37). New York: Routledge.

Norris, S. (2004). *Analyzing multimodal interaction: A methodological framework*. New York: Routledge.

O'Halloran, K. L. (2004). *Multimodal discourse analysis: Systemic-functional perspectives*. London: Continuum.

O'Shea, T., & Self, J. (1983). *Learning and teaching with computers*. London: Harvester Press.

Ochoa, A. M., & Cadiero-Kaplan, K. (2004). Towards promoting biliteracy and academic achievement: Educational programs for high school Latino English language learners. *High School Journal, 87*(3), 27-44.

Ogbu, J. U., & Simons, H. D. (1998). Voluntary and involuntary minorities: A cultural-ecological theory of school performance with some implications for education. *Anthropology & Education Quarterly, 29*(2), 155-188.

Olmedo, I. M. (2003). Accomodation and resistance: Latinas struggle for their children's education. *Anthropology & Education Quarterly, 34*(4), 373-395.

Ong, A. (1999). *Flexible citizenship: The cultural logics of transnationality*. Durham, N.C.: Duke University Press.

Orellana, M. F., & Gutiérrez, K. (2006). What's the problem? Constructing different genres for the study of English learners *Research in the Teaching of English, 41*(1), 118-123.

Ortega, L. (1997). Processes and outcomes in networked classroom interaction: Defining the research agenda for L2 computer-assisted classroom discussion. *Language Teaching & Technology*, *1*(1), 82-93. Retrieved December 6, 2005, from http://llt.msu.edu/vol1num1/ortega/default.html

Osuna, M. (2000). Promoting foreign culture acquisition via the Internet in a sociocultural context. *Educational Computing Research, 22*(3), 323-345.

Pahl, K., & Roswell, J. (2006). *Travel notes from the new literacy studies: Instances of practice*. Buffalo, NY: Multilingual Matters.

Papert, S. (1993a). *The children's machine: Rethinking school in the age of the computer*. New York: BasicBooks.

Papert, S. (1993b). *Mindstorms: Children, computers, and powerful ideas*. Cambridge, MA: Perseus Books.

Parks, S., Huot, D., Hamers, J., & Lemonnier, F. H. (2005). "History of Theatre" web sites: A brief history of the writing process in a high school ESL language arts class. *Journal of Second Language Writing, 14*(4), 233-258.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Payne, J., & Whitney, P. (2002). Developing L2 oral proficiency through synchronous CMC: Output, working memory, and interlanguage development. *CALICO Journal, 20*(1), 7-23.

Perkel, D. (2006). Copy and paste literacy: Literacy practices in the production of a MySpace profile. Retrieved December 4, 2007, from http://people.ischool.berkeley.edu/~dperkel/media/dperkel_literacymyspace.pdf

Pink, S. (2006). *The future of visual anthropology: Engaging the senses*. London: Routledge.

Plescencia, L. F. B. (1983). Low Riding in the Southwest: Cultural symbols in the Mexican community. In M. T. García (Ed.), *History, culture and society: Chicano studies in the 1980s* (pp. 141-175). Ypsilanti, MI: Bilingual Press.

Pomerantz, A. (1984). Agreeing and disagreeing with assessments: Some features of preferred/dispreferred turn shapes. In J. M. Atkinson & J. Heritage (Eds.), *Structures of*

social action: Studies in conversation analysis (pp. 57-101). Cambridge: Cambridge University Press.

Pomerantz, A., & Fehr, B. J. (1997). Conversation analysis: An approach to the study of social action as sense making practices. In T. A. van Dijk (Ed.), *Discourse as social interaction* (Vol. 2, pp. 64-91). London: SAGE.

Portes, A., Guarnizo, L., & Landolt, P. (1999). The study of transnationalism: Pitfalls and promise of an emergent research field. *Ethnic and Racial Studies, 22*(2), 217-237.

Psathas, G. (1995). *Conversation analysis: The study of talk-in-interaction* (Vol. 35). London: SAGE Publications.

Ranker, J. (2006). Designing meaning with multiple media sources: A case study of an eight-year-old students' writing process. *Research in the Teaching of English, 41*(4), 402-434.

Reese, L. (2002). Parental strategies in contrasting cultural settings: Families in México and "El Norte". *Anthropology & Education Quarterly, 33*(1), 30-59.

Reese, L., & Goldenberg, C. (2006). Community contexts for literacy development of Latina/o children: Contrasting case studies. *Anthropology & Education Quarterly, 37*(1), 42-61.

Richards, C. (2005). The design of effective ICT-supported learning activities: Exemplary models, changing requirements, and new possibilities. *Language Learning & Technology*, *9*(1), 60-79. Retrieved November 2, 2006, from http://llt.msu.edu/vol9num1/richards/default.html

Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in language teaching: A description and analysis*. Cambridge: Cambridge University Press.

Rolón-Dow, R. (2004). Seduced by images: Identity and schooling in the lives of Puerto Rican girls. *Anthropology & Education Quarterly, 35*(1), 8-29.

Rose, G. (2007). *Visual methodologies: An introduction to the interpretation of visual materials*. London: SAGE Publications.

Royce, T. (2002). Multimodality in the TESOL classroom: Exploring visual-verbal synergy. *TESOL Quarterly, 36*(2), 191-205.

Royce, T. (2007). Multimodal communicative competence in second language contexts. In T. Royce & W. Bowcher (Eds.), *New directions in the analysis of multimodal discourse* (pp. 361-390). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Royce, T., & Bowcher, W. (Eds.). (2007). *New directions in the analysis of multimodal discourse*. Mahwah, NJ: Lawrence Erlbaum Associates.

Rubinstein-Ávila, E. (2007). From the Dominican Republic to Drew High: What counts as literacy for Yanira Lara? *Reading Research Quarterly, 42*(4), 568-589.

Rymes, B. (2004). Contrasting zones of comfortable competence: Popular culture in a phonics lesson. *Linguistics and Education, 14*(321-335).

Sacks, H. (1987). On the preference for agreement and contiguity in sequences in conversation. In G. Button & J. R. E. Lee (Eds.), *Talk and social organisation* (pp. 54-69). Clevedon, UK: Multilingual Matters.

Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversations. *Language, 50*(4), 696-735.

Salaberry, M. R. (2001). The use of technology for second language learning and teaching: A retrospective. *The Modern Language Journal, 85*(1), 39-56.

Sánchez, P. (2007). Cultural authenticity and transnational Latina youth: Constructing a meta-narrative across borders. *Linguistics and Education, 18*(3-4), 258-282.

Sandvig, C. (2006). The Internet at play: Child users of public Internet communications. *Journal of Computer-Mediated Communication, 11*(4), 932-956.

Sanjek, R. (1990). *Fieldnotes: The makings of anthropology*. Ithaca: Cornell University Press.

Savignon, S. J. (1991). Communicative language teaching: State of the art. *TESOL Quarterly, 25*(2), 261-277.

Scanlon, E., & O'Shea, T. (1992). *New directions in educational technology*. Berlin: Springer-Verlag.

Schleppegrell, M. J., Achugar, M., & Oteiza, T. (2004). The grammar of history: Enhancing content-based instruction through a functional focus on language. *TESOL Quarterly, 38*(1), 67-93.

Schwartz, A., & Rubinstein-Ávila, E. (2006). Understanding the manga hype: Uncovering the multimodality of comic-book literacies. *Journal of Adolescent & Adult Literacy, 50*(1), 40-49.

Seedhouse, P. (2004). *The interactional architecture of the language classroom: A conversation analysis perspective.* Malden, MA: Blackwell Publishing, Inc.

Servon, L. J. (2002). *Bridging the digital divide: Technology, community, and public policy*. Malden, MA: Blackwell Pub.

Shin, D. (2006). ESL students' computer-mediated communication practices: Context configuration. *Language Learning & Technology*, *10*(3), 65-84. Retrieved January 6, 2007, from http://llt.msu.edu/vol10num3/shin/default.html

Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.

Sotillo, S. M. (2000). Discourse functions and syntactic complexity in synchronous and asynchronous communication. *Language Learning & Technology*, *4*(1), 82-119. Retrieved January 25, 2005, from http://llt.msu.edu/vol4num1/sotillo/default.html

Spradley, J. P. (1980). *Participant observation*. New York: Holt Rinehart and Winston.

Stein, P. (2000). Rethinking resources in the ESL classroom: Rethinking resources: Multimodal pedagogies in the ESL classroom. *TESOL Quarterly, 34*(2), 333-336.

Strauss, C., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: SAGE.

Strauss, C., & Corbin, J. (Eds.). (1997). *Grounded theory in practice*. Thousand Oaks, CA: SAGE.

Street, B. (1993). Introduction: The New Literacy studies. In B. Street (Ed.), *Cross-cultural approaches to literacy* (pp. 1-21). Cambridge: Cambridge University Press.

Street, B. (1998). New literacies in theory and practice: What are the implications for language in education? *Linguistics and Education, 10*(1), 1-24.

Sturken, M., & Cartwright, L. (2001). *Practices of looking: An introduction to visual culture*. Oxford: Oxford University Press.

Sueyoshi, A., & Hardison, D. (2005). The role of gesture and facial cues in second language listening comprehension. *Language Learning, 55*(4), 661-699.

Sullivan, N., & Pratt, E. (1996). A comparative study of two ESL writing environments: A computer-assisted classroom and a traditional oral classroom. *System, 29*(4), 491-450.

Swales, J. M. (1990). Non-native speaker graduate engineering students and their introductions: Global coherence and local management. In U. Connor & A. M. Johns (Eds.), *Coherence: Research and Pedagogical Perspectives* (pp. 187-207). Alexandria, VA: TESOL.

Swales, J. M., & Feak, C. B. (1994). *Academic writing for graduate students: A course for non-native speakers of English*. Ann Arbor: University of Michigan Press.

Thibault, P. J. (2004). *Brain, mind, and the signifying body: An ecosocial semiotic theory*. London: Continuum.

Trier, J. (2006). Reconceptualizing literacy trhough a Discourses perspective by analyzing literacy events represented in films about schools. *Journal of Adolescent & Adult Literacy, 49*(6), 510-523.

Underwood, J. (1984). *Linguistics, computers, and the language teacher: A communicative approach*. London: Newbury House Publishers, Inc.

Unsworth, L. (2007). Multiliteracies and multimodal text analysis in classroom work with children's literature. In T. D. Royce & W. L. Bowcher (Eds.), *New directions in the analysis of multimodal discourse* (pp. 331-359). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Valdés, G. (1996). *Con respeto: Bridging the distances between culturally diverse families and schools: An ethnographic portrait*. New York: Teachers College Press.

Valenzuela, A. (1999). *Subtractive schooling: U.S.-Mexican youth and the politics of caring*. Albany: State University of New York Press.

van Dijk, T. A. (2001). Multidisciplinary CDA: A plea for diversity. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 95-120). London: SAGE.

van Leeuwen, T. (2005). *Introducing social semiotics*. London: Routledge.

van Leeuwen, T., & Jewitt, C. (2001). *Handbook of visual analysis*. London: SAGE.

van Lier, L. (2004). *The ecology and semiotics of language learning: A sociocultural perspective*. Boston: Kluwer Academic Publishers.

Varonis, E. M., & Gass, S. (1986). Non-native/non-native conversations: A model for negotiation of meaning. *Applied Linguistics, 6*(1), 71-90.

Ventola, E., Charles, C., & Kaltenbacher, M. (Eds.). (2004). *Perspectives on Multimodality*. Amsterdam: John Benjamins.

Villalva, K. E. (2006). Hidden literacies and inquiry approaches of bilingual high school writers. *Written Communication, 23*(1), 91-129.

Vincent, J. (2006). Children writing: Multimodality and assessment in the writing classroom. *Literacy, 40*(1), 51-57.

Walsh, C. S. (2007). Creativity as capital in the literacy classroom: Youth as multimodal designers. *Literacy, 41*(2), 79-85.

Warriner, D. S. (2007). Transnational literacies: Immigration, language learning, and identity. *Linguistics and Education, 18*(3-4), 201-214.

Warschauer, M. (1995). *Virtual connections: Online activities & projects for networking language learners*. Måanoa, HI: University of Hawai'i Press.

Warschauer, M. (1996). Motivational aspects of using computers for writing and communication. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning: Proceedings of the Hawaii Symposium* (pp. 29-46). Honolulu, HI: University of Hawai'i Press.

Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *Modern Language Journal, 81*(4), 470-481.

Warschauer, M. (1999). *Electronic literacies: Language, culture, and power in online education*. Mahwah, N.J.: Lawrence. Erlbaum Associates.

Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly, 34*(3), 511-535.

Warschauer, M. (2003). *Technology and social inclusion: Rethinking the digital divide*. Cambridge, Mass.: MIT Press.

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching, 31*, 57-71.

Weisner, T. S. (1997). The ecocultural project of human development: Why ethnography and its findings matter. *Ethos, 25*(2), 177-190.

Williams, H., & Williams, P. (2000). Integrating reading and computers: An approach to improve ESL students reading skills. *Reading Improvement, 37*(3), 98-100.

Appendix A

Student online monikers

Name	School	Online moniker
Dina	Bayley	Dina
Lucía	Bayley	Lucía
Esperanza	Bayley	Esperanza
Marta	Bayley	Marta
Inés	Bayley	Inés
Carmen	Bayley	Carmen
Eduardo	Bayley	Eduardo
Arturo	Bayley	Arturo
Alvaro	Bayley	Alvaro
Martín	Bayley	Martín
Akira	Bayley	Akira
Rubén	Bayley	Rubén
Jorge	Bayley	Jorge
Angélica	Myers	lil crazy
Consuelo	Myers	Chica
Gaby	Myers	Gaby
Luciana	Myers	Monkey
Margarita	Myers	LD
Melba	Myers	Nena
Raquel	Myers	Raquel

Chuy	Myers	Chuy
Domingo	Myers	Domingo
Enrique	Myers	Low rider
Francisco	Myers	Francisco
Gerardo	Myers	Chivas
Javier	Myers	Javier
Roberto	Myers	Hooper

Appendix B

School Site Observation Data

School	Date	Location in school	Activity	Members
MMS	5/17/06	Classroom Classroom	Meeting Observation	R, F R, F, ELLs
BMS	5/23/06	Classroom	Meeting	R, C, P
MMS	7/7/06	Conference room	Meeting	R, F, C, P
BMS	8/22/06	Classroom	Observation Interviews	R, C, ELLs R, ELLS, C
BMS	8/29/06	Classroom Teacher Lounge	Observation Observation	R, C, ELLs R, MT
MMS	8/31/06	Classroom Cafeteria	Observation Observation	R, F, ELLs R, MS, P, VP, F, SO, ELLs, LPL
BMS	9/05/06	Classroom	Observation	R, C, ELLs
MMS	9/07/06	Classroom Computer Lab Classroom	Observation Observation Interview	R, F, ELLs R, F, ELLs E, R
BMS	9/12/06	Classroom Teachers Lounge Gymnasium	Observation Observation Observation	R, F, ELLs R, SF R, C, MT, S
MMS	9/14/06	Classroom Cafeteria	Observation Obs: LPN	R, F, ELLs R, F, ELLs, LFs, LPL, P, MT
BMS	9/19/06	Classroom	Observation	R, C, ELLs
MMS	9/21/06	Classroom	Observation	R, F, ELLs
BMS	9/26/06	Classroom	Observation	R, C, ELLs

MMS	9/28/06	Classroom	Observation	R, F, ELLs
BMS	10/03/06	Classroom	Observation	R, F, ELLs
		Media Center	Observation	R, MS, S, MT
MMS	10/05/06	Classroom	Observation	R, F, ELLs
		Cafeteria	Observation	R, F, ELLs
BMS	10/10/06	Classroom	Observation	R, C, ELLS
MMS	10/12/06	Classroom	Observation	R, F, ELLs
		Counseling Office	Observation	R, Sec, VSM
		Cafeteria/Comp. Lab	Observation	R, F, ELLs, LF, LPL, P, MT
BMS	10/17/06	Classroom	Observation	R, C, ELLs
MMS	10/19/06	Classroom	Observation	R, F, ELLs
		Cafeteria	OB:LPN	R, F, P, ELLs, MT, LF, LPL ESLT, GS
BMS	10/24/06	Classroom	Observation	R, C, ELLs
		Teachers Lounge	Observation	R, MT
		Media Center	Observation	R, L, S
MMS	10/26/06	Classroom	Observation	R, F, ELLs
BMS	10/30/06	Classroom	Observation	R, C, ELLs
MMS	10/31/06	Classroom	Observation	R, F, ELLs
		Computer Lab	Observation	R, R, ELLs
		Cafeteria	OB:LPN	R, F, ELLs, LPL, LF, P, MT, ESLT, GS
MMS	11/02/06	Main Office	Observation	R, F, ELLs
		Classroom	Observation	R, F, ELLs
MMS	11/03/06	Classroom	Observation	R, F, ELLs
		Counseling Office	Observation	R, Sec, SC, S
		Media Center	Observation	R, F, ELLs
MMS	11/09/06	Classroom	Observation	R, F, ELLs

		Office Gymnasium	Interview OB:Pep Rally	R, P R, ELL
MMS	11/10/06	Classroom Media Center	Observation Observation	R, F, ELLs R, F, ELLs
MMS	11/14/06	Classroom Media Center	Observation Observation	R, F, ELLs R, F, ELLs
MMS	11/16/06	Classroom Cafeteria	Observation OB:LPN	R, F, ELLs R, F, ELLs, P, LPL, LF, GS
MMS	11/20/06	Classroom Computer Lab	Observation Interview	R, F, ELLs R, TI
MMS	11/21/06	Classroom Media Center	Observation Observation	R, F, ELLs R, F, ELLs
MMS	11/28/06	Classroom Media Center	Observation Observation	R, F, ELLs R, F, ELLs
MMS	11/30/06	Classroom Media Center	Observation Observation	R, F, ELLs R, F, ELLs
MMS	12/05/06	Classroom Media Center	Observation Observation,	R, F, ELLs R, F, ELLs
MMS	12/07/06	Classroom	Observation	R, F, ELLs
MMS	12/14/06	Classroom Cafeteria	Observation OB:LPN	R, F, ELLs R, F, ELLs, ESLT, MT, LF, LPL, GS
MMS	2/06/07	Classroom	Observation	R, F, ELLs
MMS	2/08/07	Classroom	Observation	R, F, ELLs
MMS	2/13/07	Classroom Office	Observation Interview	R, F, ELLs R, LPL
MMS	2/15/07	Main Office Classroom	Observation Observation	R, F, ELLs R, F, ELLs

MMS	2/20/07	Main Office	Observation	R, F, ELLs
MMS	2/22/07	Classroom	Observation	R, F, ELLs
MMS	2/27/07	Classroom	Observation	R, F, ELLs
MMS	3/01/07	Classroom	Observation	R, F, ELLs
MMS	3/08/07	Classroom	Observation	R, F, ELLs
MMS	3/13/07	Classroom	Observation	R, F, ELLs
MMS	3/15/07	Classroom	Observation	R, F, ELLs
MMS	3/29/07	Classroom	Observation	R, F, ELLs
BMS	3/30/07	Classroom	Interview	R, ELL
MMS	4/09/07	Office Classroom	Interview Observation	ELLs, E R, F, ELLs
BMS	4/10/07	Media Center Classroom	Interview Interview Interview	R, ELL R, ELLs R, C
MMS	4/12/07	Classroom	Observation	R, F, ELLs
MMS	4/26/07	Classroom	Observation	R, F, ELLs
MMS	5/17/07	Classroom	Observation	R, F, ELLs
MMS	5/22/07	Classroom	Observation	R, F, ELLs

Note: MMS = Myers Middle School, BMS = Bayley Middle School
R= Researcher; E=Ellen; C=Cindy; ELLs=English Language Learners; P=Principal; VP=Vice Principal; LPL = Latino Parent Liaison; TI = Technology Instructor; MT = Mainstream Teachers; ESLT = ESL Teachers; LF = Latino Families; GS = Guest Speaker; S=Students; Sec = Secretary; SC =School Counselors; VSM = Various School Members; SF = School Faculty; MS = Media Specialist.

Appendix C
Interview Protocol for ESOL teacher

1. How did you get into teaching? Could you describe that trajectory for me? How long have you been teaching?
2. How long have you been teaching ESOL? Could you describe that path for me?
3. Could you describe your educational background?
4. How long have you taught at Myers Middle School?
5. What is your teaching philosophy?
6. Tell me about your relationship with the administration at Myers?
7. In your opinion, what are the qualities you associate with a "good" principal?
8. What has been the most challenging aspect of teaching ESOL? What has been the most rewarding?
9. Could you describe how the Latino Parent Night came about? Did you experience resistance? If so, from whom?
10. What kinds of technology do you use in a given day? Describe that to me.
11. What do you feel are the benefits of using technology? The drawbacks?
12. What do you think students need to know to enter U.S. culture as adults? Enter the workplace and higher education?
13. Describe a typical day as a teacher.
14. Could you describe the technology that you use at Myers?
15. What technology is available to your students at Myers? Do you use the computer labs with your students? Why or why not? How often?
16. What is the technology assistant like at Myers? What does that job look like? Who decided what the duties the technology position would carry? Did teachers have input on that?
17. Are you satisfied with the technology support that you have received at Myers?
18. Could you tell me the overarching philosophy that guides your life, work and what you do?
19. Is there anything you would like to tell me about that I have not asked you?

Appendix D
Interview Protocol for Focal students

1. Que piensas acerca del proyecto en linea (On-line)?
   What did you think about our online project this semester?
2. Si tu pudieras hacer algo diferente con el proyecto, que harías?
   If you could do something different with the project, what would it be?
3. Como te sentiste recibiendo las opiniones de tus compañeros? Y dando tus opiniones?
   How did you feel about receiving peer feedback? About giving it?
4. Como afectaron las opiniones de tus compañeros tu forma de escribir?
   How did peer feedback affect the way you write?
5. Que harías de diferente en otra oportunidad al recibir y dar tus opiniones a tus compañeros?
   What would you do differently given another opportunity to receive and give peer feedback?
6. Yo se que tu eres bilingüe. Estoy interesada en saber que idioma hablas en clase.
   I know you are bilingual. I am interested in knowing what languages you speak in class.
   Usas los dos idiomas? Por que? Cuando? Do you use both languages? Why? When?
7. He notado que tú usas español algunas veces con tu maestra la señora Miller, a pesar de que ella no puede hablar español. Por que lo haces?
   I noticed that you use Spanish sometimes with your teacher, Ms. Miller, even though she cannot speak Spanish? Why do you do that?
8. He notado que usas español en clase algunas veces para hablar con tus compañeros, por que lo haces?
   I notice that you use Spanish in the class sometimes to speak to your classmates, why do you do that?
9. Que es lo que mas te gusta de tu clase con la sra. Miller? What do you like the most in Ms. Miller's class?
10. Que es lo que menos te gusta de su clase? What do you like the least?
11. Crees que todos los maestros ESOL deberían hablar español? Por que si o por que no?
    Do you think all ESOL teachers should be able to speak Spanish? Why or why not?
12. Que piensas que significa esta foto? What do you think this picture means?
    a. Que significa para ellos "no excusas?"What do they mean "no excuses"?
    b. Por que piensas que ellos cuelgan esto encima de tus cabezas? Why do you think they hang this above your heads like this?
    c. Por que piensas que ellos sienten la necesidad de recordarles acerca de excusas? Why do you think they feel they need to remind you about excuses?
    d. Que sientes con respecto a este aviso? How do you feel about this sign?
13. Hemos notado que tu tuviste algunos inconvenientes con la sra. Miller este semestre, y que algunas veces ha habido alguna tensión entre ustedes. Cuentame acerca de eso.
    I noticed that you had some struggles with Ms. Miller this semester and that sometimes there was some tension between you guys. Tell me about that.
    e. Por que piensas que ellos cuelgan esto encima de tus cabezas? Why do you think they hang this above your heads like this?
    f. Por que piensas que ellos sienten la necesidad de recordarles acerca de excusas? Why do you think they feel they need to remind you about excuses?

g. Que sientes con respecto a este aviso? How do you feel about this sign?

Appendix E
Interview Protocol for Principal

1. What has been your professional trajectory?
2. Could you tell me about your degrees and the path you went through to obtain those?
3. How long have you been the principal at Myers Middle School? Could you tell me about that trajectory?
4. Could you tell me what is the overarching philosophy that guides your life, work and what you do?
5. Could you describe the primary duties and responsibilities of the vice principals here?
6. How does the county create technology goals for the schools in Walker Heights? What is that dialogue like? Are the schools included in the decision making?
7. Where did you receive the funding for the computer labs that you have at Myers?
8. Could you explain the type of technology you use here at Myers? What brought that about?
9. How many students are in this school? And of those what is the percentage of Latino students? How many are not Latino?
10. Do you have any Latino students that are not in ESOL?
11. Tell me about your take on the issue of gangs and gang membership? When did you notice that there was gang activity in Walker Heights? When did you notice it at Myers?
12. A teacher mentioned to me that graffiti had been sprayed on a wall here, could you tell me about that? Do you think that was gang related? Have there been any other instances like that?
13. How long have you had the dress code? What brought the dress code about?
14. You have mentioned before about a dual immersion, dual language program at Myers, could you tell me more about that?
15. Could you tell me what a Patriot is to you? What does that mean to you?
16. Is there anything you would like to tell me about that I have not asked you?

Appendix F
Interview Protocol for Latino Parent Liaison

1. Could you describe yourself, where you were born, how you came to live in the United States, and a little bit about your background?
2. Are you married, any children? Do your children attend Myers?
3. How did you find this position at Myers?
4. Could you describe your duties as Parent Liaison?
5. Could you describe a typical day for you as a Latino Parent Liaison?
6. Could you tell me how you came to be the translator at the Latino Parent Night?
7. Do you work at any other schools? Could you tell me about that?
8. Could you tell me what are the biggest challenges that you face in your job?
9. What are some of the rewards of your job as Latino Parent Liaison?
10. Do you ever work with Latino parents when their child is being disciplined by the school?
11. How soon do you act as advocate for Latino students' entering Myers should a problem arise?
12. Do you ever work with Latino students while they are in class here at Myers?
13. Describe the Latino buddy system that I have heard about here? How does that work?
14. Have you ever had instances where a parent/teacher conflict was not resolved well? Could you tell me about that?
15. I have noticed that there are quite a few Latino students in ISS every week when I come, could you tell me about that?
16. Do you think gangs are a problem at Myers?
17. What do you do when you are in a situation as a Latino child advocate and things become tense with an administrator or a teacher? What would you do if you did not agree with a course of action recommended to a Latino parent by a teacher or administrator?
18. Is there anything that I have not asked you that you would like to tell me about?

Appendix G
Interview Protocol for Computer Lab Manager

1. Could you describe your background, how you came to be in this position, and how long you have worked at Myers?
2. Could you describe your responsibilities as the technology support at Myers? How much are you paid for this position?
3. I know you are bilingual in English and Spanish, could you tell me how you gained fluency in Spanish?
4. What led you to join the school system in this county?
5. Have you ever been a classroom teacher? If yes, could you describe that path? If not, please tell me more. Are you certified to teacher in this state or another state?
6. What was your first job in the school system? What were your responsibilities?
7. How did you become interested in technology?
8. What kind of technology training have you received from the county or Myers?
9. What kind of technology do you use at home?
10. Describe a typical day on the job at Myers. What kind of challenges do you face as the only technology instructor at Myers?
11. How do you keep up with technological developments? What types of software/programs do you use in the computer labs?
12. What kind of support do you receive from the county when there are computer problem here at Myers?
13: Do you have any other responsibilities at Myers besides your work in the computer labs and the school's technology? Could you describe those? How did that begin?
14. What kind of contact do you have with Latino families? Could you tell me about that?
15. Do you ever provide software or hardware recommendations to the principal? How is that received?
16. How much of the technology budget at Myers is spent on ESOL software?
17. Could you explain how the server space is divided up for teacher use? Do teachers know how to access the server and store files? Why or why not? Do students have space on the school server?
18. What would be the overarching philosophy of your life and work? Could you describe that?
19. Is there anything that I have not asked you that you would like to tell me about?

Appendix H

Student Technology Survey

1. Do you or your family own a computer? Yes No
   a. If no, do you use a computer at home? Yes No
2. Do you have Internet access at your house? Yes No
   a. If yes, what activities do you take part in on the Internet? (Please check the ones that apply)

   _____Surf websites
   _____Play online games/gaming activities
   _____Listen to music/podcasts
   _____Email
   _____Download music
   _____Download movies
   _____Surf weblogs ("blogs")
   _____Other

3. Do you like using computers? Yes No
4. Do you like using the Internet? Yes No
5. Do you use the Internet at school? Yes No
6. Do you or your family own a printer? Yes No
   a. If yes, do you use the printer for school assignments? Yes No
7. Do you play video games at home? Yes No
   If yes, which ones do you play?

   _____
   _____
   _____

8. Do you own a cell phone? Yes No
9. Does your mother own a cell phone? Yes No
10. Does your father own a cell phone? Yes No
11. Do you own an Ipod©? Yes No
12. Do you own an mp3 player? Yes No

APPENDIX I

Transcription Conventions

.	A single period indicates a final clause with falling intonation
?	A question mark indicates a clause with final rising intonation indicating a question
↑↓	Arrows indicate marked shifts into higher or lower pitch in the utterance-part immediately following the arrow
:	Colons indicate prolongation of the immediately prior sound
=	Equal signs, one at the end of one line and one at the beginning of a next, indicate no "gap" between the two lines
[	A single left bracket indicates the point of overlapping speech onset
]	A single right bracket indicates the point at which an utterance or partial utterance terminates vis-à-vis another
(( ))	Double parentheses indicate an explanation from researcher
( )	A single parentheses indicates the transcriber's inability to hear what was said
(0.0)	Numbers in parentheses indicate elapsed time in silence by tenth of seconds
(.)	A dot in parentheses indicate a tiny 'gap' within or between utterances, measured as less than half a second
<u>Word</u>	Underscoring indicates some form of stress