Blogging and Emergent L2 Literacy Development in an Urban Elementary School: A Functional Perspective

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ABSTRACT
This study analyzes how a teacher in the United States used systemic functional linguistics to design a blog-mediated writing curriculum to support second grade English language learners’ (ELLs) literacy development and abilities to use computer-mediated communication tools for social and academic purposes in and out of school. The questions posed by this study relate to how blogging practices shaped a focus student’s emergent uses of print over nearly two years in a U. S. urban school serving a large Puerto Rican community. This study is informed by Halliday’s theory of systemic functional linguistics (SFL) and Vygotskian conceptions of appropriation and mediation. Using a combination of ethnographic methods and the tools of genre analysis, the findings indicate that blog-mediated writing practices afforded students an expanded audience and range of purposes for literacy activities. These practices, coupled with genre-based instruction, supported the focal student’s emergent literacy development. The implications of this study relate to conceptualizing how ideational, interpersonal, and textual metafunctions of language intersect through computer-mediated communication to support L2 language development.

KEYWORDS

INTRODUCTION
Many researchers have analyzed the implications of Web 2.0 social computing practices on language development for second language (L2) learners (Bloch, 2007; Myers, 2010; Lee, 2010; Thorne, Black, & Sykes, 2009; Thorne & Payne, 2005; Thorne & Reinhardt, 2008; Ware, 2008). These studies have demonstrated that computer-mediated communication (CMC) is distinct from other forms of semiotic practice and therefore affords teachers and learners distinct teaching and learning opportunities (Chapelle, 2009; Egbert, Huff, McNeil, Preuss, & Sellen, 2009; Hubbard, 2008; Shin, 2006; Shin & Cimasko, 2008; Thorne & Black, 2007).
For example, Sykes, Oskoz, & Thorne (2008) describe how Web 2.0 tools such as blogs and wikis afford L2 learners at the university level greater opportunities to exchange ideas for real world purposes and for expanded audiences than do typical classroom interactions. In addition, they discuss how web tools support learners in reflecting on and manipulating symbolic tools to construct knowledge and self/other roles in ways that are not readily available in typical face-to-face interactions. Sykes et al. (2008) write that blogs allow students to develop “individual (and less frequently group) authorship that is relevant to a larger, interactive community” (p. 532), and “openness to difference and a capacity to contingently and dynamically interact with members of other speech communities and cultures” (p. 533). These findings are supported by empirical studies of L2 learners’ blogging practices (e.g., Bloch, 2007; Murray & Hourigan, 2008; Lee, 2010). For example, Bloch (2007) analyzed how a Somali student used blogging assignments in a college composition course:

> to publicly participate with his classmates in the process of knowledge construction. By making this process public, his classmates could share in how he was creating knowledge, and his teachers could better understand the strategies he was attempting to use. (p. 137)

Murray and Hourigan’s (2008) work supports this finding with attention to writing instruction. They describe using blogs for creative and reflective writing in post-secondary academic settings and report that learners gained confidence as well as developed their own writing styles. Similarly, Lee (2010), collecting data from blog pages, post surveys and final interviews, studied the writing practices of seventeen advanced-level university students who kept personal blogs over a 14-week period. She reports that blogging afforded students opportunities for personal expression and collaborative interaction, which collectively had a positive influence on learners’ writing fluency and increased their motivation to write for a broader audience.

While these studies demonstrate the utility of using blogs in university-based language programs, few studies have explored the meaning-making potential of using these same tools in elementary and secondary public schools, despite the pressing educational needs of a growing population of L2 learners. For example, between 1979 and 2003, the proportion of 5 to 17 year olds in the United States who spoke a language other than English increased from 8.5% to 18.7% of the total school-age population (Lucas, 2010). Studies of these students’ schooling experiences indicate that they are likely to perform poorly on mandated high-stakes exams that require them to read and write in a language they are in the process of acquiring, and that many of these students are apt to drop out of school as they transition to secondary school, where the demands of disciplinary literacy practices increase and supports for native language instruction decrease (e.g., Lucas, 2010). In addition, other studies indicate that these students, especially those attending high-poverty urban and rural schools, are less likely than their middle class counterparts to have access to technologies that would support academic language development (e.g., Warschauer, Knobel, & Stone, 2004). The purpose of this study, therefore, is to address this gap in the research and pedagogical literature by analyzing how a teacher in the United States supported the literacy development of second-grade Puerto Rican students attending a high-poverty urban elementary school by designing a blog-mediated writing curriculum. The questions guiding this study are:

1) How did blogging practices shape the nature of ELLs’ literacy practices in an elementary school context?

2) How did ELLs’ emergent literacy practices and abilities to produce written texts change over time as evidenced by blog postings?
CONCEPTUAL FRAMEWORK
The conceptual framework informing this study is grounded in sociocultural conceptions of L2 language and literacy development (Byrnes, 2006; Halliday & Hasan, 1989; Halliday & Matthiessen, 2004; Hyland, 2003; Lantolf & Thorne, 2006; Martin & Rose, 2008; Thorne, 2005; Vygotsky, 1978; Wells, 2003; Wertsch, 1993). Specifically, we draw on Halliday’s theory of systemic functional linguistics (SFL), including Martin’s SFL-based developments of genre theory and genre-based pedagogy, and Vygotskian concepts of mediation and appropriation.

Halliday — Systemic Functional Linguistics
A fundamental premise of Halliday’s theory of SFL is the interconnectedness of the linguistic and the social. Broadly defined, SFL focuses on analyzing how people get things done with language and other semiotic means within the cultural contexts in which they interact and how these uses or functions drive the development of cultural semiotic systems (Halliday & Matthiessen, 1999, 2004). Drawing on Painter (1984, 1996a, 1996b, 2000, 2004), SFL scholars maintain that all human languages develop to manage three metafunctions (Halliday, 1975, 2004; Halliday & Matthiessen, 2004; Martin & Rose, 2008): 1) ideational, representing ideas and experiences, 2) interpersonal, managing social relations with others, and 3) textual, organizing the flow of communication to make discourse coherent and cohesive. As children develop from infants to toddlers and then enter school, not only do they physically and cognitively mature, the cultural contexts in which they interact also expand and become more diverse (e.g., caregivers, the family, the neighborhood, the community, elementary school, secondary school, workplaces, higher education, and additional kinds of workplaces). As these contexts become more expansive and diverse, the ideational, interpersonal, and textual metafunctions individuals realize through language and other semiotic means, including computer-mediated forms of communication, also expand and become more diversified. This diversification drives the ontogenesis of the individual’s semiotic resources in regard to phonology, morphology, lexicogrammar, and discourse semantics as well as the phylogensis of the system itself (Halliday & Martin, 1993; Halliday & Matthiessen, 2004; Painter, 1984). For example, in the first year of life, children develop idiomatic vocal and gestural systems that constitute a proto-language to express here-and-now basic needs and wants with caregivers who know them well. Later, children begin to use words and syntax in daily interactions with family and community members. At this point, children develop their language’s (or languages’) transitivity system(s) to realize ideational functions in making claims about who did what, to whom, and under what circumstances (e.g., I want a cookie now). They simultaneously develop the linguistic resources needed to negotiate social distance and status in culturally sanctioned ways through the language’s mood system to realize interpersonal functions (e.g., grammatical resources for asking questions rather than making demands; the modal verb can and the use of please in utterances such as, Can I have a cookie please). To coordinate these resources and make them relevant, they also develop the semiotic resources needed to manage the flow of discourse through the language’s mode system to realize textual functions (e.g., I want that cookie—there—the chocolate one, not that one).

As children enter school, the cultural contexts in which they participate and the functions they must learn to accomplish with language expand even more dramatically, especially for ELLs who have been socialized to use language and other semiotic means in ways that are very different and potentially misunderstood or devalued by mainstream educators (Heath, 1983). Children, now in student roles, must develop content-based ways of expressing ideas and experiences by expanding their ability to use the ideational metafunctions of language (e.g., discipline-specific uses of grammar in reading, writing, and talking about increasingly abstract phenomenon; technical lexis to construct disciplinary knowledge). They must also develop
new ways of interacting with peers, teachers, and administrators, who have differential status and power, by expanding their ability to use the interpersonal metafunctions of the language in negotiating information exchanges (e.g., culturally patterned and valued ways of using language and other semiotic means to construct solidarity, social distance, social status, and evaluative stances). In addition, they must expand their ability to use textual metafunctions, developing ways of managing the flow of discourse with distal interlocutors using multimodal means, such as print and CMC tools, to communicate (e.g., new ways of making print and online discourse coherent and cohesive; discipline-specific ways of using images, diagrams, maps, graphs, and formulas; see Kress & van Leeuwen, 1996; Unsworth, 2001). While learning to participate in these context-sensitive textual practices is complex and challenging for all students, this process is particularly challenging for ELLs because it is often accompanied by also having to learn how to position and re-position themselves as members of multiple and potentially conflicting home, peer, and school communities, as they try to negotiate sociocultural fault lines associated with academic language proficiency, race, class, and gender in K-12 schooling (Ibrahim, 1999; Gebhard, 2004; Harklau, 2000; Olsen, 1997; Talmy, 2008).

**Vygotsky — Mediation and Appropriation**

Halliday’s concept of language learning as an ontogenetic process of expanding semiotic repertoires resonates with Vygotsky’s concept of semiotic properties of inner speech grounded in the notion of “sense” (Wertsch, 1993, p. 42). According to Vygotsky (1934), a word has two semantic properties—sense and meaning. He writes that the sense of a word is a “dynamic, flowing, complex formation” that has “several zones of differential stability” (p. 305). Vygotsky maintains that meaning remains constant across all the changes of sense in various contexts, but that the actual meaning of a word is not fixed because a word conveys different meanings in its various operations. In inner speech, therefore, sense outweighs meaning because a word “absorbs the sense of preceding and subsequent words, thereby extending almost without limit the boundaries of its meaning” (Vygotsky, 1934, p. 308). Drawing on Wertsch, we define this semantic expansion as a process of socialization in which learners engage in using linguistic resources in dialogical relations with various contexts of speech (Wertsch, 1993, p. 43; Shin, 2006; Willett, 1995).

Moreover, socialization involves transforming an *interpersonal* process of making meaning into an *intrapersonal* one (Vygotsky, 1978, pp. 56-57). This internalization process occurs through the mediation of the cultural tools and signs that learners use to make meaning while engaged in activities. Mediated activities construct externally—and internally—oriented changes. Specifically, tools function as “the conductor of human influence on the object of activity,” whereas the signs serve as “a means of internal activity aimed at mastering oneself” (p. 55). Vygotskian scholars describe this transformative internalization process by using the metaphor of “appropriation” (Cole, 1996; Rogoff, 1995; Wertsch, 1998). This metaphor characterizes the process of learning as tool-mediated transformation and emphasizes ownership of a cultural tool-mediated activity. Ownership of a cultural activity means that learners transform interpretations of and roles for the activity to accomplish their individual purposes. The fundamental concept of appropriation is that in social practices of learning, people not only prepare themselves for changes in subsequent similar activities, but also ascribe different interpretative meanings to these social activities. Therefore, from a sociocultural perspective, we view teacher-designed blogs as tools that students can adopt, use, and transform for various goals while engaging in literacy tasks.
Martin — SFL, Mediation, and Academic Language Development in Schools

SFL scholars such as Martin and his colleagues, in work originating at the University of Sydney in 1979, have spent over thirty years developing Hallidayan and Vygotskian theories as a way of conceptualizing, researching, and teaching non-dominant students how academic language works in the texts they are routinely asked to read and write in schools across disciplinary contexts as they transition from primary to secondary school and enter college or the workforce (e.g., Christie & Martin, 1997; Christie & Derewianka, 2008; Cope & Kalantzis, 1993; Gibbons, 2002; Hammond & Macken-Horanik, 1999; Martin & Rose, 2003, 2008; see also New London Group, 1996). In Martin’s framework, the expanding social contexts and associated semiotic activities in which individuals participate construct different genres. Martin (1992) defines genres as “staged, goal-oriented social processes” (p.505). In functional terms, Martin and Rose (2008) add that genres are recurrent configurations of meaning and that these recurrent configurations of meaning enact the social practices of a given culture (p. 6). Within the social practices of the culture of schools, recurrent configurations of meaning include such tasks as students recounting events during share time in kindergarten, reading and writing narratives in the primary grades, arguing a perspective regarding historical events in social studies, describing a classification system in science, explaining a statistical analysis in mathematics, or writing a technical procedure in a computer science internship. Martin and Rose (2008) argue that as students are socialized into reading and writing these genres and participating in the social networks in which these genres are situated, they are apprenticed into a hierarchy of knowledge and specialized activities that could potentially give them the power to participate in constructing and controlling “the natural and social world” associated with these genres (p. 226). For example, in regard to science, they maintain that as students are given access to and are supported in participating in disciplinary semiotic practices, they move from developing more everyday or commonsense ways of constructing knowledge to more and more uncommon and discipline-specific understandings of the material world. Based on demographic data from Australia, they argue that as students transition from primary to secondary schools and eventually to universities, accessible forms of academic language apprenticeship become more and more limited as schools offer a more differentiated curriculum. They argue that this differentiation recreates class structures and economic realities, particularly for non-dominant students whose home and community language practices differ greatly from the language of schooling (see also Bernstein, 1996). Martin and Rose (2008) illustrate how students who are awarded advanced degrees in the sciences are more likely to participate in creating new technologies and in being economically rewarded for their work in an increasingly technology-driven economy; those who are awarded more technical degrees are likely to receive fewer economic rewards and are more likely to play a role in building and maintaining these new technologies; and those who are not given access or supported in learning these academic discourses are likely to have a harder and harder time advancing in their education and maintaining a secure foothold in the rapidly changing new work order of the twenty-first century (Gebhard, 2004, 2005; Gee, Hull, & Lankshear, 1996; New London Group, 1996).

In defining genres in this way, Martin reglosses Halliday’s use of the constructs context of culture and context of situation to capture how the language of schooling reflects and constructs cultural semiotic practices that are both material and infused with ideology (Martin & Rose, 2008). For example, while canonical narratives in English have patterned genre moves (e.g., orientation, complication, resolution), they vary depending on the local context of situation (Labov, 1972). This variation is reflected in the grammar depending on purpose, audience, and the channel through which the narrative unfolds. For example, if a 14-year-old boy tells a story to entertain friends over lunch in school, the narrative would be construed differently than if he constructed the same story as an English class assignment for his teacher. This version would vary still from how the same events would be conveyed to a larger community on a blog, Facebook, or some new means of CMC.
To analyze register variations of this sort, Martin uses Halliday’s concepts of field, tenor, and mode (see Martin & Rose, 2008, p. 11). The field of a specific text refers to how an individual construes the lexicogrammatical system at his or her disposal to realize the content or subject matter of a text (e.g., Wow! My ice melted already because it’s sooo hot! versus Actually, kinetic energy in the form of heat causes greater vibration between H2O molecules, resulting in a change in the state of matter from a solid to a liquid). The tenor refers to how an individual construes the lexicogrammatical system to realize subjectivity or stance in communication (e.g., more casual and emotive versus scientific and authoritative voices). The mode refers to how an individual construes the lexicogrammatical system to manage the flow of discourse in attempts to make the text coherent and cohesive (e.g., how given and new information regarding ice melting is presented and woven together in relatively straightforward and easily recovered ways in everyday discourse versus how academic texts pack de-contextualized information into longer clauses through the realization of verbs into nouns such as vibrate/vibration).

SFL scholars have coupled Halliday and Martin’s perspectives of SFL and Vygotsky’s concepts of appropriation and mediation in developing and researching approaches to designing curriculum, instruction and assessment tools for classroom use. This synthesis, developed in collaboration with K-12 teachers and teacher educators, produced the teaching-learning cycle (Macken-Horarik, 2002; Feez, 1998; Rothery, 1996). The New London Group (1996) further developed this cycle and inflected it with a post-structural, critical perspective of language and pedagogy to account for new forms of CMC in an increasingly globalized world (e.g., the New London Group’s available design, p. 65). The goal of this cycle is to expand students’ meaning-making repertoires by providing them with models, explicit instruction, and critical analyses of authors’ and their own semiotic choices as they learn to interpret and produce academic texts in school. As articulated by Feez (1998, p. 28), this cycle consists of five teaching-learning phases (see Figure 1). During the first phase, the context-building phase, teachers and students discuss a genre’s purpose and the context in which it is typically used, as a way of building both content and genre knowledge and constructing a shared context for learning. The second phase, the text model and deconstruction phase, involves analyzing the genre features of model texts and further discussing the context of culture in which these sample texts are used. This stage also includes attending to the clause-level register features of selected texts as a way of further exploring the subject matter (field), an author’s stance (tenor), and how the author manages the flow of the text (mode) to support his or her purposes in specific contexts of situation. During the third stage, called the joint construction phase, teachers draw on insights gleaned from phases one and two to co-construct a new text with students in the same genre as a way of making genre knowledge and the process of critically making semiotic choices visible to all students. Stage four is the independent construction phase. Teachers support students in using model texts and their analyses of these texts in drafting, revising, and editing their own texts and attending to how genre and register choices construct subject matter and maintain text coherence. During phase five, students and teachers compare what they have learned to other genres and contexts by linking related texts. As discussed by the New London Group (1996), this phase should also include critical framing and attempts at transforming practice. As argued by the New London Group (1996), a phase that includes these aspects of the cycle is vital because of the tendency for schools to reproduce rather than address power dynamics through situated practice and overt instruction alone. They write,

Neither immersion in situated practices within communities of learners, nor overt instruction of the sort Vygotsky (1987) discussed, necessarily gives rise
to critical understanding or cultural understanding. In fact, both immersion and many sorts of overt instruction are notorious as socializing agents that can render learners quite uncritical and unconscious of the cultural locatedness of meanings and practices. (New London Group, 1996, p. 85)

Figure 1
The Teaching-Learning Cycle (Feez, 2008, p. 28)

In sum, the teaching-learning cycle provides a praxis approach for uniting the conceptual frameworks of Halliday, Martin, Vygotsky, and the New London Group to inform curriculum development, data collection, and analysis of student learning. SFL, genre theory, and this cycle have been used by a number of L2 literacy scholars in the United States to support the academic language development of ELLs attending K-12 schools in the context of current high-stakes school reforms (Achugar, Schleppegrell, & Oteiza, 2007; Achugar & Schleppegrell, 2005; Aguirre-Muñoz, Park, Amabisca, & Boscardin, 2008; Brisk & Zisselsberger, 2010; Fang & Schleppegrell, 2010; Gebhard, Harman, & Seger, 2007; Gebhard & Harman, in press; Gebhard, Willett, Jimenez, & Piedra, 2010; Schleppegrell & de Oliveira, 2006). Informing these scholars is the research of Mary Schleppegrell and her colleagues who developed the California History Project (CHP). This project introduced mainstream and ESL secondary teachers to using SFL tools to deconstruct the meaning of history textbook passages and primary source documents. Achugar et al. (2007) report that CHP teachers who planned lessons that incorporated SFL analyses were able to facilitate more in-depth discussions of history. In summarizing their findings, they write that students whose teachers participated in the CHP made significantly greater gains on the state exams than students whose teachers had not participated in the workshops, and ELLs were among those who showed the greatest benefits.

In an effort to build on Schleppegrell’s work and contribute to SFL theory and practices in critical ways, the purpose of this study is to analyze how the use of CMC tools, specifically blogging, in combination with genre-based pedagogy influenced emergent L2 literacy development over time in the context of a high-poverty U. S. elementary school serving Puerto Rican ELLs.

**METHODS**
Context and Participants
This study was conducted in a large urban elementary school in a former industrial city in New England. At the time of data collection, approximately 700 students in grades pre-kindergarten through five attended this school. This school served the surrounding Puerto Rican community, which was described in local and state media pieces as one of the poorest communities in Massachusetts. Nearly all of the students were eligible for a free or reduced lunch; nearly half reported their home language was Spanish; and nearly all were failing the state mandated exams in reading, English language arts, and mathematics (Massachusetts Department of Education, profiles.doe.mass.edu/search). In addition, at the time of the study in 2005, the school did not have a computer lab or provide students with instruction in using technology within individual classrooms. As a result, students’ and teachers’ access and use of technology were limited to what individual teachers made possible using their own resources. In the second-grade classroom where we conducted this ethnographic study, the teacher, Mrs. Seger, equipped the room with two G3 computers that had outdated keyboards and operating systems and a printer that had belonged to her father. In September, at the beginning of data collection, this computer was used primarily to practice keyboarding skills.

Mrs. Seger, a white woman in her early fifties, was a well-regarded elementary school teacher with over twenty years of teaching experience in a variety of contexts. However, she was new to teaching in this school, to working with ELLs, and to using technology in designing curriculum and instruction. She became involved in this study through her participation in a federally funded teacher professional development program that offered a Master’s Degree in Education and a state license in Teaching English as a Second Language. This program, called the ACCELA Alliance (Access to Critical Content and English Language Acquisition), provided in-service teachers with scholarships and research assistants to complete on-site coursework and action-oriented research projects in their classrooms. Coursework centered on reading relevant scholarship; critically analyzing state curricular frameworks and exams; designing curriculum, instruction, and assessment tools related to supporting students’ critical academic literacy development; and collecting and analyzing data related to student learning. The two university researchers who collaborated with Mrs. Seger on this investigation were Meg Gebhard and Dong-shin Shin. Meg, a white woman, taught courses in second language learning and academic literacy development within the ACCELA Alliance and collaborated with teachers and research assistants in designing research studies. Dong-shin, a Korean woman with research interests in computer-assisted language learning, acted as Mrs. Seger’s co-researcher, co-teacher, and technology specialist throughout the first year of the study.

Mrs. Seger’s second-grade classroom was comprised of 19 students, all but five Puerto Rican, who had a range of proficiencies and literacy abilities in English and Spanish. Of the five non-Spanish speakers, three were African American, one was white, and one was Chinese. In this study, we focus on one of the Puerto Rican students we call “Diany.” We selected Diany in consultation with Mrs. Seger based on Mrs. Seger’s interest in better understanding the needs of students who fit Diany’s profile as a second-language “struggling reader and writer.” Diany was born in the United States and reported speaking mostly Spanish at home. She lived with her mother, father, and older sister, who had a son and daughter. Diany’s mother played an active role in supporting her daughter and granddaughter’s education. Her ability to play this role was facilitated by her job in the school cafeteria, which allowed her to visit the class regularly. For example, she attended classroom events in which students shared their final projects of various genre-based curricular units. One such project involved parents relating family stories as part of a classroom unit on narratives.

Socially, Diany’s teachers described her as “friendly” and “very outgoing.” Academically, however, she was identified as a “low-performing” or “at-risk” reader based on a nationally used
reading assessment called DIBELS (Dynamic Indicators of Basic Early Literacy Skills). This widely used assessment measures phonological awareness, alphabetic principles, fluency, vocabulary, and comprehension of early literacy skills in English. At the beginning of the school year, Diany scored a low 47 out of 100, indicating that she was in need of remediation. She also scored in the “needs improvement” range on state exams in language arts and mathematics. Because Massachusetts passed a proposition limiting state support for bilingual education prior to this study, we do not have any formal data regarding Diany’s Spanish proficiency. However, Mrs. Seger, who was conversationally fluent in Spanish, remarked that Diany used Spanish in daily routines in proficient ways (e.g., drop-off and pick-up routines with mother, classroom and lunchroom chat with peers), but had difficulty in communicating about academic work in Spanish. For example, Mrs. Seger reported that some of the more Spanish-proficient students in the class often made “unkind remarks” regarding Diany’s Spanish when Mrs. Seger encouraged them to use Spanish in making sense of new content material.

Regarding technology, like all of the students in Mrs. Seger’s class, Diany did not have access to or experience using computers at school or at home prior to her participation in this study.

Blog-mediated Teaching-Learning Cycle

The writing curriculum implemented in Mrs. Seger’s class was influenced by ACCELA coursework, specifically the reading and discussion of required texts such as Dyson’s (1993) Social Worlds of Children Learning to Write, Derewianka’s (1990) Exploring How Texts Work, and Schleppegrell’s (2004) The Language of Schooling. These texts introduce teachers to sociocultural theory, classroom ethnographic methods, SFL, genre theory, and the curriculum cycle. In addition, Mrs. Seger and Dong-shin were interested in making greater use of technological tools to support students’ literacy development by having them write for expanded purposes and audiences, encouraging them to invest more effort in school-based writing tasks (Dyson, 1993; Lee, 2010; see Peirce, 1995, for a discussion of the construct of investment). As a result, ACCELA provided the class with four laptops throughout the school year. Dong-shin also created a class blog called “Seger Kids” and provided computer workshops for students and parents in the classroom and at a local public library (Shin, Gebhard, & Seger, 2010). In these workshops, participants learned how to word process, use Web browsers, and post comments to the class blog, shown in Figure 2. The purpose of these workshops was to provide technology training and introduce students to technology resources offered in their community through the city library. Families were introduced to the blog and supported in learning how to use the blog when they attended open houses, parent-teacher conferences, and other classroom events.
Relative to other families, Diany’s family did not actively use the blog to interact with Diany about her writing other than the single post from Diany’s mother, shown below, which is followed by its English translation and Diany’s reply:

Mi nina Diany, Lei tu carta que escribistes a tu amiga. Estoy orgullosa de ti, por reconocer tu error, es bueno pedir perdón a un amigo(a) cuando nos equivocamos. yo tambien huviera hecho lo mismo que tu hicistes. Eres buena amiga y buena hija te quiere, mucho mami.

Posted by: Diany’s Mom | November 08, 2005 at 10:13 AM

(Translation: My girl, Diany, I read the letter that you wrote to your friend. I am proud of you for recognizing your mistake. It is good to ask a friend to forgive us when we do something wrong. I would have done the same thing you did. You are a good friend and a good daughter. With much love, Mommy.)

Dear mom

thank for giveing me 5 dollers for my attendance. I can’t wait spend my 5 dollers. I like your Spanish letter. I know how to read in spanish. Did Mrs.Dong-shin tiched you how to do the computer I think she did. Mrsdong-shin is the camra person how vido tapet the class room.

Posted by: Diany | November 08, 2005 at 01:28 PM

Despite using the blog only once, Diany’s family was very supportive of her use of technology in school. For example, Mrs. Seger reported that Diany’s mother noticed her daughter’s interest in and abilities using the class blog and convinced her husband to buy the family a computer for Christmas. Mrs. Seger also reported that after this purchase, Diany’s mother referred to her as the "computer expert" for the family.

To develop the curricular plan, Mrs. Seger and Dong-shin also reviewed the state’s English
Language Arts Curriculum Frameworks and analyzed the language demands of mandated state exams, which students were required to take in grades 3, 4, and 5. Based on this analysis, they identified five main genres on which to focus curriculum and instruction over the academic year. These genres included letters, recounts, informational reports, arguments, and explanations in response to literature (see Christie & Derewianka, 2008). In developing curricular units to support students in learning to read and write these specific genres, Mrs. Seger and Dong-shin adapted the phases of the curriculum cycle to include blogging activities (Shin, Gebhard, & Seger, 2010). As with phase one of the teaching-learning cycle, Mrs. Seger first introduced the target genre and supported students in discussing its purpose and the contexts in which it is typically used (e.g., friendly letters). Second, she provided students with model texts. She deconstructed these texts for students to support them in becoming aware of genre patterns and the kinds of linguistic choices authors make to convey information (field), establish a relationship with their reader (tenor), and manage the flow of their ideas so readers “don’t get lost” (mode). Third, Mrs. Seger co-constructed an additional sample text with students as a way of further exploring the kinds of linguistic choices available to students. The goal of this phase was to expand students’ linguistic repertoires and critically analyze the nature of their linguistic choices in relation to their purpose(s) and audience(s).

Fourth, at the local library and in the classroom, Dong-shin instructed students in how to write drafts and post them to the blog. Some students elected to use pencil and paper and others composed their texts online as Mrs. Seger and Dong-shin circulated through the room, during this stage as well as the next, to provide both technical support and writing instruction as needed. Fifth, Mrs. Seger and Dong-shin demonstrated how students and their families could respond to posts using the class blog. They also continued to support students in critically analyzing the linguistic choices (e.g., aspects of tenor) they might make in posting to the blog and responding to messages posted by their friends, family members, the school librarian, or members of the ACCELA research community. And last, students used the feedback they received in online and face-to-face exchanges to revise their texts, which they then turned in to Mrs. Seger in hardcopy form.

**Data Collection**

In describing how these data were generated and collected, it is important to note that the class blog did not function in ways typical of other class blogs (e.g., teachers and students posting class news and commentaries). Rather, it was deliberately designed and used as a pedagogical tool to support students, teachers, and family members in giving and receiving feedback on students’ emergent literacy practices with an eye toward expanding the nature of the linguistic choices students might make depending on the purposes and audiences of their texts. Students and teachers certainly used the blog to exchange information and ideas about non-academic topics, but its purpose was largely a pedagogical one and related to scaffolding school-based literacy practices.

Data collection and analysis combined the tools of classroom ethnography (Dyson, 1993) and genre analysis using the tools of SFL (Christie & Derewianka, 2008; Martin & Rose, 2008). The purpose of this combination was to analyze both process and product data related to how Mrs. Seger and her students participated in genre-based instruction in class and online as well as how these interactions influenced students’ text production and interpretation practices over time. To capture both process and product data, the unit of analysis for this study was the “curricular unit.” This unit of analysis comprised materials from all the activities of planning each curricular unit (e.g., teaching materials used in ACCELA courses, curricular materials mandated by the school or district, teacher-made handouts and worksheets); the process of teaching the unit (e.g., videotaped classroom interactions); and the texts ELLs produced in
connection with each unit (e.g., hard copy notes and drafts, online posts).

Data were collected over 22 months between August, 2005, and June, 2007. During the 2005-2006 academic year, the students were enrolled in Mrs. Seger’s second-grade class. In this first year of data collection, for each curricular unit Dong-shin videotaped classroom events and transcribed classroom interactions, wrote field notes, collected instructional materials and student texts (hard and electronic copies), and conducted informal interviews with Mrs. Seger and her students.

During the second year, Mrs. Seger took a position as the school’s “English Language Arts Instructional Leader” and no longer had her own classroom. However, she maintained the class blog over much of the 2006-2007 academic year in a more limited way, providing reading and writing “tutoring” to students before and after school. These tutoring sessions were designed to support students in reading and responding to the literature they were assigned as part of the third-grade Language Arts curriculum in the school. As a result, data collection during year two focused exclusively on the blog posts that students produced more independently and not as a component of a dedicated block of Language Arts instruction. During this year, Mrs. Seger reported that Diany taught other students, new to blogging, how to compose at the keyboard, post their drafts, and comment on peer work. Given that time was limited before and after school, the amount of blogging that happened in school with assistance from Mrs. Seger decreased, and Diany began to blog more independently from home.

Data Analysis
Analysis of these data occurred in three phases. Phase one consisted of a content analysis of the activities associated with each unit of study. The purpose of this phase was to describe the classroom and online literacy activity systems, identify major trends in the data, and accomplish the interim task of data reduction. Phase two consisted of profiling Diany’s literacy practices as she engaged in classroom and online activities related to producing target genres (e.g., letters, recounts, explanations, reports, arguments). Last, phase three centered on analyzing the linguistic features of Diany’s posted texts using the tools of SFL (e.g., genre and register features of student texts; see Martin & Rose, 2008; Christie & Derewianka, 2008).

FINDINGS AND DISCUSSION
An analysis of the data reveals that Diany used the class blog to communicate with an expanded audience for a wide range of academic and social purposes in ways that also expanded her semiotic resources. In SFL terms, Diany used blogging in interpersonal ways to construct and display social roles related to being a valued peer and good student. Simultaneously, she developed a greater metalinguistic awareness of the semiotic resources available in online communication to textually display these roles as well as to better manage the flow of her written discourse. Consequently, Diany developed an ability to produce more varied and complex clause structures, a greater control over tense and modality, and a better understanding of the differences between oral and printed discourse. In the following discussion, we illustrate how Diany used blogging to communicate with an expanded audience by analyzing how she (1) completed genre-based class assignments, (2) provided other students with feedback on their writing, and (3) constructed and displayed social boundaries and status. Finally, we provide an analysis of Diany’s language development through blogging over the course of the 22 months of the study.
**Completing Genre-based Assignments**

In line with the overarching goal of designing a genre-based and blog-mediated curriculum to teach grade-level literacy practices to second-grade ELLs, the first unit of study focused on teaching students how to write “friendly letters.” This unit was the first of several focusing on genres stipulated in the state curriculum frameworks and assessed on state exams. Other units focused on writing short narratives or recounts of special events, descriptions of friends, reports on animal characteristics, persuasive letters to Bill Gates requesting computers for the classroom, and explanations in response to literature. In the context of the first unit, Mrs. Seger provided students with a model and explicit instruction in the genre and register features of friendly letters. Students drafted their own letters on paper and at the computer using Mrs. Seger’s model and Dong-shin provided technical support as needed to assist students in posting their letters to the blog.

As illustrated in Figure 3, Diany posted an apology letter to a classmate named Mari regarding an incident in gym class that involved students forming two teams with some students wearing red nylon vests and others not. Diany excluded Mari from the red team by not giving her what she refers to as a *red shurt* (red shirt).

Figure 3
Diany’s Friendly Letter

```
October18/2005/

Dear Mari

sorry dint let you put the red shurt on you in jym sorry I got you mad PLESE forgive me sorry I got you very mad I wish I wood do you one thing for you I wish you had the red shurt on I will put you the shurt next time I will make it up to you you are my friend plese be my friend jym time was hard but it got fun it got hot in jym was veryveryvery swety we were tired in there we got cool in the hall way.

Love

Your best friend diany
```

In posting this letter, Diany drafted this text in line with Mrs. Seger’s instruction to use the genre features explicitly modeled in class. Diany stipulated the date (*October18/2005*); began with a greeting typical of letter writing (*Dear Mari*); included a message in the body of the text that made clear the purpose of the letter (*sorry dint let you put the red shurt on you in jym sorry I got you mad PLESE forgive me*); made several statements regarding gym class, and closed with a sign-off also typical of letter writing (*Your best friend diany*). In posting this letter, Diany attempted to construct and display herself as a contrite and valued peer and a competent writer and computer user. These were roles she actively pursued and constructed in class and online over the course of the study. However, at the beginning of the year, as an emergent user of print, Diany spelled words using her developing knowledge of the English sound system and graphology (e.g., *jym/gym, swety/sweaty*). She also did not use punctuation in ways that would support readers in parsing the flow of discourse in her post. If communicating the same information face to face, she may have chosen the same lexical items and
grammatical structures, but she would have managed the flow of language using semiotic resources readily available in oral but not in written discourse (e.g., pauses, breath, intonation, and gestures). This difference is something Mrs. Seger addressed in class instruction and her posted response (Figure 4), which drew attention to the functional need for punctuation in Diany’s post rather than simply stating the formal rule that a period goes after a sentence. In providing this feedback, Mrs. Seger also maintained and reinforced Diany’s perception of herself as a competent student and valued member of the class (e.g., *You wrote several nice sentences, but some don’t have a period or question mark. If you could fix that, your letter would be easier to read*).

Figure 4
Blog Comment Posted by Mrs. Seger

```
Dear Diany,

Your apology letter to Mari was very thoughtful. I’m sure she will appreciate it.

You wrote several nice sentences, but some don’t have a period or question mark. If you could fix that, your letter would be easier to read.

Keep writing!

Your teacher,

Mrs. Seger
```

Diany’s lack of control over punctuation and knowledge of conceptions of print was consistent with her level of development as an emergent reader/writer at the beginning of second grade. She did, however, exploit other textual affordances of print in ways that were in service of her primary interpersonal goal of repairing and further solidifying her relationship with Mari. For example, she used capitals for emphasis in making her apology (*PLEASE forgive me*) and selected a larger font for the word *Love* to close her letter. The choice of *love* was one Diany selected from a list of possible choices Mrs. Seger made available to the class in modeling tenor aspects of letter writing on a cline that ran from intimate, to informal, to more formal (e.g., *love, best wishes, best, yours truly, sincerely*). Ideationally, Diany made other lexico-grammatical choices, such as *I wish you had the red shirt* (shirt); *I will make it up to you; you are my friend, plese (please) be my friend*. Collectively, these textual and ideational resources achieved the purpose of constructing a sincere apology that Mari accepted (Figure 5), but she did so with the more formal sign-off *best*, perhaps signaling greater social distance than Diany was hoping for given the teachers’ emphasis on and their understanding of the aspect of tenor.
As the school year progressed, students developed increasingly sophisticated ways of responding to each other’s writing using the class blog. For example, at the beginning of the year, students tended to post more phatic responses by writing comments such as “I like your letter.” After participating in additional units of study that focused on other discipline-specific genres and the associated register features of these genres (e.g., descriptions in Science; narratives and responses to literature in Language Arts), their posts became more varied and substantive, and they attended more to the field, tenor, and mode of each other’s drafts. For example, in the context of a unit in which students researched different mammals and analyzed the linguistic features of description, a classmate named Jocey wrote and posted a first draft about skunks. Diany’s response is illustrated in Figure 6.

In this post, Diany gave Jocey’s text high praise (you have a great story, I think your story is the best, it is so much fun reading it). She also reiterated some of the main facts she learned from reading Jocey’s text. Namely, skunks give three warning signs before they spray (I know 123 stink woo!!!!!!!!!!!!). She concluded by taking more of an emotive stance in which she personally engages with Jocey’s post (I wood be like AHHHHHHHHHH!!!!!!!!! i WILL BE RUNING AS CRAZY). Diany took up this more emotive tenor by exploiting the modal resources of print by using capital letters and exclamation marks to create the effect of yelling loudly and running fast.

A final way in which students responded to each other’s texts centered on appropriating Mrs. Seger’s instructional discourse related to genre-based pedagogy and the writing process. Specific to the writing process, students gave one another feedback by drawing attention to spelling errors and typos as illustrated in Figure 7.
In regard to genre-based pedagogy, students echoed Mrs. Seger’s instruction in responding to the genre and register features of each other’s texts. For example, in a post related to the letter campaign to Bill Gates, a student, Dawn, corrected one of Diany’s typos (e.g., buy/busy) and drew attention to aspects of register by commenting on how she closed her letter. As shown in Figure 8, she reminded Diany of the class discussions regarding the difference between *love*, which they decided should be used with friends and family, and *sincerely*, which should be used in more formal business settings.

**Figure 8**
Blog Comment Posted by Dawn

```plaintext
Dear Diany

I like your letter. you need to use sincerely instead of love. and you put buy instead of busy.

your friend dawn
```

*Posted by: dawn | May 30, 2006 at 01:33 PM*

In addition to Dawn, another student named Jose made a similar comment, shown in Figure 9, which prompted Diany to respond that she would use *sincerely* because to use *love* would be embarrassing.

**Figure 9**
Blog Comment Posted by Diany

```plaintext
Dear jose

I will do sincerely cause thats inbarisen
to write love to mr gates that’s NOT right

love diany
```

*Posted by: Diany | May 30, 2006 at 12:59 PM*
In the context of the same unit, the class also discussed the effect of making a request with several iterations of the word *please*. The general agreement was that too many uses of the word *please* amounted to "begging" for something as opposed to "requesting" it. In responding to another student named Angie, Diany drew her attention to this difference as shown in Figure 10. She also gave Angie feedback that she did not substantiate her request by explaining why the class needed computers, which was a key feature of Mrs. Seger’s model and accompanying instruction.

Figure 10
Blog Comment Posted by Diany

![Blog Comment](image)

Collectively, these posts illustrate that Diany and many of her classmates were able to utilize the combination of classroom instruction and blogging to construct a community of writers who provided feedback to each other as a way of validating each other’s efforts while also attending to aspects of graphology, register, and genre.

**Constructing and Displaying Social Networks**

As evident in the data discussed thus far, students responded to each other’s posts for a variety of purposes, including to praise, thank, joke, apologize, request information and give information. Students also used blogging to compete, agree, disagree, defend opinions, give evidence, provoke, and scold. For example, Diany used blogging to apologize (Figure 3); praise and joke (Figure 6); provide feedback (Figures 7 and 10); and thank and accept feedback (Figure 9). Through these functions, she used blogging, sometimes subtly and at other times overtly, to construct and display social networks and power dynamics related to peer relationships. For example, Diany was sensitive to and regularly kept track of the number of comments she and others received to their posts. In cases where a classmate did not receive any comments, she was quick to provide one, but often did so in a way that also constructed the student as a less valued peer, as illustrated in Figure 11.
Figure 11
Blog Comments Posted by Diany

Dear Keisha
I feel bad for you because you have 1 comment so I will wish you a lot of comment.
love diany

Posted by: Diany | April 11, 2006 at 12:22 PM

Dear ray
I feel bad for you because you have know one to right to you.
love diany

Posted by: Diany | April 12, 2006 at 12:26 PM

In interviews with students regarding their blogging practices, they indicated that they often responded to their "best friends" first and students who did not have many comments next. As such, posts such as those illustrated in Figure 11 simultaneously had the intended consequence of conveying affinity and empathy and the unintended consequence of publicly threatening the receiver's status in the class.

More overt threats to students' social status, while seldom, were evident both in online and face-to-face communication between students who had more volatile friendships, as was evident in interactions between Diany and a student named Felecia. For example, after the introduction of the blog, Felecia capitalized on a key affordance of Web 2.0 social computing—the ease of assuming another's identity. She did this by posting "I love you" to Diany using Dawn's name. This incident resulted in a class discussion regarding the dangers and illegality of what Mrs. Seger called "identity theft" and a discussion of class norms regarding pro-social blogging practices. While this conversation reinforced class expectations and a culture of civility, Felecia on occasion still used blogging to provoke her peers, as illustrated in Figure 12 when she pressed Diany for a confirmation of their friendship after Diany wrote a description of another classmate as part of a unit of study on descriptions. From an SFL perspective, Felecia accomplished this by forming a question with the adverb sure to mark high positive polarity (e.g., are you sure) and signing off with the word LOVE in capital letters.

Figure 12
Blog Comment Posted by Felecia

Dear Diany are you sure you are my friend. LOVE Felecia

Posted by: felecia | March 15, 2006 at 12:18 PM

Diany responded as illustrated in Figure 13 in a way that pragmatically parallels her comments displayed in Figure 11. That is, she simultaneously constructed solidarity with Felecia with her own use of the adverb sure (I am sure I am going to be your friend) while also declaring Felecia to be friendless and therefore having very low status. She intensified the sting of this put-down with capital letters, marked use of exclamation marks, and the imperative so chill. She
then mitigated this sting by closing with a sign-off that also signals high affinity (*love diany*).

Figure 13
Blog Comment Posted by Diany

| Dear felecia,
| I am sure I am going to be your friend beacause you don't have a lot of friends so I was sure I am going to be your friend
| so don’t be like ARE YOU GOING TO BE MY FRIEND!!!!!!!!!!! so chill.
| love diany
| Posted by: Diany | March 23, 2006 at 12:36 PM |

While perhaps alarming to readers who do not spend much time with elementary school students, dynamics such as these are a routine part of child development and are well documented in the literature regarding child psychology (e.g., Crick & Grot彼得, 1995), the sociology of childhood (e.g., Thorne, 1993), and in ethnographies of early literacy development in schools (e.g., Dyson, 1993). As such, they are also representative of how students used blogging as an extension of their face-to-face social networks and the power dynamics related to these networks. Specifically, they used blogging to negotiate identity and status, including taking on a teacher voice in correcting one another’s low-level spelling and punctuation mistakes. This finding supports other studies that suggest that CMC semiotic practices often reconstruct face-to-face social practices (e.g., Lam, 2000, 2009; Shin, 2006). However, in contrast to face-to-face interactions, blogging afforded students a computer-mediated public sphere of influence that transcended the physical limits of the classroom and the temporal space of the school day.

**Literacy Development through Blogging**

The second question posed by this study focuses on how ELLs’ emergent literacy practices and abilities to produce written texts change over time as evidenced by blog postings. In exploring this question, the data reveal that the functions for which Diany used blogging pushed and expanded her meaning-making repertoires in regard to graphology, lexicogrammar, and discourse semantics. In other words, as students progressed from using blogging to accomplish more phatic functions in the beginning of the year (e.g., *I like your letter, thank you*, see Figure 5) to communicating more propositionally loaded functions, they tried out and developed a greater metalinguistic awareness of and control over more complex grammatical constructions and aspects of written discourse. This progression, while certainly not linear is illustrated in Figure 14.
Figure 14
Blog Comments Posted by Diany

Dear Mari
I like your litter it was
kind of you it was good to
hear it.
Posted by: Diany | October 28, 2005 at 11:16 AM

Dear keyla
I feel bad for you because
you bork your back. So I
woder how did you learn how
to walk again?
your friend Diany
Posted by: Diany | February 17, 2006 at 11:14 AM

jose can you tall every body in the class pleas goood bye pluss mrs.segerbecause she is a
graet teacher thank you all in the class for lissien to this becuse I have to go to sleep every
body have a niceday than I will give you all sooviners
peele who I have not wrote to you I am soory because my mom said go to sleep because
we have to wake up at 5:30 so good night love diany
Posted by: Diany | May 9, 2006 at 10:00 AM

Dear Jose,
You are the baby of the family. Me, too. I feel kind of left out since my niece and nefio
came. My mom puts all of the attashian for the kids. My mom taught me how to carry my
niece. Now I can feed her. My nefio is really heavy and he can really drool on me.
Sincerely,
Diany
Posted by: Diany | February 3, 2007 at 10:27 AM

Dear mrs.seger,
One of harriet’s goals was to be a pilot. And she had lessons. Another goal was from the
story is she made her own close cause all men only worked on planes so she soyed her
own suit.
sincerely diany
Posted by: Diany | April 2, 2007 at 9:33 PM

As evidenced in these comments, which display Diany’s first post in October, 2005, to her last
post to Mrs. Seger in March, 2007, Diany continued to lack control over punctuation and spell-
ing, but demonstrated an expansion in the functions her posts served:

- Praising (e.g., *I like your litter; it was kind of you, it was good to hear it*, in
the post of 10/28/2005);

- Expressing curiosity (e.g., *I feel bad for you beause... I woder how...*, in the
post of 2/17/2006);

- Requesting action and committing to future action (e.g., *can you tall every-
body in the class pleas goood bye....I will give you all soovineers*, in the post of
5/9/2006);

- Explaining (e.g., I am sorry because my mom said go to sleep because we have to wake up at 5:30, in post of 5/9/2006, and I feel kind of left out since my niece and nephew came. My mom puts all of the attention for the kids, in the post of 2/3/2007);

- Providing evidence to support a claim in the context of discussing a piece of literature (e.g., Another goal was from that story is she made her own close cause all men only worked on the planes so she sewed her own suit, in the post of 4/2/2007).

From an SFL perspective, performing these more varied functions in writing through blogging necessitated that Diany expand the grammatical resources available to her, including modal resources related to print. For example, despite inconsistent uses of punctuation and standardized spelling, which could have been an artifact of the informal mode of blogging and/or lack of attention to editing in an early draft of a piece of writing, she progressed from producing simple subject-verb-object patterns to using more complex clause structures to allow her to manage multiple events in time, show causality, elaborate nominal groups using WH clauses, and keep track of participants using pronouns. Drawing on data shown in Figure 14, this finding is illustrated in Figure 15. We have noted aspects of tense in brackets and causality in bold. We have also marked clause breaks with a backslash (/) and included the date of the post to illustrate change over time.

Figure 15
Analysis of Diany's Blog Postings

<table>
<thead>
<tr>
<th>Date</th>
<th>Posting</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/28/2005</td>
<td>I like your litter/ it was kind of you/it was good to hear it. Posted</td>
</tr>
<tr>
<td></td>
<td>10/28/2005</td>
</tr>
<tr>
<td>2/17/2005</td>
<td>I feel (present) bad for you /because you bork (past) your back. Posted</td>
</tr>
<tr>
<td></td>
<td>2/17/2005</td>
</tr>
<tr>
<td>5/9/2006</td>
<td>peiple who (WH clause) I have not wrote (present perfect) to you /I am</td>
</tr>
<tr>
<td></td>
<td>sorry/ (present) because my mom said (past) go to sleep (imperative)/</td>
</tr>
<tr>
<td></td>
<td>because we have to wake up at 5:30 (future intention). Posted 5/9/2006</td>
</tr>
</tbody>
</table>

The progression from simple SVO patterns in October, 2005, (e.g., I like your litter) to more complex clauses in May, 2006, is of particular interest. For example, by May, 2006, Diany used the causal conjunction because and a WH clause in the initial or theme position. In constructing this multi-clause sentence, she attempted to manage aspects of tense by using the present perfect (I have not wrote) as well as the present (I am sorry) and intentional future tense (we have to wake up at 5:30). This progression demonstrates an expansion in her linguistic repertoire as well as her ability to realize spoken discourse in print. For example, blogging supported Diany in developing conceptions of print related to transcribing aspects of orality in written discourse through her use of capital letters and exclamation marks to display sincerity, excitement, and irritation (e.g., PLESE in Figure 3, woo!!!!!!!! and AHHHHHHHHHH-HH!!!!!!!!!!!!!!!!!!!! in Figure 6, and ARE YOU GOING TO BE MY FRIEND!!!!!!!!!!! in Figure 13).

These data also reveal the degree to which she developed keyboarding skills as a result of participating in this project. In addition to knowing how to type capitals and find exclamation marks, she also at times took advantage of the spell function of word processing programs.
(albeit inconsistently) and boasted to other students about her ability to “type fast with two hands like an adult.” In an interview with Mrs. Seger about Diany’s facility in keyboarding and the implication of this facility for literacy development, Mrs. Seger remarked:

She was the first one to learn how to really type—fingers on the appropriate keys—no “hen-pecking.” The other classmates soon noticed how fast she could type. This is when I noticed a change in her stamina to stick with an academic task. If I put her to a paper/pencil task, her concentration plummeted, and her responses tended to be very mediocre to unacceptable. More than once I had to ask her to explain to me what she was trying to say, because her written response was so poor. However, she seemed to be able to communicate academic ideas with relative fluency on the blog. I remember her sitting at the computer with great concentration reading a blog posting that had been sent to her. She had great motivation to respond to her classmates about her compositions.

In addition, and perhaps in part because of her increased and sustained attention to print through blogging, Diany’s test scores in reading improved. This improvement resulted in her no longer being institutionally classified as an “at-risk” student, but as a “reader on grade level.” For example, Diany’s test scores on the DIBELS jumped from 47 to 87, and her scores on the Developing Reading Assessment (DRA) increased from 18 to 28. In regard to writing, her scores on district benchmarking exams also improved slightly in the areas of “developing ideas” and “mechanics,” giving evidence that Diany’s irregular spellings and use of punctuation may be attributable to the informal, unedited nature of social networking practices with peers rather than a lack of control or ability to use editing tools (e.g., spell checking functions).

Moreover, there is some preliminary evidence that Diany was beginning to use blogging to support more academic literacy practices. For example, in year two of the study, in the context of blog-mediated tutoring sessions before school, she posted the last response in Figure 14. That post is an unrevised, unassisted text Diany constructed at home in response to a question Mrs. Seger posted to the blog as part of an effort to support ELLs in preparing for the written portion of an upcoming exam in Language Arts given to all third graders in the state, including ELLs new to using English for academic purposes. Using a past state exam as a prompt, Mrs. Seger asked students to read a passage, state the “goals” of the main character, and “explain” their answers with examples from the text. Diany’s post reveals that she was able to comprehend this grade-level text to some degree and draw on Mrs. Seger’s explicit instruction in the genre features of explanation as well as instruction in test-taking strategies. Specifically, Diany appropriated and reformulated Mrs. Seger’s question by constructing a thesis statement using a simple declarative statement that conveyed an authoritative tone (e.g., One of harriet’s goals was to be a pilot). Diany constructed this statement by drawing on her knowledge of the linguistic features of expository texts as opposed to narrative ones (e.g., compare One of harriet’s goals was to be a pilot to Once there was a girl named Harriet…). In other words, she attempted to take a position and explain her position by selecting key events in the text rather than simply retell the sequence of events in the reading passage. As SFL scholars have made clear, newcomers to academic discourse who have not been apprenticed to reading and writing expository texts for disciplinary purposes are apt to rely on narratives in ways that are ill-suited to constructing disciplinary knowledge in academic ways (Christie & Derewianka, 2008; Martin & Rose, 2008; Schleppegrell, 2004). In addition, in regard to the register features of academic language, Diany used the words one and another to construct logical connections between nominal groups within and between clauses (One of harriet’s goals… Another goal was…) rather than connecting clauses temporally as is typical in a narrative (e.g., then, next, in the end). While far from being a response that would receive a passing score, Diany’s post provides evidence that she was beginning to explore expository
genres and academic registers in ways that represent a shift from her previous posts, which mostly centered on constructing relationships with peers using a primarily oral/everyday register realized in print.

Given time and additional instruction, Diany could have been supported in further developing the thesis of this post and explaining her examples using separate paragraphs, selecting quotes from the text, adding a conclusion, and checking her spelling and use of capitalizations as she moved through the stages of the writing process. Drawing on previous classroom experience, Mrs. Seger might also have continued to support Diany in noticing and playing with the differences between informal oral registers and more formal academic ones. This kind of instruction might have included attention to clause combining and nominalizing strategies to support Diany in developing the ability to read and write decontextualized disciplinary texts that pack information into clauses in specific ways (Christie & Derewiaka, 2008; Schleppegrell, 2004). Based on her reading of Schleppegrell's *The Language of Schooling* and her use of the teaching-learning cycle in previous coursework, Mrs. Seger was well aware of the differences between everyday oral registers and academic written ones. For example, prior to participating in this study, she supported ELLs in writing persuasive letters to their principal to get their afternoon recess reinstated, something that had been eliminated from their schedule to make room for more test preparation activities (see Gebhard, Harman, & Seger, 2007).

However, not long after Diany’s last post, the blog project was shut down because the district installed a system that blocked students and teachers from accessing any websites that were not approved by a district-wide filtering system. Despite Dong-shin and Wendy’s best efforts and support from some local administrators, they were not able to change how this filtering system was configured in their school to make the class blog accessible to students and teachers during the school day. In an interview, Mrs. Seger remarked that when she and Dong-shin started the blog in 2005, few people in the district had experience with social computing practices, and the main challenge was explaining what a blog was and why it might be a useful tool in supporting the literacy practices of ELLs in the context of current school reforms (e.g., scripted curricula, little or no support for the use of students’ L1 in completing academic tasks, high-stakes testing practices with instruments not designed to assess ELLs). Later, as interactive ways of using technology began to take hold, the districts’ response was to tighten control over Internet access in fear that students and teachers would use instructional time unwisely or would download inappropriate material and open the district up to liability. As a result, Diany and other students who were part of a larger study of CMC literacy studies in Mrs. Seger’s class no longer had access to the Web 2.0 social computing areas after mid-April, 2007. Over the remaining school year, Mrs. Seger continued to work with Diany and other students before school to support and track their literacy development, but not in ways that involved the blog. This suggests a fundamental difference between uses of CMC in K-12 schools versus university contexts. Namely, in addition to greater material constraints regarding access to technical assistance, hardware, and software in high-poverty K-12 schools (Warschauer, Knobel, & Stone, 2004), teachers and students may be more constrained by greater numbers of top-down policies and control mechanisms than their university counterparts.

**CONCLUSION AND IMPLICATIONS**

An analysis of the data reveals that Diany appropriated the class blog to transcend the physical limits of the classroom and the temporal space of the school day to communicate with an expanded audience for a wide range of primarily social functions. In SFL terms, she used blogging in interpersonal ways to perform identity work by constructing and displaying social roles as a technology expert and valued peer. Simultaneously, she developed a greater meta-awareness of the semiotic resources available in online communication to textually display
these roles as well as to realize oral discourse in a written mode (e.g., use of capital letters and exclamation marks to display sincerity, excitement, and irritation). Consequently, she developed an ability to write more varied and complex clause structures that required her to attend to and gain control over aspects of the English tense system and develop conceptions of print. While the majority of her posts exhibit the features of informal discourse as opposed to a more formal academic register, she demonstrated greater control over uses of print to interpret and produce informal exchanges with her teacher and peers for an expanding set of functions. In regard to these functions, the interpersonal functions for which she used graphology, lexicogrammar, and blogging appear to have expanded her semiotic resources. The finding that the interpersonal functions of language stimulate the development of her semiotic system is consistent with Painter and Halliday’s work regarding L1 language development (Halliday, 1975, 2004; Halliday & Matthiessen, 2004; Painter, 1984, 2000, 2004). This suggests that a Hallidayan perspective of language, which attends to the interpersonal and textual functions, can complement a Vygotskian perspective, which attends more to the ideational function. In other words, Vygotskian theories focus primarily on how children develop conceptual understandings of words through social interaction and how language acts as a mediating tool in the service of cognitive development (e.g., the development of scientific concepts as opposed to everyday ones through interactions with more skilled others; the use of language as a mediating tool in the service of development, see Lantolf & Thorne, 2006). In contrast, a Hallidayan perspective views language as a dynamic system of semiotic choices children learn simultaneously at the phonological/graphological, lexicogrammatical, and discourse levels or strata in the process of making meaning (Halliday, 1985; Halliday & Matthiessen, 1999, 2004). Halliday argues that what drives this semiotic system is not necessarily interactions regarding concepts or the ideational functions of language. Rather, he maintains that the engine driving language learning is the learner’s desire to construe social relationships and manage the flow of discourse, which he refers to as the interpersonal and textual metafunctions of language. In highlighting a theoretical difference between Vygotsky and Halliday, Hasan (1992) argues that Vygotsky did not develop the theoretical apparatus required for exploring the interpersonal and textual functions of language and the role they play in development (see also Wertsch, 1993, 1998; Wells, 2003). Therefore, she maintains that Vygotskian theory by itself provides an inadequate social theory of language and language development and argues for the coupling of Vygotsky with Halliday. This critique of Vygotsky is worth considering in light of the attention Vygotskian theory has received in second language acquisition studies, specifically in studies of Web 2.0 social computing practices (e.g., Sykes et al., 2008; Thorne & Reinhardt, 2008).

In addition to theoretical considerations, a second implication of this study relates to classroom practice and the potential of coupling genre-based pedagogy with a blog-mediated reading and writing curriculum as a way of providing under-serviced language learners attending under-resourced schools with more opportunities to interact through print with an expanded audience about topics in which they are academically, socially, and politically invested. Specifically, in this study ELLs were provided access and instruction in how to use Web 2.0 technologies, models, explicit instruction in how to read and write high-stakes genres, and opportunities to give one another feedback on their drafts online. As suggested by the interactions between Diany and her peers, students used blogging to a) complete genre-based class assignments (e.g., friendly letters, descriptions, persuasive letters, and explanations), b) provide each other with peer feedback regarding aspects of spelling and punctuation, register, and genre, and c) construct and display social boundaries and status as emergent writers.

Access to technology and instruction in using the class blog supported Diany in developing keyboard and word processing skills and in advocating for more computers for their classroom through a letter writing project. While this project was unsuccessful, it did result in Mrs. Seger’s room being equipped with an additional two laptops (one from ACCELA and one
from the school). Moreover, as a result of students and their families wanting to have access to the blog from home, a number of families purchased computers, including Diany’s. In this respect, the combination of greater access to technology and the use of these technologies to support both the social and academic goals that were relevant to students, teachers, parents, administrators, and ACCELA faculty resulted in a change in the material conditions of the classroom and in the homes of those students who desired and could afford a computer. However, gains made in regard to using technology in school as opposed to home were ironically not sustainable because of the district’s policies regarding students’ and teachers’ access to the Internet. A final implication of this study is the importance of researching the institutional context of classroom-sponsored social computing and of working with school officials to develop policies and practices to support academic literacy development that foster rather than shut down innovative uses of technology in schools.

NOTES

1 This study was funded by several federal and state grants: Title VII Department of Education Career Ladder Grant, Title III Department of Education National Professional Development Grant, and a Massachusetts Teacher Quality Grant.

2 The terms context of culture and context of situation come from Malinowski (1935), a renowned ethnographer. It is important to note that Halliday and Martin’s treatment of genre and register are different. Halliday does not use the term genre but uses only the constructs of field, tenor and mode. For Halliday, context of culture and context of situation instantiate the overall semiotic potential of the system in a particular instance. For Martin, context of culture is realized through genre, and in turn the context of situation is realized through register. See Martin & Rose, 2008, pp. 9-18, for a discussion of these differences and their implications for analysis. See Halliday & Matthiessen, 2004, pp. 27-28, for a discussion of instantiation on a cline from potential to instance.

3 See Goodman (2006) for a critique of the use of this widely used assessment, particularly with bilingual language learners.

REFERENCES


ACKNOWLEDGEMENTS
We would like to thank Mrs. Seger’s students and their families for their willingness to participate in this study. We would also like to acknowledge the contribution of Nelida Matos, Holly Graham, Ruth Critcher, and members of the ACCELA Alliance for their support. And last, we would also like to thank Jim Martin, the editors, and outside reviewers for their valuable feedback.

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