Problems and Possibilities: Emergent Bilinguals and Multimodalities

Kathy Marie Bussert-Webb

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Abstract

This commentary and review focuses on my teaching and research experiences with Mexican-heritage youths in the lower Rio Grande Valley, Texas, alongside Mexico and the Gulf of Mexico. Most of these youths were emergent bilinguals of poverty. I argue that high-stakes testing environments limited their experiences in diverse sign systems, including technology, in and out of school. These youths engaged in entertainment and friendship uses of technology outside of school, even though most had access to up-to-date digital tools at home for more higher-order technology use. They did not appear to have mentors or teachers who taught them to use digital tools beyond consumption and drill and practice, or who taught them how to explore multimodal texts for academic reasons. Also, I highlight promising multimodal and digital practices in and out of school to demonstrate the transformative potential of these semiotic tools.

Recollections of 13-year-old Flor (all names are pseudonyms) trouble me. When asked if she had ever used technology in school, this South Texas Latina said, "We haven't done projects. In other schools they … do PowerPoints about songs … write about a person you admire … I would stay after school and work on it, if it was a technology project, or go to the public library" (Bussert-Webb & Diaz, 2012, p.5). Flor noticed the unequal parsing of semiotic and digital resources between schools and she said, "It makes me mad" (p. 5). Besides one internet-related project in sixth grade and a Christmas wish list she created on a computer, Flor could not recall any other use of technology for school and she desperately wanted the opportunity. Flor shared experiences with other Mexican-heritage participants and students in the lower Rio Grande Valley (LRGV), Texas who were emergent bilinguals (García, Kleifgen, & Falchi, 2008), whom others identify as English learners. Like other youths I know, Flor attended local public schools, which the Texas Education Agency (n.d.) rated exemplary or recognized—awarded, in part, for the children's pass rates on the high-stakes tests. High-stakes tests are standardized measurements with major consequences for teachers, students, and schools (Popham, 1987).

Flor's frustration should not bother me. After all, I am familiar with the unequal system. As a high school teacher in Flor's area from 1995 to 1998, I was supposed to provide my remedial reading students, most of whom were low SES emergent bilinguals, with a paltry high-stakes testing diet (Bussert-Webb, 1999, 2000, 2004), while their English-proficient peers in wealthier schools had a smorgasbord of unlimited semiosis, or how we render our world as significant and meaningful (Harste, 1994). Semiosis occurs when we tap into several sign or communication systems at once, e.g., creating transmediations, or using digital videos, songs, and images to re-present a written text. Like drama, music, art, dance, and mathematics, and language – technology is a sign system to make and share meaning (Berghoff, 1998). Also, a text can be any human creation (Fernández, 2001). Needless to say, I rebelled – and rebel - for my students and research participants. Although some of my publications do not focus on technology as a sign system, they demonstrate that emergent bilinguals in our region have experienced

mostly the sign systems of language and mathematics, with attention on discrete skills and testing (Bussert-Webb, 2009). Also, for the last five years, colleagues and I have focused on emergent bilinguals' use of technology in and out of their South Texas schools (Bussert-Webb & Díaz, 2012; Bussert-Webb & Díaz, 2013; Bussert-Webb & Henry, 2013).

Besides my public school teaching and research, I also base this commentary on my experience as a teacher-educator and parent in the LRGV. I have taught pre-service and in-service teachers at a public university in my region for over 14 years and I had to change the schedule of my graduate class from the spring, when the high-stakes tests are, to the fall. This schedule change was so my students could implement and reflect on multiple modality and technology-related engagements in their classrooms as course requirements. Most of my graduate students, who are LRGV teachers, have told me they cannot deviate from explicit and direct high-stakes testing preparation in the spring semester. Next, our daughter attended a local, low SES elementary school serving mostly emergent bilinguals for five years. In the spring semester of first grade, district-wide mathematics benchmarks, or routine practice tests to prepare students for the real tests, began for our daughter. Although she was in a dual language program that was supposed to focus on enrichment, by third grade instruction equated to mostly high-stakes test-preparation.

This was not a situation of mostly Anglo educators teaching Latino/a children. In fact, 87% of teachers in the school district where our daughter attended and where I conducted much of my research were Latinos/as; most grew up in the LRGV, also. Perhaps these instructors practiced exam-focused instruction because of the testing panopticon. In this all-seeing panopticon, teachers and administrators fear they will lose their jobs if their students do not fare well on high-stakes tests because educators are under scrutiny in an all-seeing testing and accountability system (Bussert-Webb, 2004). Gándara (2010) found that No Child Left Behind (NCLB) (U.S. Department of Education, 2002) has caused many schools and districts serving predominately Latinos to constantly test and pressure the children, which relates to these students' lack of school attachment, and in turn their high dropout rates. The late Eliot Eisner lamented in 2004 that standardized testing has taken precedence over multiple modalities and other important curricula. Little has improved the LRGV, which has 1.3 million people and constitutes two of the most economically strapped U.S. metropolitan areas (U.S. Census, 2010).

In this commentary and review of nearly 20years in the LRGV, I make three points. First, high-stakes testing particularly affects emergent bilinguals of poverty and limits their experience in diverse sign systems, including technology. Second, emergent bilinguals of poverty engage in mostly friendship and entertainment uses of technology outside of school, which limits these children semiotic potentials; thus, the real digital divide is about use, not access. Last, I highlight promising practices in and out of school.

Theoretical Framework

Semiotics, or the study of signs, and New Literacy Studies (NLS) frame this commentary and review. We mediate our understandings through sign systems, or ways to make and share meaning (Peirce, 1955). Since all humans have different experiences and discourses, or socially situated practices (Gee, 2008), we interpret and create signs differently according to contextual

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factors related to time, place, people, and purpose. Signs do not represent reality; instead, we use signs to convey and interpret perceptions of reality (Eco, 1976). Also, a tendency exists to privilege language too much as a sign system in U.S. schools. According to Eisner (2004), art, music, and dance are just as related to literacy as is reading printed text: "Literacy involves the ability to encode or decode meaning in any of the symbolic forms used in the culture. For example, one can be literate in one's ability to experience and derive meaning from music, from the visual arts, or from dance" (para. 11).

This commentary also relates to NLS because literacy practices, or patterns of activity that are socially situated, are indeed ideological and contextualized (Gee, 2000; Street, 1993, 2003). Thus, I discuss dominant school literacies and also informal out-of-school practices (Barton & Hamilton, 1998) in the hopes of unpacking these everyday practices. This commentary is part of NLS as well because technology can enhance literacy practices (Gee, 2007; Stolle, 2008). Indeed, digital literacies involve multimodalities, skills, contexts, and practices (Pahl & Rowsell, 2005; Street & Lefstein, 2007), as well as dispositions and strategies (Leu et al., 2007), such as Flor's desire to engage in transformative digital literacy practices for school-related purposes.

School Practices of Emergent Bilinguals

Minimal generative multimodal and technology integration is evident in low-income urban schools because of the test preparation focus (Henry, 2007) vis-à-vis NCLB. Menken (2006) found most high school teachers of emergent bilinguals concentrated on teaching to New York's high-stakes exam. Texas, the context of this commentary, has the highest accountability pressure rating of 25 states examined (Nichols, Glass, & Berliner, 2012). In my studies with emergent bilinguals along the Mexican border, I have found that the children and their teachers have engaged in heavy test preparation practices that reach crescendo in February.

In the last 14 years, I have conducted research with over 500 mostly Latino children in Esperanza, pseudonym for the most economically disadvantaged U.S. neighborhood (The University of Texas, 2009) and in a school district in the poorest U.S. city (Hess, Frohlich, & Sauter, 2013). Esperanza participants lived in a colonia, a Spanish word for an unincorporated settlement throughout the Southwestern U.S.A., sometimes lacking public amenities, such as trash pick-up and electricity (Federal Reserve Bank of Dallas, n.d.). In terms of my research conducted in local schools, 96% of the district's children were economically disadvantaged and 99% were Latinos; over 85% of children in both in- and out-of-school research sites were emergent bilinguals.

Few participants in the *colonia* or school setting mentioned any school-based technology or multi-modal use. If they did, this use focused on discrete-skill-building exercises, test preparation or testing, or Accelerated Reader (AR) tests. The AR program involves children taking computerized comprehension tests over books read to receive points, grades, certificates, and prizes. Even in an extracurricular school district program, aimed at engaging children identified as at-risk, in generative, authentic experiences, few participants discussed using technology in generative, authentic ways (Bussert-Webb & Henry, 2013). Sample comments from children's learning logs in this before- and after-school enrichment program were: "This

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program helped me make my benchmark scores this past week," "What impacted me this week was that we learned how to develop new skills for my new tests," "We work so hard so we can pass the staar [sic] test," and "My favriot [sic] part is when I take the quiz." I highlight these quotes to demonstrate that high-stakes testing permeated even a program that was supposed to counter drill and kill practices, which tend to limit emergent bilinguals' experience in diverse sign systems, including technology. Cummins (2007) argued that students in high SES districts experience constructivist instruction, while their peers in low SES districts receive behaviorist, scripted instruction; he stated this is due, in part, to NCLB.

Out-of-school Practices of Emergent Bilinguals

Most children participants in the LRGV neighborhood and school district studies had high-speed Internet and working computers at home. If some children did not have access, they explained how they, like rhizomes that create new branches around obstacles (Fernández, 2001), tapped into close-knit community and family resources, such as computers, printers, and the Internet to gain access. For instance, Flor and others said they would go to the agency's tutorial center in Esperanza to print things. In another study, teen cell phone owners in the lowest SES were most likely to use their phones to go online (Lenhart, Ling, Campbell, & Purcell, 2010): "The cell phone appears to be a viable alternative for internet access for some teens living in households that cannot afford computers" (para. 9). Participants in my studies reported using Web 2.0 tools and/or hand-held devices daily outside of school. However, almost all respondents in both settings used these tools for consumption, not creation (Attewell & Winston, 2003), and for friendship and entertainment, not interest-based inquiries (Warschauer & Matuchniak, 2010). Flor was no exception. Although she used the Internet, she did so for entertainment.

Ironically, many teachers and administrators believed these children did not have digital access at home, so they did not give the children any digital technology homework. I interviewed district staff and teachers and when I told them that most of the children had digital access in their homes or neighborhoods, they were incredulous (Bussert-Webb & Henry, 2013). Also, few participants reported touching technology during their classes. The district where both sets of participants attended school blocked (and still blocks) many websites, including www.teachertube.com, apparently to protect children from accessing inappropriate information. District officials also prohibit hand-held devices, games, and gaming magazines, such as *Game Informer*.

Since the children did not receive much mentoring or instruction in technology-based projects and inquiry in schools, their friends or older siblings mentored them. For example, Flor's only digital mentor was her older sister, who showed Flor a www.videojuegos.com (a website to play video games) and a website to see animals dressed up in human costumes. Other respondents said their informal mentors engaged in technology use outside of school for friendship and entertainment (Warschauer & Matuchniak, 2010) and consumption (Attewell & Winston, 2003). And the pattern continues. Thus, the digital divide for emergent bilinguals of poverty appears to be about use, not access.

Promising Practices In and Out of school, Emergent Bilinguals, and Promising Practices

Anomalies existed in these in- and out-of-school studies. Some children and their teachers in the school district study engaged in authentic, generative projects related to the children's passions, e.g., creating a newsletter, learning about schools around the world, and investigating their career and college interests. In his school's extracurricular program in the fall, Robot Boy, his peers and teacher, and a pre-service teacher from my university created a website about their school called Hello World. However, these practices stopped the spring semester because of high-stakes testing. At home, Robot Boy designed video games through a program called Scratch; he used mathematical calculations to determine where, how, and when to move his sprites. In the neighborhood study, only two participants mentioned using technology for projects or authentic engagements during their school day; one participated in an experiment related to voting and another created a PowerPoint about the respiratory system.

Truly, I found few cases of emergent bilingual students' engagement with authentic, generative, multi-modal and digital texts for school-related purposes in high-stakes testing environments. However, teachers can prepare emergent bilingual students for high-stakes tests while engaging the youths in transformative digital, multi-modal practices. They can expose their students to culturally relevant digital stories (fiction and non-fiction), songs, drama, and art and can teach their students difficult vocabulary words and creators' crafts in these texts, or related to these texts. For instance, educators can have their students analyze a Frida Kahlo painting from the Internet as one would analyze a fictional story in terms of mood, tone, theme, genre, and character development. This is what my graduate students, all in-service teachers, have been doing in their classrooms, but they do not stop there. They create text-sets, or materials around the same theme (Short, Harste, & Burke, 1988) and have students work in small groups, and then with the whole class, to compare and contrast a painting with two other texts. Later, they engage their students in a similar activity, but with a song recording and written lyrics from the Internet. Students, from kindergarteners to high school seniors, engage in much research, writing, and conversations about these texts. My graduate students have experienced success with emergent bilinguals in particular. Reluctant speakers and writers came alive when they interpreted a painting or analyzed a song from a Mexican or Latino artist.

Another example is a Community Words activity I designed in which students in pairs find difficult words in a digital story. The students type the word in question and where they found it, be it a page, frame, or paragraph; hypothesize its meaning based on the context; find an appropriate, short definition or synonym from the Internet; type the part of speech of the word; type a new sentence with the word; find an image to represent the word and copy the URL to give the artist or photographer credit; and post their work in an online platform (such as Blackboard or Edmodo). Meanwhile, the teacher circulates and helps students. When it is time for sharing, the pairs would read their work aloud as everyone looks at the screen. I created this activity as part of my dissertation work with mostly African American middle school students (Bussert-Webb, 1997), but I later modified it for my high school students, many of whom were English learners (Bussert-Webb, 2008).

Besides multimodal and digital texts to entice learners, these classroom examples can help emergent bilinguals with academic oral language development and collaboration (Garc á,

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Kleifen, & Falchi, 2008). Also, collaboration is an important skill to teach diverse children for the 21st Century (Eisner, 2004; Gee, 2000). Many erroneously believe that no collaboration is involved in people working together online, but this is a fallacy because negotiation and conversation are involved in students' online decision-making (Gee, 2007).

Although I gave classroom examples of students collaborating, I did not provide ideas about educator collaboration. As a high-school teacher in a high-stakes testing environment, I shut my classroom door and followed what I knew in my soul was good and important for my students – collaboration, critical thinking, and meaningful literacy (Eisner, 2004). However, I was what Perreault (2000) would call a covert "solitary craftsman" (p. 705). I could have, as teachers and administrators from three low SES elementary schools in Strahan's (2003) case study, worked with district colleagues to improve student test scores, while remaining true to my beliefs. As Goodman (1984), stated: "resistant teachers see themselves as part of a group… isolated individuals cannot be expected to substantially alter present circumstances" (p. 30).

Conclusions

Children learn valuable reading skills when they engage in multi-faceted, collaborative video games because they are using diverse semiotic domains, e.g., symbols, graphs, images, words, and sounds (Gee, 2007). Indeed, emergent bilinguals can employ complex cognitive skills, similar to academic reading and writing, when they use digital literacies for non-academic purposes (Moje, Overby, Tysvaer, & Morris, 2008). However, few participants in the studies I conducted mentioned playing intricate, collaborative games. Few alluded to anything that appeared difficult cognitively, not because they were not capable, but instead because they did not have digital mentors in or out of school. Hull and Schultz (2002) suggested educators' dichotomies between children's informal and formal educational contexts have not been productive; instead, they argue it is important to find overlapping aspects of both settings. We must discover ways to engage emergent bilinguals in interest-driven, digital literacy experiences (Warschauer & Matuchniak, 2010), to merge the children's in- and out-of-school lives, and to help the youths to use technology for creation, not just consumption (Attewell & Winston, 2003).

This interest- and creation-driven use of technology is difficult in many schools serving predominately low SES emergent bilinguals, mostly because of high-stakes testing pressures. Most of the teachers of participants were Latinos/as. Like all educators, they truly wanted the best for the children. Yet under the current testing milieu, teachers in contexts similar to those I described are afraid that if they veer too far from the test preparation path with multimodal and digital literacy engagements, their students will not pass the high-stakes exams. The teachers' jobs, the school's accountability rating and reputation, the students' and their families' futures, and many other factors are in danger because of the testing panopticon (Bussert-Webb, 2004).

However, we can learn from the children participants who behaved like rhizomic ginger roots (Fernández, 2001). When participants, such as Flor, needed to print a document, they did so at the community tutorial center. When Robot Boy did not get the generative digital experiences at school, he created his own game through *Scratch*. Likewise, when we as teacher-researchers face an obstacle, such as high-stakes testing, we, like the emergent bilinguals in these studies, can find alternative paths to engage emergent bilinguals in generative, challenging multi-modal,

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digital practices. Hopefully, we can form thought collectives (Fleck, 1938) in our educational settings to nourish our students and ourselves. Through collaboration, we can transcend obstacles to create rich multimodal possibilities that low SES emergent bilinguals deserve – truly.

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