

# How Teachers Deploy Multimodal Textbooks to Enhance English Language Learning

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## Abstract

This study draws on semiotics to argue that multimodal textbooks encode specific knowledge that offers teachers and learners new possibilities for the design of teaching and learning of English language. Drawing on Halliday's theory of systemic-functional linguistics, this paper examines how two teachers deployed multimodal resources of textbooks for English as a second language (ESL) instruction. Data were collected through classroom observations, field notes, interviews, and textbook analysis. The tentative findings suggest that the ESL teachers in this study were faced with problems on teaching English language learners how complex multimodal resources combine and integrate to design meaning in the textbooks they teach.

**Keywords:** critical literacy, multimodality, multiliteracies, social semiotic theory

## Introduction

In the last two decades, a confluence of events has brought about the need for English teachers to teach a wide range of materials such as textbooks, diagrams, photographs and drawings to facilitate students' learning. First, in response to Gardner's (1991) groundbreaking theory of multiple intelligences, English teachers have grappled with how to integrate different learning modalities into classrooms, particularly, the visual intelligence, to appeal to students' learning styles. Gardner (1991) argues "students possess different kinds of minds and therefore learn, remember, perform, and understand in different ways" (p. 11).

Second, advancements in multimedia technology have created possibilities for integrating different modes into textbooks. Emphasizing the integration of images, words, colors and audio for communication, Kress (2000) contended it "is now impossible to make sense of texts, even of their linguistic parts alone, without having a clear idea of what these other features might be contributing to meaning of a text" (p. 337). Concerned with how to support students' learning and make materials appealing, publishers are integrating diverse modes into textbooks. Designs of multiple modes into texts suggest a change in social and pedagogical relations between producers of textbooks and learners. This shift signifies horizontal, more open and more participatory relations in knowledge production among textbook producers, teachers, and students (Bezemer & Kress, 2010). Because of the multimodal nature of English language learning (ELL) textbooks, students enjoy more leeway in establishing reading paths according to their interests, backgrounds, and needs.

Indeed, visual representations have become a pervasive and visible feature of ELL textbooks in the U.S. and around the world. In many ELL textbooks, producers integrate language and multimodal resources (e.g., image, color, layout, typography, and font) to communicate messages. However, sometimes, textbook producers relay messages through the image across textbooks and such ideas may not be carried by the linguistic text

(Bezemer & Kress, 2010; Giaschi, 2000; Petrie, 2003). For example, Astorga (1999) analyzed one ELL textbook and concluded that while some messages were expressed through images, others were communicated only through the linguistic text. In essence, teaching ELL textbooks in modern times requires teachers to understand how images are increasingly interwoven with the construction of content. This point is important because English language learners who do not have the skills to interpret images in textbooks may not understand how social, political, and ideological messages are conveyed to them and how they are positioned as both English language learners and as social subjects (Giaschi, 2000).

Furthermore, ELL textbooks are sold to schools accompanied with videos, VHS, CD-ROM, and audio cassettes. The multimodal nature of such textbooks affords English language teachers the opportunity to be resourceful in analyzing such texts. For example, teachers can generate questions around a textbook that reflects a social issue and supplement the text with students' everyday multimedia materials such as video clips, CD-ROMs and the Internet to address student learning about the social issue (Sanders & Albers, 2010). The multimodal resources of ELL textbooks suggest that teachers and students need new kinds of textual understanding: how multimodal resources of text-books are a crucial aspect of knowledge construction in classrooms. Such new understandings can help teachers make connection between their students' social and economic change, the materials conditions of learners' lives, ELL textbooks, and pedagogy (Hull & Schultz, 2001). Equally importantly, multimodal textbooks brought by multimedia technologies have given rise to new textual experiences, social practices, and accompany literacies that potentially expand opportunities for ELL (Kern, 2006).

Contemporary texts place new demands on English teachers on how they deploy multimodal resources across lessons (Meskill, Mossop, & Bates, 1999; Walker, Bean, & Dillard, 2010). Despite increasing multiplicity and integration of different modes into ELL textbooks, how teachers help English language learners make connections between visual forms of knowledge and learning is seldom explored in research (Jewitt, 2008b). Available literature tends to focus on how ELL teachers use visual images for illustration and motivation of learners. For example, visual images in textbooks are rarely used to engage learners on critical analysis of texts in order to provide an understanding of how minority students are positioned and stereotyped (Ajayi, 2008, 2009, 2011, 2012).

In fact, while visual messages are integral to texts, "they are still often ignored or treated superficially in the classroom" (Hobbs & Frost, 2003, p. 330). In many classrooms today, "the visual and multimodal survive at the margins of the curriculum" (Jewitt, 2008b, p. 15). The disconnection between highly visual and multimodal textbooks and teachers' practices is hardly surprising. Walker et al. (2010) noted: "When teachers are required to use these texts, their sense of agency is undermined and many fall into undynamic, textbook-driven routines" (p. vii).

There is a need to rethink how teachers teach multimodal texts because in many schools across the U.S and the world approved textbooks probably form the main source of ELL instruction. More importantly, multimodal textbooks offer new possibilities for ELL instruction as such texts provide "flexible conceptual frames that support more efficient interaction than with more rigid, linear print" (Meskill et al., 1999, p. 236). Multimodal practices in ELL classrooms often foster greater student participation, freedom to communicate, collaboration and negotiation of meanings. In addition, multimodal texts

afford English learners the opportunity to draw on different modes and gain access to a wider range of semiotic possibilities for meaning making.

Furthermore, the ways knowledge is designed into multimodal textbooks is crucial for meaning making. Multimodal texts are highly visual because they integrate diverse modes of representation. As such, such texts can provoke different interpretations from English language learners. Indeed, the multi-layered and multifaceted nature of multimodal textbooks requires learners to engage in multimodal thinking and cognitive flexibility that are crucially important for language learning in multilingual contexts. Walker et al. (2010) aptly argued that multimodal texts facilitate “a different, expanded form of classroom discourse that spans intertextuality and critical connections” (Walker et al., 2010, p. ix) that were usually not made available in traditional print-based materials. In addition, images in textbooks offer English language learners the possibility of multidirectional entry points into textual analyses and interpretations. Students can start interpretations of texts from captions, images, colors, layouts, or words. Because multimodality involves understanding how students interpret, understand and produce texts, the role of teachers is to teach English language learners the “interpretation of the diverse combinatory ways of representing meaning that new technology tools are making possible” (Kern, 2008, p. 7).

The above paragraphs suggest that reading contemporary textbooks require more than just abilities to decode language-based materials to entail the knowledge of how different modes form one dynamic, systemic whole for meaning making (Hubbard & Siskin, 2004; Meskill et al., 1999; Nelson, 2006). Hence, English language learners need more than the conventional linguistic ability; they require multimodal skills to interpret the structure of representations and information in textbooks in ways that best support their understanding of such materials. In addition, as a teacher educator-researcher in a small rural university, I face the challenge of preparing teachers to make connections between multimodal textbooks and English language learners’ cultural practices in ways that are significant for learning. My goal is to prepare teachers who understand that ELL instruction goes beyond a decontextualized, skill-based process to entail new blends of skills, knowledge, practices and dispositions associated with multimodal textbooks. I believe that if English language teachers link multimodal textbooks to students’ experiences, such educators have the potential to redefine ELL for Hispanic students, reinvent their own pedagogy and make teaching/learning truly transformative for themselves and students.

The purpose of this study is to explore how two teachers help their students use multimodal textbooks to enhance English language learning. Three research questions guided the study:

- In what ways do the teachers teach English language learners how multimodal resources structure meanings in textbooks?
- How do the teachers integrate audio materials into teaching ELL instruction?
- How do the teachers promote critical readings of multimodal textbooks in ELL classrooms?

This study makes significant contributions to ELL-related research on multimodality. It bridges the disconnection between English teaching/learning and multimodal textbooks used in classrooms. Even though *High Point Level C: Success in Language, Literature* (Schifini, Short, & Tinajero, 1998a) and *Content and High Point - The Basics: Success in Language, Literature, and Content* (Schifini, et al., 1998b) are widely used across the U.S. for ELL instruction from elementary to high schools, there is hardly any substantive literature on how teachers and students negotiate their multimodality

as evident from dearth of literature on this important topic. This study also contributes to an understanding of how Hispanic English learners negotiate multimodal textbooks. For one, Hispanic students account for 3,598,451 (79.05%) of the approximately 5.1 million students in pre-kindergarten through 12th grade in ELL programs in the U.S. Too many of the students underperform in English learning. An important factor in the students' poor achievement is the use of "tightly structured hierarchical print forms used in schools" (Meskill, et al., 2009, p. 236) for teaching ELL. An exploration of Hispanic students' (and teachers') understandings of the complex ways in which diverse modes are integrated for meaning-making in multimodal textbooks potentially represents a significant shift in the direction of ELL instruction.

### **An Evolving Notion of Textbook**

The notion of textbook is shifting and evolving. A textbook traditionally means print materials - usually made primarily out of words. However, designs of contemporary textbooks use a mixture of multimodal resources, including language, image, font, layout, color and spatiality. Textbooks are accompanied by cassettes, CD-ROMs, videos and digital texts. Digital texts are often hypertextual, hypermultimodal (integrating images, language, audio, etc.), and hyperlinked to other websites. Such intertextual links allow students to connect their textbooks to other texts such as the Internet and Websites. Equally important, computer technology has brought about differing textual forms where their production involves a complex combination of different modes and media (New London Group, 2000). Kress and van Leeuwen (1996) defined multimodal texts as "any text whose meanings are realized through more than one semiotic code" (p. 183). The term is used in this study to refer to the composition of texts using varied forms of expression, including images, symbols, and multimedia texts associated with the Internet.

The shift in the definition of texts implies a need for change in ways English language teachers negotiate textbooks - from reading and writing print-bound materials - to developing skills and knowledge to teach how meanings are designed into textbooks through multimodal resources. In this way, English language teachers can connect textbooks to Hispanic students' multiple identities and cultural forms of communication in order to "engage with, and gain access to, student agency, cultural memory, and home and school learning, within local contexts" (Jewitt, 2008b, p. 50).

### **Multimodal Texts and Critical Literacy**

How knowledge is presented in textbooks is "integral to meaning, creativity and learning" (Jewitt, 2008b, p. 34). Indeed, the ensemble of different images in textbooks makes different demands on students and has differential potential impacts for shaping identities and dispositions to learning (Cope & Kalantzis, 2009; Gee, 2003; Lemke, 2005). This view suggests that a crucial aspect of English language teachers' work is to teach students explicit analyses of semiotics of textbooks as such knowledge can provide learners "the tools for their own social, cultural, and linguistic exploration" (Warschauer & Meskill, 2000, p. 308). Using a multimodal pedagogy, English language teachers have a greater chance of preparing their students to read textbooks from different identities based on ethnicity, race, gender or class, and redesign texts in ways that transform knowledge (Behrman, 2006; Walker & Bean, 2005).

## Textbooks, Teachers' Practices, and ESL Students' Learning

Textbooks remain a significant source of teaching ELL students in many classrooms in the U.S and around the world. However, multimodal textbooks pose a significant challenge for many teachers. First, the assumption behind the design of many ELL textbooks is that students passively receive knowledge from teachers and mechanically decode words from materials (Hsu & Yang, 2007; Lee, 2010). Second, many textbooks limit English language learners' learning opportunities as such texts are designed to meet the rigid requirements of state-mandated standards, which "often create a mismatch between students interests and content requirements" (Walker et al., 2010, p. ix). Third, in many cases, images are not properly integrated into textbooks to facilitate effectively ELL. In many texts, images express biases and are unrepresentative of the broad and varied learners' cultural experiences.

Therefore, there is a need for teachers who understand that multimodal resources are central to ELL textbook design and students' learning in the contemporary times. Such teachers will screen textbooks for cultural representation, relevance and accuracy. More importantly, teachers also have to theorize on how textbook multimodal resources structure knowledge for students' learning in ELL classrooms.

### A Theoretical Framework for Multimodal Text Analysis

Halliday's (1976) systemic-functional linguistics (SFL) described language as a system with meaning potential. Halliday (1976) defined language as "a set of options in a stated environment . . ." (p. 26) that were shaped by how people use them to make meaning. He identified a tri-functional framework of meaning: *ideational, interpersonal and textual*. The *ideational meanings* relate to what is going on in the world, that is, how people use language to articulate their experiences. They relate to how words are used to express actions, objects, places, events, people, things, qualities and ideas. They deal with how people represent their experiences through the types of processes and participants they use. The *interpersonal meanings* are concerned with the ways language is used to position people, the kind of speaker-listener interaction and how such is negotiated. van Lier (2004) argued that the term relates to "roles, and identities of participants, sociocultural issues, relationships, power and control" (p. 74). The *textual meanings* deal with how textual elements are composed into a coherent message that is relevant to the context of the situation. For example, elements in the left are presented as *Given* while those on the right are *New*.

Kress and van Leeuwen (2001) applied SFL to the analysis of multimodal texts. Central to their theory of social semiotics is the notion the visual, the written, the auditory and the haptic (sense of touch) are all interrelated and contribute to meaning. Kress and van Leeuwen (2001) theorized that multimodal resources of visual images can be constituted into "grammatical systems" to realize specific metafunctions such as *ideational, interpersonal and textual meanings*. They contended that social semiotics affords means of analyzing how different people in visual images were represented and relate to each other (ideational), the kinds of participant-viewer social relation (interpersonal), and the different compositional configurations that afford the realization of different meanings (textual).

Cope and Kalantzis (2009), Kern (2006), and Lemke (2005) extended the social semiotic theory of communication to explain how diverse modes serve as resources for critical interpretations of texts and build on individuals' multifarious subjectivities. For example, Nelson (2006) argued that multimodal practices allow English learners the opportunities to negotiate and communicate meanings in different media than English language. Jewitt (2008) suggested that teachers may use multimodal texts as "the basis for critical engagement, redesign, or the explicit teaching of how modes construct meaning in specific genres" (p. 262). This view suggests that English teachers need to link textual features of textbooks to social contexts and politics that inform them. For example, teachers need to teach students how textbooks' structures and visual resources interact and integrate to convey biases and prejudices and how such features can be interpreted within particular socio-cultural contexts and through specific social practices.

### Method

This is a qualitative case study. Yin (1984) defined the case study research method as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context" (p. 23). Case studies are used "to give an emically oriented description of the cultural practices of individuals" (Ramanathan & Atkinson, 1999, cited in Mackey & Gass, 2005, p. 167). Qualitative case study method using field notes, interviews and videotape recordings is appropriate for this research as it allows the researcher to provide detailed descriptions of pedagogical practices and viewpoints of particular English teachers in specific contexts (Strauss & Corbin, 1998).

### The School Site

The study was conducted in a border county in California. The county's *records* show 16,154 (46.0%) students of the total school enrollment of 35,115 were classified as English language learners. The document also indicated that while 84.6% of student population was Latino origin, white and African American ethnic groups accounted for 10.7% and 1.7% respectively. The data showed that 81.0% of the students came from economically disadvantaged homes as compared to the statewide average of 53%.

The broader context of teaching at the site of this study suggests that Hispanic English language learners might be highly literate in multimodal texts. In public spaces such as billboards and advertisements, multimodal resources of images, colors, and languages are used to convey messages. As such Hispanic English learners may have gained considerable multimodal literacy skills through reading diverse texts made available in their social environment and, therefore, bring a wide range of experiences in multimodal texts to classrooms that teacher should tap into (Ajayi, 2008, 2011, 2012).

### The Participants

Eight ELL teachers were initially invited to participate in the study. While four decline, the remaining four met the criteria for the study: they were full-time teachers, had taught for 10 years, were willing to participate in follow-up interviews, and did not expect to be compensated for their time. However, Ana Guzman and Mario Reyes (pseudonyms) were finally selected based on the need to draw participants from broader range of

backgrounds: gender, years of teaching, and excellent record of teaching. Both teachers were described by their respective school principals as “effective teachers.” Guzman had once been recognized as “Teacher of the Year.” Similarly, Reyes was elected by his colleagues as a grade-level coordinator. Guzman and Reyes had taught for 18 and 10 years respectively, in the same school. Guzman had a Master’s degree and a California teaching credential in Bilingual, Cross-cultural, Language and Academic Development (BCLAD). She was teaching the Basic level – beginning class. Similarly, Reyes had a Bachelor’s degree in Education and a certification in BCLAD. He was assigned to teach Advanced class. The selection of the teachers was deliberately motivated to provide examples of varied experiences they bring to English language teaching. This kind of sampling is described as *theoretical sampling* (Strauss & Corbin, 1998).

The teachers were particularly suitable for addressing the research questions in this study. They seemed to have an expanded view of literacy – a view that embraced multimodal texts. They were interested in providing English learners with varied forms of texts that connect instruction to learners’ experiences and culture. This researcher had earlier observed Reyes using video clips from a social network site to connect his teaching to students’ out-of-school experiences.

Guzman’s class roster showed that the number of students in her class fluctuated between 20 and 23 throughout the semester. All the students were Hispanic. There were 14 female and nine male students. According to the teachers, majority of the students came from Mexico. The students were classified as Beginning L1 based on their scores in the state-mandated California English Language Development Test (CELDT). They were in Basic Bilingual, which meant they had instructions in the school subjects in Spanish. Reyes had 18 students in Advanced class – a Structured English Immersion class. They learned core subjects in English and were supported with minimal instruction in Spanish.

Guzman used *Content and High Point – The Basics* to teach the Basic level. The textbook was introduced the students to English vocabulary, language functions, patterns and structures, and high frequency words. Reyes also used *High Point Level C* for teaching Advanced class. The textbook focuses on literature, using a variety of themes, particular themes dealing with how English learners could successfully integrate into the fabric of their new society. This theme was articulated through a complex integration of a multiplicity of semiotic modes. This was why the theme, which ran through the two textbooks, was chosen for exploration in this study.

Each teacher had *The Teacher’s Edition* of textbook s/he was teaching. The teacher’s edition stated that it “outlines the structure of different kinds of text and the corresponding reading strategies . . . [and also] tells the teacher how to model the strategies and conduct practice” (Schifini, et al., 1998c, p. 26). The editions do not make specific recommendations for teachers on how to use the multimodal features of the textbooks.

## Data Collection

Data for the study were collected over 16 weeks. During the first two weeks, the researcher visited the two classrooms daily for one hour to acclimatize the teachers and their students to the presence of the researcher and videotape equipment. There were three sources of data collection:

**Classroom Observation.** From third to 16th week, the researcher observed each teacher once a week for 110 minutes. Each teacher prepared 14 lesson plans for observation. The lessons were video recorded to preserve the data for analysis. The observations were sufficient to provide a descriptive/interpretative analysis of how the teachers negotiated multimodality in their lessons. The researcher developed observation records to complement the videotape recordings (see Figure 1). The observation records focused on specific issues: (a) how the teachers exploited the multimodal features of the textbooks to teach ELL; (b) how they used additional meaning making resources such as students' cultural experiences; and (c) how the teachers helped English language learners make intertextual connections to other sources. As the teachers taught, the researcher checked appropriate column that related to multimodal resources they were using for teaching. For example, the auditory column was checked when a teacher used CD-ROM. Then, the researcher wrote commentaries on the field note on how it was used.

	Interpret pictorial images	Discuss language, colors,	Use auditory - music, recorded excerpts of textbook	Link discussion to students' resources, perspectives, experiences	Link discussion to websites, blog sites, online activities, web logs, the Internet	Discuss page layout, font, bold, italics, captions	Use electronics: videos, cassettes, CD-Rom.	Use dialogue, social interaction

Figure 1. Weekly Lesson Chart and Checklist

**Interviews.** The teachers participated in tape-recorded interviews after school. Kern (2006), Meskill et al (1999) and Walker et al. (2010) provided a theoretical framework for the interview questions: (a) multimodal textbooks textually position learners; hence, ELL teachers need to teach students how to access meanings from texts, (b) multimodal resources of textbooks give ELL teachers new possibilities for the design of teaching, and (c) new shapes and routes into learning made possible by multimodality suggest that ELL teachers need new skills, abilities and dispositions for teaching.

The teachers responded to the following interview questions: Are you familiar with the notion of semiotic analysis of multimodal textbooks? Do you think your literacy education at the university prepared you to analyze semiotic modes of multimodal textbooks? To what extent do you use additional sources of meaning making such as the Internet and websites? What do you perceive as the effects of scripted textbook and curriculum on teaching multimodally? Do you think that teaching explicit analysis of multimodal textbooks can help your students develop into more critical aware learners and

citizens? Do you have appropriate audio materials that effectively model pronunciation of the different varieties of English? For content validity and usability, two English as second language (ESL) professors and twelve ESL teachers were asked to comment on it. Their comments were used to improve the survey.

**Field Notes.** There were field notes which provided commentaries of how the teachers navigated multimodal resources of the textbooks. It also included record of dialogues among the teachers, students, and researcher. Using multiple sources for data collection allowed the researcher to triangulate the findings.

### Data Analysis Procedures

The data collected through the weekly charts and field notes were tabulated on a large chart to examine how the teachers and students manipulated multimodal resources of the textbooks. The video recordings also were analyzed using a two-step analytic induction: analyzing the videotape to identify (a) the participants' explanations and discussions of visual images in the textbooks, and (b) their ideas were coded and developed into a categorization scheme. In the weekly charts, field notes and videotape recordings, attention was paid to how the teachers used particular images to contextualize teaching, teach students to make intertextual connections or provide alternative interpretations of texts. Specific images that Guzman and Reyes spent more time analyzing with the students were selected for analysis. Image analysis was based on the metafunctions of ideational, interpersonal and textual meanings. Furthermore, interviews with the participants were transcribed. The transcripts were emailed to the participants for vetting - to ensure the transcripts reflected their responses. The process allowed the researcher to check the validity of the transcripts (Strauss & Corbin, 1998).

A theoretical framework of transformative pedagogy that suggested multimodal texts offer English teachers the opportunity to reshape and transform knowledge developed by Cope & Kalantzis (2009) and Jewitt (2008a, 2005) guided data analysis. The theory suggested that multimodal texts offer teachers: (a) new possibilities for the design of teaching; (b) the opportunity to use multimodal resources to promote new routes into knowledge; and (c) a chance to engage students' experiences and cultural forms of representation and agency.

Using a qualitative, interpretative research approach, the researcher engaged in a line-by-line analysis of the transcripts of the data. Using micro-analytic method (Strauss & Corbin, 1998) allowed the researcher to carefully read the data several times to identify phrases, sentences and themes that were pertinent to the research objectives. The researcher analyzed and interpreted the data to decide what arguments, ideas and concepts to include and emphasize. Similarly, the pictures in the textbooks were "read," analyzed and interpreted to provide an understanding of how the publishers juxtaposed words and images to convey specific ideological messages.

The next stage involved coding and categorizing the data. The data were re-read to compare ideas from data-sources. The data were broken into discrete portions, compared for differences and similarities. Ideas, concepts and comments that were similar were categorized. Concepts such as "lack of training in multimodal analysis," "I don't know how to analyze pictures," were grouped together. Ideas such as "use images to provide contexts for topics," and "use pictures to explain story to my students" were grouped under the

same category. Using comparative analysis (Corbin & Strauss, 1990), the data were sorted into recurring patterns and themes: using CD-ROM to model pronunciation, providing context for reading, linking instruction to students' backgrounds, and presenting conflicting message of racial harmony. Finally, quotations from the participants were used to support these themes.

## Results

The purpose of this study was to explore how two teachers used multimodal resources of two textbooks to enhance ELL for students. English textbooks are organized by structures in which images become integral to meaning making and learning in classrooms. Teachers' role is crucially important in teaching English learners how knowledge is presented and communicated through multimodal textbooks. The results are discussed under the research questions raised at the beginning of this study.

### In What Ways Do the Teachers Teach English Language Learners How Multimodal Resources Structure Meanings in Textbooks?

The process of interpretation and learning in ESL textbooks requires teachers to teach students skills to make sense of how different modes integrate for meaning making. However, the teachers in this study seemed to use images in the textbooks to contextualize reading. In Figures 2 and 3, Guzman led her class in a discussion of how sports and objects could bring strangers together. She encouraged the students to link the image to their experiences of how they met new friends through sports or other activities. The students noted that the images in the frames were friends sharing common interest in sports and bracelets. The students also identified play station, music videos and videogames as objects they shared with their friends. With these activities, the teacher seemed to use the images to contextualize teaching to provide a space for the students to use their backgrounds to construct meaning from the textbook.

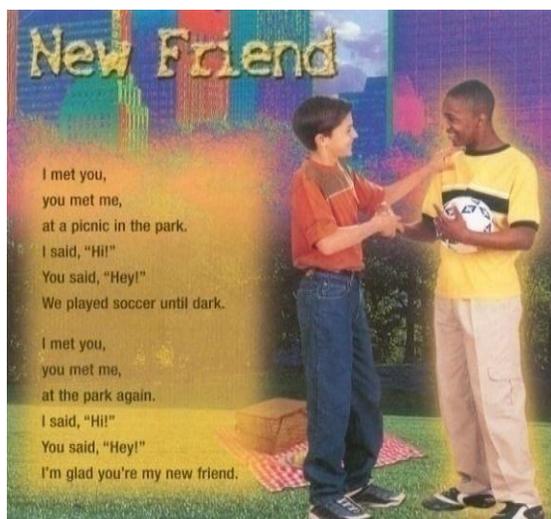


Figure 2. Where to Find a Friend  
*The Basics* (p. 108)

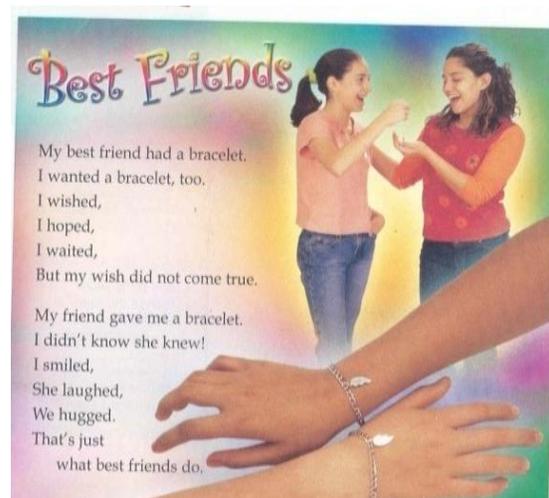


Figure 3. Sharing a Common Interest  
Source: *High Point: The Basics* (p. 150)

During the follow-up interview, Guzman was asked if she was familiar with the notion of semiotic analysis of multimodal texts and its potential to offer her students wider and richer interpretations of the textbook they were reading. The participant explained that she understood how to use pictures to contextualize instruction, adding “I am not familiar with the notion of semiotic analysis of texts.” Guzman suggested that her training, expertise, and experiences were in the area of print-based text analysis. She argued that she paid “more attention to the content” (the literature in the textbook) and used audio materials to help students learn.

### **How Do the Teachers Integrate Audio Materials into Teaching?**

Teachers need to explicitly teach English language learners to understand the different possibilities for meaning making made available by multimodal resources and how they integrate for expressing ideas. However, the use of a CD-ROM in this study appeared to confound students’ learning. Guzman played a CD-ROM as a pre-teaching activity before the class read Figure 2. A female voice modeled the verbal text in the standard American English accent. Guzman explained the lesson in Spanish to provide support. The observation records showed that the students had difficulties pronouncing words like “friend,” “picnic,” and “park.” They substituted the short /a/ vowel for r-controlled /a/ vowel in park. The students did not seem to articulate the primary stress on both “friend” and “picnic.” They eventually read the text with a Spanish accent. It is important to note that the students had little prior knowledge of English.

The field notes and observation records indicated that the focus of the lesson was primarily on the verbal text. During the interview, Guzman explained that she wanted to help the students learn simple words they could use during social interactions. She also seemed to use the technology to bridge the gap between her English pronunciation (with Spanish accent) and American English variety the students listened to. When Guzman was asked if she had CD-ROMs that could model the different varieties of English used in California, she explained she had “only the school approved CD-ROMs for teaching.” The teacher argued that the recorded excerpts provided “the students the necessary exposure to the standard American English accent that they might need to interact with the larger society.” According to Guzman, her lessons focus on the best ways to integrate the students into the mainstream American society rather than helping them acquire critical reading skills.

### **How Do the Teachers Promote Critical Readings of the Multimodal Textbooks?**

The role of teachers involves teaching English language learners how images and words in textbooks are integrated to convey cultural and ideological meanings and how to provide alternative interpretations. In essence, English teachers should teach students skills for critical interpretations of the social, economic, cultural, and political influences that shape designs of textbooks. However, Reyes did not appear to encourage the students to critically examine the conflicting message of equitable social opportunities in Figures 4 and 5. For example, Reyes encouraged the students to discuss whether Miss America in Figure 4 was Hispanic. The teachers’ explanation centered round Miss America’s physical appearance. When Reyes asked the class how many of them thought they could become Miss America, no student raised her hand. He then asked why they felt they could not

become Miss America. A student answered: “. . . winners are [usually] tall, slim and blonde and I’m not look like that.”

During the lesson on Figure 5, Reyes led the class in discussion of the challenges that people with disabilities faced. He asked the students to mention the kind of difficulties such people face. Reyes encouraged the students to “read” the picture. They empathized with her and expressed their happiness that she realized her dreams. Reyes asked them to talk about immigrants who have achieved success in America. The students then shared with the class difficulties they were trying to overcome as immigrant English learners.

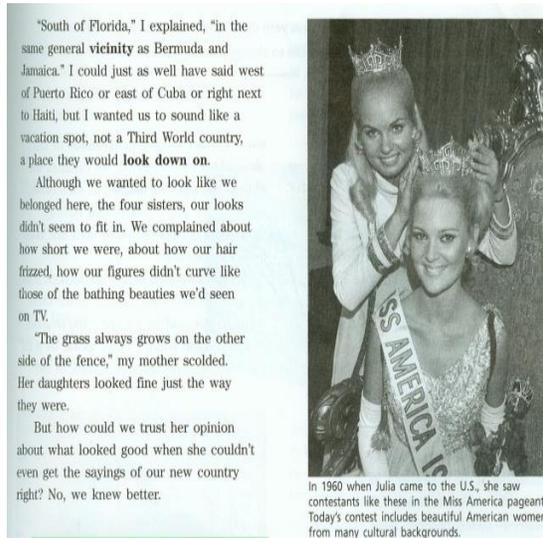


Figure 4. Is She Hispanic?  
Source: *High Point: Level C*, (p. 121)

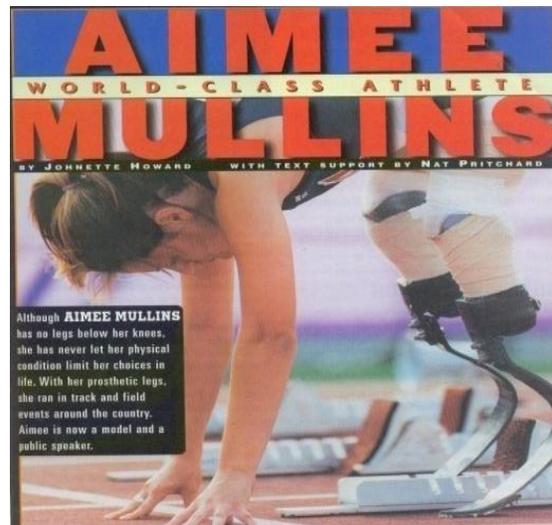


Figure 5. I’m Happy for Her  
Source: *High Point: Level C*, (p. 239).

Guzman used Figure 6 to teach reading comprehension. She started the lesson by asking the students to share with the class how they met their friends and why they became friends. She then called the students’ attention to Figure 6. She explained the assignment in Spanish. For vocabulary development, Guzman asked the students to explain the meanings of “friend”, “new”, “go fast”, “cold”, and “time”.



Figure 6. Not Easy Finding Friends  
Source: *High Point: The Basics*, (p. 52)

The teacher also played a CD-ROM so that students could listen to, and repeat the words after a female voice that modeled the reading. Guzman asked the students to identify the different ethnic groups depicted in the frames. She further asked them whether they had friends in the school or outside from different race/ethnicity. Only two students answered in the affirmative.

## Discussion

### **In What Ways Do the Teachers Teach English Language Learners How Multimodal Resources Structure Meanings in Textbooks?**

The findings in this study suggest that Guzman does not use the pictures in the textbook to teach the students how designs of messages in the Figures rely on textual organization of different modes. The captions: “New Friend” and “Best Friends” are written in 32 points, bold, and stylish fonts to provide visual salience. The bold and stylistic captions call the students’ attention to the headings – as embodying the central message. In addition, the Figures are photographs rather than sketches. Photographs make the story more credible to students.

In Figure 2, the textbook uses elements of visual salience: a “long shot” (full view of the two students with background), directionality of gaze (the two students make eye contact to show engagement), and size (the photographs relatively large while the accompanying words are small). There is also high color saturation as a signifier of an emotional expression of energy and emotion typically associated with young teenage boys. This technique allows the publishers to select the pictures as more important, more valuable, and more worthy of attention. In Figures 2 and 3 the textbook uses interpersonal meaning, including attitude (students smile to suggest gregariousness), closeness (students stand closely to suggest friendship) horizontal angle (to suggest viewers’ high degree of involvement in the message of the text). Furthermore, the Figures are realistic – showing what students do in real-life situations, and therefore, suggesting the images in the frames are real. For example, in Figure 2, the boys wear blue jeans, t-shirts and holding a football.

The goal of the publishers is probably to help students connect with the interpersonal meaning they want to convey to students: the school is a place to meet new friends. Figure 2 depicts students of different ethnic backgrounds – Hispanic and African American – as happy and gregarious individuals with the necessary qualities to form and maintain good friendships with others. The pictures invite readers to emulate the friendly qualities of the two students. Using textual meaning – the textbook depicts image of the two hands, one black and the other brown, at the bottom of Figure 3. The image becomes the Real – the most practical aspect of the message. Figures 2 and 3 thus suggest racial harmony on school campuses.

The data analysis potentially suggest that multimodal representations in textbooks make new demands on teachers in “relations to both how knowledge is represented and communicated and how those representations circulate and mobilized across time and space” (Jewitt, 2008a, p. 256). More importantly, multimodal composition changes the shapes of knowledge in textbooks as diverse modes – images, words, color, captions, font, gaze, closeness, and directionality of gaze – interact and design meaning in textbooks. Hence, helping English language learners understand the combinative potential of

multimodal resources and the “relations of meaning that bind semiotic modes together” (Nelson, 2006, p. 57) is crucially important. Teachers can help English language learners understand the complex ways by which meanings are designed into textbooks and how to interpret such materials.

The modal diversity in textbooks can serve to “increase the possibility of emergent knowledge, which may in turn positively affect intellectual and affective development” (p. Nelson, 2006, p. 70) of English language learners. For example, Figures 2 and 3 suggest that when teachers explicitly teach social semiotic analysis of images, they potentially provide Hispanic students a better opportunity to link interpretations of textbooks with the broader American society that serves as the backdrop against which English is learned and used. The school as a context of learning provides an interface between learning, the students’ multiple cultural backgrounds and multiple identities (as Mexican, English language learners, adolescents, multilingual and multicultural students and Spanish speakers). Through an explicit critical analysis of the Figures, the students could have developed into more critically aware learners by contesting the message that racial harmony and social interaction were easily forged among the different ethnic groups in schools. Such critical skills can be transferred into analysis of different communicative modes, including audio materials in ELL classrooms.

### **How Do the Teachers Integrate Audio Materials into Teaching?**

However, the CD-ROM presents many problems for the students. First, it created a non-interactive situation where the students passively listened to an audiotape. Second, using the standard American English accent to model pronunciation seemed to create confusion for the students. For example, the audiotape had no extra-linguistic clues to contextualize the listening comprehension passage and provide support in form of clues for meaning making. In addition, the audiotape did not repeat, expand and reinforce specific important vocabulary. Third, the students, at the beginning level, lacked skills to discriminate between sounds, recognize words, understand grammatical groupings of vocabulary, categorize sounds into meaningful patterns, and use background knowledge in English to predict what vocabulary may be read next. Lastly, the students’ listening comprehension was probably influenced by Spanish.

In view of these challenges, the rationale for the school’s adoption of such a CD-ROM, which essentially focuses on teaching and evaluating linguistic forms such as pronunciation and fluency, seemed inadequate in the face of multimodal textbooks and diversity of students. Jewitt (2005) argued that “the ‘new’ range and configurations of modes that digital technologies make available present different potentials for reading than print texts” (p. 327). New London Group (2000) suggested that because of increasing local diversity and global interconnectedness, teachers should teach students skills they need to “negotiate regional, ethnic, or class-based dialects” (p. 14). From multimodal literacy perspectives, teachers may need to teach English learners skills to negotiate the standard American English dialect, academic English, Hispanic variety of English, and code switching between English and Spanish that are commonly used across the U.S. (New London Group, 2000). In addition, the data here suggest that teachers need to use CD-ROMs that are pedagogically rich and interactive to meet the specific students’ needs of English language learners (Hubbard & Siskin, 2004). Teachers can provide expanded opportunities for students to use CD-ROMs to enhance their skills in listening,

pronunciation, and oral reading comprehension, and teach them to critically evaluate the effectiveness of such multimodal texts.

### How Do the Teachers Promote Critical Readings of the Multimodal Textbooks?

In the data above, the participants used the photographs to enact literacy instruction that helped the students make connections between the textbook and their lives. Reyes uses Figures 4 and 5 to accomplish the goal sanctioned by the textbook and the politico-ideological landscape, which was to introduce the students to the U.S. society and its ideals: all men are created equal. For example, the participant interprets the verbal texts in Figures 4 and 5 to suggest a message of building consensus around the notion that everybody has equal opportunities to achieve his or her goal irrespective of race, gender, ability or situation in America. Similarly, Reyes achieves the objective approved by the textbook and the dominant culture that the U.S. is a melting pot for diverse ethnic and cultural groups.

However, a critical analysis of Figure 4 could have shown the students that the verbal text (the *Given*) was depicted at the left while a graphically salient picture (the *New*) was shown at the right. The picture, in relation to the bottom text became the *Ideal*. The commentary at the bottom - “. . . today’s contest includes beautiful American women from many cultural backgrounds” - therefore became the *Real*, the factual evidence of the multicultural dimension of beauty pageants in contemporary America. Thus from a practical point of view, the message of the commentary was presented to viewers as the most salient aspect of the discourse. The factual commentary gave greater credence to the promise of many faces in the American beauty pageantry in the picture. Furthermore, the design of Figure 4 relies on interpersonal message to convey meanings. The two contestants are depicted close (to show intimacy) and smiling (to show a positive attitude). In addition, using interactional system of gaze, the women in the frame are depicted as directly gazing at viewers. In this way, the image establishes an imaginary relationship with viewers. The message here is: the beauty queen is just like any other immigrant and that if she can become a beauty queen, any other person can achieve his or her dreams.

A semiotic analysis of the Figure 5 showed that the textbook uses textual design to compose the message of the frame. The frame contains an extra large caption at the top to signify *Given* while the image is depicted below as *New* information - a woman with prosthesis legs on the track field. In the frame, the verbal text at the top is the *Ideal* while the picture at the bottom is the *Real*. The big size of the image adds to its visual salience. In addition, colors - the use of bright red colors against a blue background - express interpersonal meaning. Bright red color is generally associated with winning, achieving, and competing while blue is associated with peace, tranquility and harmony. The bright color in the headline is also dominant in the pictorial image. The dominance of bright color in the headline and picture is suggestive of a promise of a happy ending story. The bright color becomes the glue that visually holds together the different semiotic modes to encode the message of the text: people can achieve their goals in America regardless of disabilities.

A semiotic analysis of Figure 6 shows the image is designed for interpersonal meaning. Figure 6 depicts a “long shot” to provide a full view of three students with different ethnic identities (Caucasian, African-American and Hispanic) and two genders (male and female). The students in the frame dress up in a school jersey. They are also running on the school field. In addition, Figure 6 is a photograph instead of an abstract drawing. These ideas are to signify the realistic nature of the image. The three images in the

frame are close and smiling to suggest intimacy. The frame also provides a horizontal angle to suggest to viewers high degree of involvement with the message of the text: the school is a fun place and a place for meeting friends regardless of individuals' ethnic and gender backgrounds. The verbal text - "Lupe is new at Lakeside school . . . Lupe is glad to have two new friends" - is used to reinforce the central message of the image: friendship is easily forged among people of different racial/ethnic and gender backgrounds in schools.

To understand the visual message made available for critique in Figures 4, 5 and 6, the teachers needed to explicitly engage in semiotic interpretations of the frames and situate meanings of the textbooks in students' lives. This means they needed to teach the students to interpret the images in the light of their subjective and cultural reality in which adolescent Hispanic English learners construct an understanding of themselves and the world. The teachers could ask: What is the message of the pictures? Do you agree or disagree? Explain your position. Why is the message presented to readers this way? Whose social-political interest is the message designed to serve? If the teachers pose these questions, they can potentially help their students to contest the conflicting message (e.g. all men are equal and all men have equal opportunities) against other national political discourse, including anti-immigration rhetoric, English-only policy, and high unemployment/poverty rates in Hispanic communities they experience and see on the TV. The teacher can also encourage the students to critique Figure 5 by asking them whether special education students are treated differently by other students in schools.

The data analysis above seems to suggest that English teachers need to develop more complex and critical views of images in textbooks (Meskill, et al., 1999; Nelson, 2006). English language learners gain "new understandings . . . as a result of transducing semiotic material across modes" (Nelson, 2006, p. 70). More importantly, multimodal textbooks have an inherent critical potential to the extent that teachers learn to teach English language learners how to "deconstruct the viewpoint of the text, and the text to subvert the naturalness of the image" (Lemke, 2005, p. 4). To teach multimodal textbooks is to "learn how to be critical of its messages, and . . . how to use it critically" (Lemke, 2005, p. 5). Such critical textual analyses of images by teachers are vitally important for preparing students to engage in heteroglossic interpretation that "focuses on how English learners and their communities influence and are influenced by social, political, and cultural discourses and practices in historically specific times and locations" (Gutiérrez, 2008, p. 150).

### Summary of Findings

This study provided an important exploration of how two teachers deployed multimodal resources of textbooks to support ELL in their classrooms. The preliminary findings suggest that Guzman and Reyes used visual images to contextualize instruction and CD-ROMs to model pronunciation for students. They also used images to help students make connections between the textbooks and some aspects of their cultural lives. The teachers' expertise in verbal text analysis allowed them to pay more attention to the content (literature) of the textbooks. However, Guzman and Reyes seemed less prepared to analyze how multimodal resources combine and interact to structure knowledge in the textbooks. First, they appeared to lack the necessary preparation for teaching multimodal features of textbooks. Second, the way multimodality was designed into the textbooks actually confounded the students' learning. Sometimes, the confusion happened in directly observable ways - their failure to understand the recorded English excerpts - and at other

times, in more subtle ways – the textbooks sending messages of interracial harmony and equitable social opportunity that conflict with the lived experiences of the students. Third, the scripted nature of the textbooks seemed to have discouraged the teachers from mediating them in light of their own experiences, pedagogies, interpretations, and understandings. Finally, the teachers did not appear to engage in critical analysis in ways that possibly teach students to challenge ideological messages of textbooks. The findings have important implications for ELL teachers.

### **Implications of this Study**

There is a need to rethink ELL instruction given the blends of knowledge made available in multimodal texts and the attendant new possibilities and challenges for the design of teaching. Teachers may need to ask crucial questions about ELL instruction: what new multimodal resources are made available in textbooks for meaning? What are the possibilities and constraints of visual and non-linguistic resources of textbooks? How can teachers exploit the potential of multimodal textbooks for teaching?

Furthermore, there may be a need for additional “training” for some ELL teachers on how to make better use of the affordances of multimodal textbooks. Such training will prepare teachers to teach how multimodal resources inform textbook production and the specific skills, knowledge and dispositions they need to teach students for analysis, interpretation, and critique. Furthermore, school districts need to give teachers a more prominent role in selecting and adopting textbooks for students. To play this role effectively, teachers may need “training” on how to engage in nuanced interpretations of textbooks. This is because textbooks are a patchwork of ideologies, interests and marketing strategies. ELL teachers may need additional training on how to ask questions such as: which publishing house produces them? What are its views on how best to educate ESL students? How does it intend multimodal textbooks to be used?

Such training will help ELL teachers to identify multimodal texts that they consider appropriate for their students, including CD-ROMs or other multimedia technologies. For example, CD-ROMs with images to provide extra-linguistic clues to support the language being taught will potentially facilitate students’ learning. Such materials also need to be interactive, e.g., use slower speech, repetition and allow students to ask for clarification. In addition, CD-ROMs should be interesting and relevant to students’ lives. Furthermore, CD-ROMs should be recorded in different accents as a way to provide students the most important skill to negotiate the different dialects and accents across the U.S.

### **Limitation of this Study**

A major limitation in this study is the small sample. Therefore, there is a need for further studies that collect data that are representative of larger populations of ELL teachers and from diverse rural community contexts. Such studies can help validate some of the main findings of this study and present broader pictures of the complexity of ELL instruction and multimodal textbooks in rural schools.

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