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Interdisciplinary Perspectives on Learning to Read

Culture, cognition and pedagogy

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Chapter 7

New literacies in the elementary classroom

The instructional dynamics of visual-texts

Dawnene D. Hassett

This chapter examines the hypertextual, interactive, and visual elements of contemporary children's texts, and proposes a pedagogy of multiliteracies that draws on social semiotics and sociocultural theories. As an organizational framework, the discussion employs a widely accepted heuristic for reading comprehension, which defines reading as the interaction among four elements: the *reader*, the *text*, the *activity*, and the *sociocultural context*. This model of reading comprehension was developed with a traditional print-based notion of "text" in mind, and thus contains particular expectations about what the reader is to "do" with the text (e.g., decode the graphophonic cueing system). However, basic print literacy alone, while remaining ever-important, is no longer enough to meet the demands of new forms of texts and new literacies. Thus, this chapter updates the terrain of early literacy pedagogy to include highly interactive visual-texts, and outlines roles for the reader/writer when producing and consuming these texts, as well as roles for the teacher/facilitator for designing interactive-visual activities. The chapter closes with a discussion of the instructional dynamics necessary for a pedagogy of multiliteracies.

Introduction

This chapter is situated within a larger evaluation of the ways in which new literacies affect the teaching of reading. Kress (2003) notes that "the world of communication is not standing still" (p. 16), and as literacy educators working to find our balance on this shifting terrain of communication, we must begin by looking at the changing nature of reading itself. Studies in new literacies have pointed to two important shifts in the nature of reading, involving 1) ontological changes to texts; and 2) paradigmatic changes to our instructional mindsets (Lankshear & Knobel, 2003).

First, in a very real and ontological sense, texts have changed, because they look, feel, and sound completely different from traditional print-based texts where graphemes are the primary carrier of meaning. Visual, interactive and hypertextual modes of communication have become more prevalent with the advent of new technologies, and texts today combine alphabetic print and images in ways that

rival the printed word (Kress, 1998, p. 57). In the chapter, I define "text" as the cohesive whole of a document, including words, images, design, and their relations; and I use the term "print" to refer specifically to the units of writing. This expanded definition of "text" includes innovative approaches to communication (nonlinear, interactive, dynamic, multimodal, visual, imaginative, interpretive, and mobile). These texts challenge notions of representation and interpretation commonly associated with traditional print – and traditional literacy instruction.

Second, alongside ontological changes to texts, sociocultural theories and the idea of "multiliteracies" have become important tools for re-thinking our paradigms about the reading process. Sociocultural forms of "new literacies" involve an understanding that specific codes (like an alphabetic sign system) don't mean anything outside the context of the text (including its images) or the social and cultural practices that the children bring to a reading. The social contexts and purposes for making sense of any text are (of course) shaped by the reader's experiences, background knowledge, and social/cultural identities. But beyond this, the social context for making sense of text is also shaped by the makeup of the text itself, and what the reader is to "do" with it. To read, interpret, and create meaning through various forms of communication and representation requires a new role for the reader/writer – as well as a new role for the teacher in designing learning spaces and activities that highlight the multiple literacies of the children in our classrooms.

These two shifts to the nature of reading (one ontological and one paradigmatic) indicate the need for an updated reading pedagogy for classroom use. In this chapter, I examine the hypertextual, interactive, and visual elements of contemporary children's literature as a starting point for rethinking what it means to read and write with new forms of text. The first section ('Updating models of reading and comprehension') outlines a traditional heuristic of reading comprehension, and argues that this model needs to be renovated for new texts and new times using social semiotics and sociocultural theories of literacy learning. The second section ('Visual-texts') examines specific characteristics of highly interactive, hypertextual, and visual children's literature, and employs the updated model of reading and comprehension to discuss the implications of using these texts in the classroom for early reading and writing instruction. Finally, in the third section ('Reader/writer/teacher/designer'), I discuss the classroom contexts and instructional dynamics necessary for a pedagogy of multiliteracies. Taken together, this chapter argues for the inclusion of highly interactive visual-texts in the classroom, and outlines roles for the reader/writer when producing and consuming these texts, as well as roles for the teacher/facilitator for designing interactive-visual activities.

Updating models of reading comprehension: social semiotics and visual-texts

In this highly visual and interactive world of communication, "the basics" of traditional literacy education may not be enough for students to know how to

read and write new forms of text. Yet in schools, literacy instruction continues to be dominated by traditional texts and alphabetic print (Hassett, 2006b). In this section, I describe a traditional heuristic for reading comprehension as a starting point for understanding the process of reading, and then I discuss how social semiotics and multidynamic literacy theories can help us update that model for new texts and new times.

Traditional heuristic for reading comprehension

As an organizational framework, I draw upon four components of the reading process that are widely accepted by reading researchers, and depicted by the RAND Reading Study Group (2002) in the heuristic below (Figure 7.1).

This model defines *reading comprehension* as the process of getting meaning from written language, and it consists of four interrelating elements: the *reader*, the *text*, the *activity* (or purpose) of reading, and the larger *sociocultural context* in which the reading occurs. In this model, the reader brings something to the text (e.g., knowledge and skills); the text has particular characteristics and codes; and the activity defines what we are to do with the text – the purpose of the reading or the outcome of a lesson. All of this occurs within a sociocultural context, such as defined by the social and cultural plane of the classroom, including the students' and the teachers' backgrounds, identities, expectations and ways of being in the classroom as a learning environment (Hammerberg [Hassett], 2004a).

This model of reading comprehension was developed with a traditional print-based notion of "text" in mind. When learning to read, the print on the page is primary, as we teach children to move from left to right and top to bottom. While readers can bring their own background knowledge to the reading, comprehension of the printed word involves being able to decipher the code to find the author's meaning. While graphics may speckle the printed page, educationally speaking

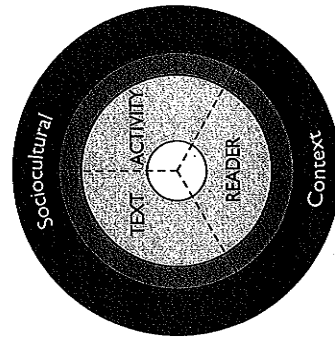


Figure 7.1 Traditional heuristic view of reading comprehension showing four components of the reading process depicted by the RAND Reading Study Group (2002).

(e.g., notions of reading development; literacy assessment) the images and pictures are primarily there to support the printed text (Hassett, 2006a). Thus, the traditional model for reading comprehension contains particular expectations about what the reader is to "do" with the text (e.g., decode the graphophonemic system; decipher the author's meaning), as well as particular kinds of "good reading behaviors" we look for as children engage with the texts and activities in our classrooms. These "good reading behaviors" are seen in our educational activities, standards and assessments, and are tightly tied to the printed word (Hassett, 2006b).

Of course, definitions of *text*, *reading*, *writing*, and *literacy* should not be understood as absolute. One look across the changes that have occurred educationally over time shows how the knowledge used to make decisions about best practice is not a matter of "given" knowledge, but more a matter of histories, practical techniques, and social forms of reasoning (Graff, 1979, 1986; Hassett, 2006b; Myers, 1996).

In this moment of our history, the history that makes up our present, we are living with a variety of communication techniques, which clearly indicate that basic print literacy skills alone, while remaining ever-important, are no longer enough to meet the demands of new forms of texts and multiple literacies. As the New London Group (2000a) points out, literacy pedagogy must account for "text forms associated with information and multimedia technologies" (p. 9). Beyond this, changes to our working lives, our public lives, and our personal lives demand that individuals be flexible, multi-skilled negotiators across languages, discourses, and cultures (New London Group, 2000a, pp. 14–18). Thus, the notion of a singular form of literacy as the reading and writing of print has been transformed into the notion of "multiliteracies" (Anstey, 2006; Kalantzis & Cope, 1997; Kress, 2000; New London Group, 2000b). This is not just a matter of reading the word, but rather, a matter of interpreting and representing meaning across various contexts and audiences with multiple sign systems.

Educationally, then, our social forms of reasoning about basic and best practice, as well as our practical techniques for teaching reading and writing, need to "catch up." In order to modify and update the traditional model of reading comprehension, I turn to sociocultural theories and social semiotics, described in the next section.

Social semiotics and sociocultural theories

In an updated model of reading comprehension, we can begin by thinking of "text" as involving more than the printed word, as many sociocultural theorists already have (see e.g., Gee, 1991; Hammerberg [Hassett], 2004b; Pérez, 1998). The texts children encounter today embody cues for reading that extend beyond the letters and words on the page, requiring readers to (inter)actively focus on textual elements beyond the decoding of print. To further understand the textual elements that extend, yet often embrace, printed text, I offer semiotic and

sociocultural definitions of *mode*, *multimodal*, and *visual-texts* to help us update our model of reading comprehension.

Mode

Bezemer and Kress (2008) define a mode as a "socially and culturally shaped resource for meaning making" (p. 171). Beyond the printed word, there are numerous other socially and culturally shaped modes of communication and representation that can be counted as a part of the "text" to be "read," including, but not limited to, images, talk, directional lines, gestures, utterances, or icons. Although this definition is broad, Bezemer and Kress's characterization of "mode" helps us educationally to note that children have numerous resources to draw upon as they engage in literacy learning. When we help children to focus on print, itself a socially and culturally shaped mode to interpret, we can also utilize additional resources (modes) that children have available to them, be it simple gestures and pointing at words and print, or conversations around the text at hand, or interactive whiteboards that help us to create meaning in new ways. In the end, it is our job, as educators, to get the most out of the signs children are attuned to; but it is also our job to provide them with, and demonstrate for them, the multiple resources (modes) we have available for making meaning.

Multimodal

With a changing definition of "text" that includes multiple modes for making sense, the role of the reader/interpreter changes to one who can construct meaning from the multiple resources available. Siegel (2006) notes that children have always been multimodal; their resources for making meaning include talk, gesture, drama, drawing, and ways of incorporating, integrating, and extending linguistic signs (pp. 65–66). In a digital and technological culture, though, actual texts have become multimodal as well, containing multiple forms of symbolic representations (diSessa, 2000).

Hassett and Schieble (2007) point out that the use of computerized type design and photomechanical printing technologies create multimodal texts with various levels of meaning, as evidenced in some children's literature. Rather than having simple, static images paired with standardized alphabetic print, multimodal texts take on dynamically interactive elements. Thus, being able to navigate the Internet, use digital media, or even read a children's book involves being able to decode and comprehend alphabetic print in conjunction with other socially and culturally shaped forms of representation, that is, in conjunction with multiple modes.

Visual-text

I use the term "visual-text" to refer to the network of semiotic systems available within texts that contain and combine images and print. In semiotic terms, print

itself can take on multiple modes of meaning through visual design and synergy with images (Dresang, 1999; Hammerberg [Hassett], 2001; Hassett, 2006a; Sipe, 1998). Unless the print is literally "pushed off the page" (Kress, 1998, p. 57), font itself can be a mode, because the way the word looks and "feels" on the page contains more meaning than the word itself.

Heuristic of reading comprehension updated

In an updated model of reading comprehension (see Figure 7.2), the text to be understood is a visual-text with a variety of modes for making sense. With this change to "text," the reader becomes one who uses the multimodal resources available to negotiate the text and interactively write/construct new meaning. Thus, the activity of reading/writing visual-texts involves meaning construction through a reflective recombination of the signs available (Siegel & Carey, 1989). In this sense, the signs available become the "semiotic scaffolds" that the reader/writer can use to create new meaning.

In the updated model of reading/writing with visual texts, the sociocultural context in which a reading takes place is informed by all three elements within the inner model. The visual-text itself sets up a sociocultural context for negotiating the multiple modes available; the reader/writer brings sociocultural backgrounds (both knowledge and skills) to the reading; and the activity of constructing meaning necessarily relies on the social and cultural resources available (semiotic modes) both in the text and in the classroom. In this way, the activities designed by teachers in the classroom around visual-texts become the scaffolding support for the instructional use of multimodal resources.

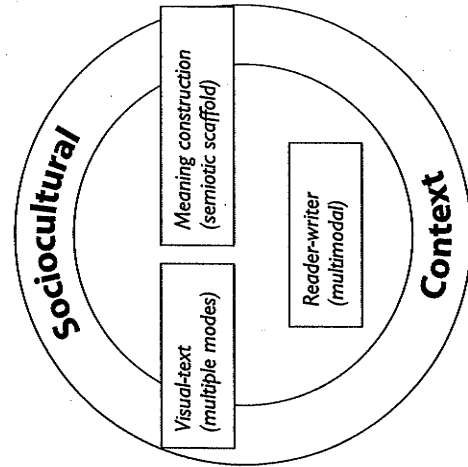


Figure 7.2 Model of reading/writing with visual-texts.

Visual-texts: Relationships between images and print in books for children

So, the text always has certain "real" (ontological) signs to interpret; the reader always has certain "real" sociocultural backgrounds (both knowledge and skills) to use with the text; and the activity of interpretation always takes place within a sociocultural field. In this section, I will use the updated model of reading/writing to explore specific characteristics of interactive visual-texts. Examples of contemporary children's literature will highlight the ways in which visual-texts contain: 1) words that express meaning through typesetting; 2) interactive narration; 3) images that expand meaning; and 4) multiple perspectives.

Words express meaning through typesetting: The text

In *Charlie Parker played be bop* by Christopher Raschka (1992), the *ways* in which various repetitive, melodious, and nonsense words are printed on the page – their typeface and graphical placement – lend themselves to a musical reading, with some words jumping around the page, some pounding, some rocking, and some rolling. One way to approach this reading might be to repeat the phrases over and over, in pairs and in groups, letting the words wash over you in all of their nonsensical sensibilities until you realize that . . . maybe you sound like jazz.

In *Froggy gets dressed* by Jonathan London (1994), images show mom yelling Froggy's name throughout the book: "Frrrooooooggggy!" The print informs young readers to stretch out Froggy's name in terms of decoding, but additionally, the font changes color from a cool purple/blue on p. 7, to burnt orange on p. 10, and to fire red on p. 14. As a mode, the color changes show the mother's progressive anger with Froggy, and illustrates how, in this instance, more meaning is carried visually through color than decoding itself allows.

In Jules Feiffer's (1997) book *Meanwhile*, the word "RAYMOND!" is printed in huge capital letters, in a megaphone shape, with "noise lines" running through it. There is no need for quotation marks or a signifying trailer like: [comma, close quote] Mom yelled. We know mom is yelling by the way the word is placed on the page, and through our own cultural knowledge of mothers yelling, comic-book forms, and image-text relations.

In these and many other instances available in visual-texts, graphics represent more meaning than the word alone. The reader is required to decode not only the word, but also the way the word is printed and placed on the page, in what color, with what other designs (e.g., noise lines), in what shape (e.g., megaphone). Here, the visual-text itself sets up a social context for using our own backgrounds to interpret the modes available (e.g., *Froggy's mom is getting more mad*). Thus, the visual-text affords multiple ways to make sense of the elements in front of us in terms of our own lives.

Interactive narration: The reader

A key characteristic of interactive visual-texts is the way in which the reader is necessarily involved, not only as a consumer of the text and not only as a producer of meaning, but also as intrinsically mixed up in the plot and unfolding of the story itself. In *Don't let the pigeon drive the bus* (Willems, 2003), the narrator, a bus driver, directly addresses the reader, via a speech balloon in the very beginning prior to the title page, to watch over things while he goes away for a bit, and under no circumstances to let the pigeon drive his bus. As the story goes on, though, the little blue pigeon jumps through hoops and circles to try to get us to allow him to drive the bus. He begs us sweetly; he invents bus-driving games to play together; he cries; he screams . . . and so the story goes. But to read or hear this story is not merely to passively accept what is written. To read or hear this story is to respond back: often loudly, often with gusto! In the telling and viewing of this story, the reader/writer takes up dialogue with the pigeon, simultaneously in an object-subject position; and the reader/writer is, as a matter of fact, the only other "character" the pigeon speaks to.

In *Follow the line through the house* (Ljungkvist, 2007), the reader does not take the position of a character who moves through the story dialoguing with the other characters. Instead, the reader takes the position of moving through the house to explore, answer questions, and play hide-and-seek with small images of robots or mice. On the cover of this book, the title words are formed by means of a thin line that can be followed throughout the entire book. We enter the coat room, then the kitchen . . . and we realize that all of the major visual lines throughout the house are connected as one long line to follow. As we go from room to room, we follow the line into something else. For example, in the kitchen, we enter the refrigerator, where the line marks out milk containers, melons, pitchers, cheese. Within each "smaller space" of a room (e.g., refrigerator, closet, bathroom cabinet), there are questions and problems posed to the reader. In the refrigerator, readers are asked, through print scattered over the page, how many pickles are in the jar, or whether they can find all of the cherries that fell out of the bag. These types of questions require the reader to search and actively seek both the images and the text in concert. Additionally, many of the questions posed compel readers to draw on their own personal interests: What would you use from this refrigerator to make a sandwich? The images and signs in the text, then, serve as a scaffold for further thinking as new texts and stories are produced through interactive conversations.

In the cases where visual-texts directly address the reader and/or require an interactive form of story-telling, we can clearly see how the reader's role has changed. Beyond reading to decipher a particular (singular) meaning, highly interactive visual-texts require that young readers are a part of a larger milieu where they can respond altogether in a group and/or openly dialogue with their little colleagues who are experiencing the same thing. But make no mistake: these visual-texts themselves set up the context that calls for readers who can use

the multimodal resources available to them in interactive ways. In order to negotiate and play with the text, and in order to interactively write/construct new meanings, the text and the social context (expectations) of the classroom are primary.

Images expand meaning: the activity

Another characteristic of visual-texts involves the heavy use of visuals to carry more meaning than the printed word alone. In Christopher Bing's (2000) artistic depiction of Ernest Lawrence Thayer's traditional poem, *Cassey at the hat*, a traditional ballad is opened up into a new form of historical fiction. Graphics weave real and fictitious artifacts from the nineteenth century into the poem, such as newspaper clippings, ticket stubs, and photographs. Thus, images carry information about things outside the poem and add to the poem's meaning.

The activity of reading/writing visual-texts involves constructing meaning via a continual recombination of the signs available. Many texts for children combine print and images in such a way that the image is made of the print. Known as "synergy" (Dresang, 1999; Sipe, 1998, 2001), printed words and images blend together on the page and can no longer be separated. For example, in Peter Sis's (1996) *Starry messenger*, a book about Galileo, there is an image where printed words in script font are shaped in an "eyeball image" (n.p.). The image itself—the eyeball made up of Galileo's words—conveys meaning about Galileo's science and vision, yet the words cannot be disconnected from the image since they *are* (a part of) the image. To read this visual-text, the reader has to combine both the text and the image as one because the words themselves don't contain the overall larger meaning: that Galileo was a visionary; that Galileo observed the world; that Galileo used his eyeball to see into the skies. These meanings are not "in" the text; instead, they are "in" the interpretation and recombination of the signs available.

A similar form of image-text relations occurs in *Meow Ruff* (Sidman, 2006), a children's book in which *all* of the images are made up of words: the grass, the table, the tree, the rain. The clouds are the words; the words are the clouds. All actions, animals, places, and things are depicted in complete synergy between words and images. Additionally, the words used to form the objects in this book change from page to page depending upon the context of the story, even when the same object is being described in poetic form. For example, early on in the book, the picnic table is formed out of the words: "platform for picnics and crumbs and ants" (n.p.). Later, after it starts raining, the picnic table reads: "platform that's spotting and splatting and dripping" (n.p.). As the cat and the dog cuddle beneath the table, the activity of reading this visual-text requires the reader to constantly recombine the signs available and notice the nuances of meaning available everywhere on the page.

Siegel and Carey (1989) suggest that "sense-making involves the creation of new ideas" (p. 19). With visual-texts, the network of signs available for making

Reader/writer/teacher/designer: classroom contexts and a multidynamic pedagogy

Using a theoretical frame that combines sociocultural theories of language and literacy with semiotic theories that explore the changing nature of text enables us to understand the act of reading as always embedded within a social context and purpose for meaning-making, while also understanding the ways in which new forms of text set up different social contexts. Burbules (1998) notes that this is not a matter of whether a "new" form of reading will displace an "old" form of reading, because the practice of reading takes place "within contexts and social relations . . . [and] significant differences in those contexts and relations alter the practice" (p. 102).

As we have seen, highly interactive visual-texts are significantly different from traditional linear texts on several levels. From the look of the print on the page to the synergy of images and words, interactive visual-texts create "transactive spaces" (Dwight & Garrison, 2003) where the reader/writer can engage with multiple modes in an interplay, informing and reinventing meaning in multiple and innovative ways. For Smagorinsky (2001), this space is an "experiential space" rather than just a "social space" because the tools for reading (signs, symbols, texts, images) exist within a social space (accepted genre conventions, the pragmatics of the activity), which in turn exists in reciprocal relation to the human reader's "head" (cognition, skills, knowledge, identity, and abilities) (Hammerberg [Hassett], 2004b; Shaffer & Clinton, n.d.).

In this frame of mind, the socio-cognitive processes of reading involve not only the tools of the text (the modes of representation), but also the social practices that allow us to recognize and interpret various signs and modal genres as *meaningful* in the first place. Thus, reading, as an interaction between a reader and a text, involves the social use of these representational modes as part and parcel of conceptual thinking. This understanding of reading as a socio-cognitive process is meant to highlight the ways in which complex cognitive actions and various social resources are reciprocally and inextricably coupled.

It is important to note, then, that the design of activities and lessons around visual-texts encompasses more than the text itself. With visual-texts, reading is not always a matter of "getting" the author's meaning; instead, reading is about constructing sense out of the mass of cultural artifacts, tools, signs, and symbols at hand. In the classroom, the social (instructional, conversational) practices at work within the learning environment form a part of the "experiential space" in which meaning is produced. Thus, teachers as facilitators of visual-text experiences *design* their learning spaces and activities in order to highlight the multiple literacies of the children in our classrooms (New London Group, 2000a), and in order to highlight the multiple modes available in any text.

Elsewhere, I have proposed a multidynamic literacy pedagogy (Hassett, 2008) where literacy is viewed as multifaceted, socially constructed, and inextricably linked to the real lives and thoughts of children. In the case of highly interactive

sense becomes a scaffold for further thinking, questioning, and idea-creation. The new ideas created through the activity of reading visual-texts are not always "in" the text itself, but instead, are a part of a "dynamic and non-linear process" (Siegel & Carey, 1989) of critical and reflective thinking about the signs available.

Multiple perspectives: the sociocultural context

In the book *Loki & Alex* (Smith, 2001), Loki is the dog, and Alex is the boy, and each has his own perspective about what is happening at the moment. For example, a clear, full-color, photograph of Loki eating out of a trash bag has a superimposed image of Alex's face, saying how naughty Loki can be. On the opposite page, a distorted black-and-white photo of Alex grasping his cheeks with his mouth wide open reads from Loki's perspective, about how he thinks Alex just loves it when he digs for his own treats. The images show how Alex sees in color, as a human might, and Loki sees in black and white, as dogs are thought to do. But beyond the mode of color to convey meaning about seeing the world differently, the multiple perspectives on the same event are carried in the words and actions of each character. The book itself sets up a sociocultural context of living and being like Loki and Alex, each with his own perspective. The act of reading this book means living within their sociocultural push-and-pull world, but the reader is also living within the sociocultural contexts he or she brings to the reading as students share and laugh about these ideas with friends in the classroom.

Likewise, *Throw your tooth on the roof* (Beeler, 1998) describes what various cultures do when children lose a tooth. These tooth traditions are told in encyclopedic format: not to be read front-to-back, but instead, to be picked and chosen as the reader desires. This suggests a new way of reading books to and with children. Instead of reading a book out loud from front to back and cover to cover, adults and children necessarily have to communicate with each other about various elements and stories within the story. The social and cultural act of reading interactive visual-texts with multiple narratives sets up a space *outside* of the book to produce new knowledge around the book at hand.

Multiple perspectives and multiple narratives in interactive visual-texts require the reader to interpret across many social and cultural realms, as well as across many different story lines. For instance, *Black and white* by David Macaulay (1990) is a non-linear text that contains multiple narratives for the reader to interconnect and think about. Four distinct stories happen on the page at the same time, and while one *could* read each story individually, that would be missing the point. Links and connections among panels hold this book together: for example, the main character in the text is a robber, but he is never written about in the print: he only appears in images that connect the panels. This book does not have a singular meaning to interpret in the end, but instead, sets up a context for talking with each other about the many possible meanings. With each new reading a new meaning may be produced.

visual-texts, a multidynamic literacy pedagogy allows teachers the flexibility to add semiotic toolkits to their instructional repertoires. As teachers/facilitators design experiential spaces for their young readers/writers, there is a "letting go" of some of the dogma around traditional reading instruction. For example, our reading strategies and cuing systems can be updated to include graphics, textual placement, synergy, and images that represent more than the printed word alone. We can include the possibility of mixed genres and dialect cues, and a purpose for reading beyond deciphering an author's singular meaning. If we truly value "children's powers of imagination and generativity" (Siegel, 2006), then we must accept that, in the end, there is no singular meaning to take away, no one "right" answer. Rather, there are multiple story-lines and modes to integrate together as readers/writers create a larger meaning for themselves. Thus, a pedagogy of multiliteracies continually reinvents the story of what's "new" about "new literacies" in the elementary classroom using visual-texts as a starting point.

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