

Reading–Writing Connection

JEROME C. HARSTE

I have often said to teachers, “If your reading program is having problems, your writing program probably has problems too. And vice versa, if your writing program is problematic, your reading program is more than likely problematic too.” While some people may think these statements are speculative at best, what follows is an analysis of what we know about the reading–writing connection and why these statements are more fact than speculation.

Parallels between reading and writing exist at the graphophonic (letter–sound), structural (syntactic), semantic, and pragmatic levels of language. Parallels also exist between all of the expression of language, not only between reading and writing but also between reading and writing and speaking and listening. Carolyn Burke (see Harste, Woodward, & Burke, 1984) has referred to these parallels as a “linguistic data pool,” by which she means that experiences in any expression of language become a resource to be used when engaging in another expression of language. What you learn from speaking (what to call things, how to talk about a topic, how language does the work it does) becomes a resource when you engage in another expression of language, be it reading, writing, listening, or speaking. Burke’s model suggests a synergy between reading and writing. It is not just that reading and writing are correlated but rather that in juxtaposition they are generative, allowing language users to make leaps in terms of their growth and development as language learners.

Although these understandings may not have represented new ways to think about teaching children to read and write (Sprague Mitchell, 1950; Stauffer, Burrows, Coleman, & Swain, 1960; Jacobs, 1965; Hunt, 1980), they did suggest new avenues for research. In the 1960s researchers interested in the reading–writing connection studied it using correlation. Specifically they studied the relationship between spelling and phonetic knowledge. The correlations were always low, around .20, which when doubled explained only 4% of the variability found between spelling scores and reading scores. Hanna, Hanna, Hodges, and Rudorf (1966) fed a computer all of the known phoneme–grapheme correspondence rules of English (17,310 words) and then asked the computer to spell as many words as it could correctly. The relationship between phonetic rules and the correct spelling of words was much higher than anyone expected. While a quarter of the words not spelled conventionally were the highest-frequency words in the English language, the computer was able to spell correctly almost three-fourths of the words it was fed!

While surface-level studies of language have helped advance our understanding of the reading–writing connection, breakthroughs in our understanding of how we learn language were needed. In the 1960s teachers were told not to teach reading and writing together to young children. The assumption was that teaching both subjects together was too much information for the young child to take on. The advice given was that writing should not be introduced until after the child had learned to read, by which educators at that time meant learned the fundamentals of sounding out words and had a sufficient sight vocabulary to recognize function words “with automaticity” (Lagerbe & Samuels, 1974, p. 294). By “automaticity” Lagerbe and Samuels meant that sounding out had to be automatic so that attention could be focused on meaning. They saw reading as the mind having to do two things at once. Given new insights into language and learning this advice is questionable, with some theorists arguing (Goodman, 1996) that separating the systems of language makes the learning of both reading and writing harder than when they are taught in conjunction with one another.

Graphophonic Parallels

I am not going to argue against the direct teaching of phonics. However, I will argue that encouraging writing, and hence invented spelling, incorporates the best of what we know in terms of supporting literacy learning. P. David Pearson (2002) explains:

At the most rudimentary level, when kids are encouraged to write—even at the very early age, pre-kindergarten and kindergarten—and they’re encouraged to spell words as they sound them, two things happen. The first is that they develop phonemic awareness in precisely the way that the advocates of direct phonemic instruction intend for it to be learned and tested. But with writing, they do it, I would argue, in a much more incidental, less laborious, and more natural way. And it’s acquired in the service of some other functional task, i.e., trying to communicate something with someone. (p. 1)

Our own research on what preschool children know about reading and writing prior to going to school (Harste, Woodward, & Burke, 1984) shows that all English-speaking children by age 6 come to school with some grapheme–phoneme knowledge. This was even true for children from inner-city settings and from areas where not much environmental print is found (such as on the Navajo Reservation). We also found that children as young as 3 years old could read certain items of environmental print, including “Stop” on a stop sign, “McDonalds” on a McDonalds cup, and “Milk” on a Kroger’s milk carton. While they were clearly using the context to make sense of what we asked them to read, it is important to note that not one child said “Wendy’s” or “Burger King” when shown a McDonalds cup. Their responses were far more predictable based on the graphemes that were shown them.

The same was true with the children’s writing. While what they wrote was far from conventional, there was, nonetheless, a higher percentage of letters that corresponded to the message they said they were writing than one would predict if their production of letters were random. Children began by writing consonant letters but often place-held the vowels using a single letter. Alison, age 5, for example, used “o” over and over again and did so with surprising accuracy as to where vowels would be found in words (Harste et al., 1984, p. 54). The very fact that the children were writing letters instead of other shapes when asked to write verifies a very early reading–writing connection.

Even before children were writing letters in a conventional manner, we found that children whose name started with a curved letter (Shannon, Chris, Jerry) tended to produce circle-like shapes when asked to write whereas children with names that began with straight-line letters (Heather, Kezia, Ella) used more of a jagged up-and-down stroke to place-hold their writing. This was true in 93% of 3-year-old writing samples we studied. Often when children begin to form letters, it is the letters in their name that they repeat to place-hold their message (Clay, 2001). Our conclusion was that the child’s name constituted the child’s first “linguistic laboratory.” Megan, one of the children we were working with, when shown a McDonald’s cup, remarked, “Hey, that is the same letter as in my name!” The written language learning process begins to take on conventional forms with this kind of recognition, that the “m” in Mary and the “m” in McDonalds make the same sound. Our study, plus other studies of young children (Goodman, 1980; Baghban, 1984; Teale & Sulzby, 1986; Dyson, 1993; Martens, 1996), show that children at a very early age are attending carefully to print. While these studies focused on children in English-speaking communities, Emilio Ferreiro (1983) found the same could be said of South American children becoming literate in Spanish.

Equally surprising, we found that there was no order in language itself to the way it was learned. Children attended to what interested them based on their own experiences

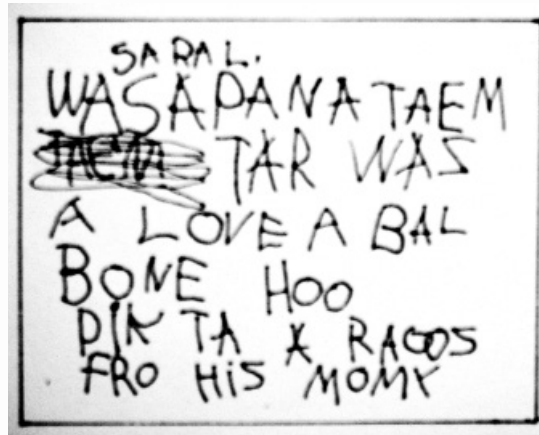


Figure 1 Sarah's mother's-day card © Jerome C. Harste

in language, learning, and life. One of my favorite writing samples is a mother's-day card which Sarah, age 5, created (Figure 1) (see Harste et al., 1984). When asked to read what she had written, Sarah read: "Once upon a time there was a loveable bunny who picked a rose for his mommy."

It is important to note that Sarah wrote "Once upon a time" as a single conceptual unit. While this is not a convention we use in English, Sarah is right in a very important sense. "Once upon a time" signals to the reader that this is fiction and hence the need to activate a different schema than one would if the text were nonfiction. Notice also that the majority of Sarah's text is written in word units and, although not conventionally spelled, most English-language users can read her text when asked to do so. In one instance Sarah writes using syllables as her graphic frame ("loveable" as "love a bal"), a move she probably made because of knowing how to spell the word "love." Sarah makes her "s"s like "z"s and does this consistently in words that end with the z-sound ("was" and "roses"). What is evident in this writing sample is that Sarah is testing multiple hypotheses about letter-sound correspondence. Her knowledge of graphophonics, already at 5 years of age, is extensive.

Charles Read (1975) was interested in children's phonological knowledge. He found that even misspellings such as writing "j-r-e-s" for "dress" can be explained by studying the point of articulation where letters are made in the mouth. "j" and "d" in this instance are both made at the same point of articulation. While not all children have as well-developed a sense of letter-sound correspondence as Sarah, by the time they enter first grade we found that all children have enough letter-sound knowledge to begin to build instruction from that base. Teachers of young children rarely, if ever, need to start from scratch when working on grapheme-phoneme correspondence.

Structural Parallels

Children with severe reading problems often have abandoned syntax as a significant cuing system. Often the only way to support them in learning to read is to re-establish the link between the syntax of oral language and the syntax of written language. Roach Van Allen (1976) understood this and made it one of the key features of his language experience approach to reading. Children were taught that what they could say could be written and

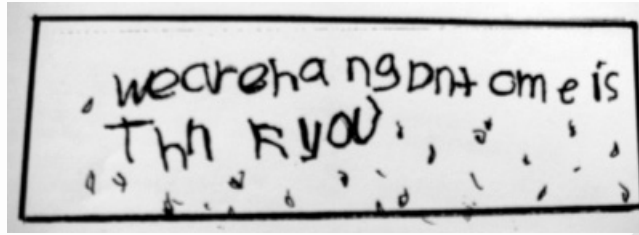


Figure 2 Message (Watson, 2007) © Jerome C. Harste

read. Teachers using this approach begin by having children dictate stories or important events in their lives, which then become the texts they use when learning to read.

Most children, even most children with reading problems, never totally abandon syntax as a cuing system. Kenneth Goodman and Carolyn Burke (1973) found that the miscues of all readers—even young children—are substitutions of the same grammatical class. As is evident in Sarah's mother's-day card, Sarah has a well-developed sense of syntax or the flow of language. Like many beginning readers and writers she writes one idea per page, using the page itself, rather than a punctuation mark, as a vehicle to place-hold a sentence or complete thought.

Spacing, of course, is an issue. Figure 2 (Watson, 2007) is a message Eric taped on his classroom door. When asked to read his message, he said: "We are having reading. Don't come in. Thank you." He, like many beginning readers and writers, labored at sounding out the words. The result, in his case, was place-holding some words with only a few letters ("ha" for "having" and "ng" for "reading"). Other children who labor at sounding out words end up with a string of letters, thus elongating the word due to the oral repetition of the word during the writing process (like "skoohkooool" for "school"). Although not clearly shown in Figure 2, Eric uses red blots (which he said was "blood") to make sure readers understood he meant business. His "thank you" at the end suggests that he understands larger structural issues such as politeness and how it typically operates in school settings.

As is also evident in Figure 2, once children move to writing continuous text, other issues, like punctuation, come into play. It is not uncommon for children to throw periods all over their text once they realize that a period ends a sentence. Like other reading discoveries that end up in their writing, once something becomes known it is often overused and abused before it takes on conventional form.

Yetta Goodman (Goodman & Wilde, 1996) received a letter from Bill, an elementary student in a school she had visited. Bill had developed a new exclamation mark which he called "the sad-clamation mark." Here is what he had to say: "Dear Yetta Goodman, I've invented a new punctuation mark. A mark for something sad. It is used in a sentence like this. I had a dog, it died. It does look funny but it will get better looking soon, just like all of the others." (See Figure 3 for how to make Bill's "sad-clamation mark.") Bill's letter documents one child's attempt to work out syntactic markings, and like Sarah, Bill goes beyond the conventions the English-speaking community have elected to use in transcribing its language into a written form (in Bill's case he invents a new punctuation; in Sarah's case she draws a distinction between when "s" is written "s" and when it should be written as a "z").



Figure 3 Sad-clamation mark © Jerome C. Harste

Semantic Parallels

One of the real benefits of writing is that thoughts become visible and hence revisable. Peggy Atwell (1981) says "The very first editor that a writer encounters is him- or herself" (p. 101). In writing, the hand often lags behind the mind, or the ideas being generated. That is why first drafts often contain syntactic errors or even misspellings of known word usages, like writing "there" for "their." This mind-hand gap is as prevalent in experienced writers as it is in children new to writing.

In the cloze procedure (Bormuth, 1970) every *n*th word in a text is deleted and readers or writers are asked to put in words that grammatically and semantically fit, using their knowledge of language and the world. Though sometimes frustrating for readers, as an instructional technique, it is surprising how many grammatically and semantically acceptable sentences are generated by children of all ages. Bormuth found from 38% to 70% accuracy. Shanahan, Kamil, and Tobin (1982), however, found that when the sentences in a story were randomized, participants did as well as when the sentences in the story were presented in their original order. These authors' finding suggesting that whatever cloze measures, it is not allowing readers to use larger semantic and syntactic structures that operate in connected discourse to make predictions and refine hypotheses.

Kenneth Goodman (1968; 1996) found that one's knowledge of the world is an important cuing system in reading, allowing readers constantly to predict and confirm their meaning making during reading. One of the strategies developed by Goodman and Burke (1980) was synonym substitution, in which readers were asked to replace underlined words in a text with synonyms as they were reading. Schema theorists (Anderson & Pearson, 1984) built on this insight and the importance of activating background knowledge as a key to successful reading. Writers, too, have been found to be most successful when they write about things they know (Britton, Burgess, Martin, McLeod, & Rosen, 1975; Graves, 1983). It should be said, however, that Barbara Kamler (2001) argues that to create critically literate individuals for the 21st century, we need to help readers and writers unpack the personal in terms of the social constraints that are operating on the meanings they make and the stories they write.

Pragmatic Parallels

Pragmatics has been defined as the rules of language use operating in a context of situation (Halliday, 1975). To go back to a language sample already introduced in this text, one cannot help but hope Sarah (see Figure 1) gets a job with Hallmark when she grows up, as she already understands the genre of mother’s-day cards. Sarah’s example clearly illustrates that pragmatics is not something that is added on to language when everything else is in place, but rather is part and parcel of the language-learning process from the beginning.

The language of story is different from the language of newspaper and different again from the language of the Bible or the everyday use of language. Linguists would say that each genre has a different register or set of rules that operate. All language varies by context of situation. Hansen argues (1985) that writing for authentic purposes is very different than writing for the teacher. This is probably most easily illustrated with an oral language sample. Edwards and Westgate (1987) found that school talk is very different than talk outside of the classroom. The example they give is that Speaker A asks, “What time is it?” Speaker B answers, “3 o’clock.” Speaker A responds, “Very good.” This example of language use they say only happens in school where Speaker A has evaluated the quality of the response Speaker B has given. In the outside world if this event had occurred, one most likely would get a “Thank you” as a follow-up response.

We (Harste et al., 1984) found that experience is a bigger factor than age or stage in written language learning. The more experience children have with language in a variety of settings, the more readily they are able to produce successful texts in both reading and writing. Our advice was that if you want your children to sound and write like a lawyer, let them hang out with lawyers. By 6 years of age children’s stories sounded and looked like stories, their personal letters sounded and looked like personal letters, and their notes sounded and looked like notes.

Because of prior experience, language users can predict the kinds of texts that are likely to be found in that particular context. One of the problems with the way reading is taught in schools is that the predictability between text and context is broken; teachers can pull out anything at any time to have children read. While this is part of the pragmatics of reading instruction, it does not allow readers to activate the pragmatic schema they may have for a particular genre, or even the background knowledge they may have about a particular topic. Normally, readers read things they have selected and writers write things they know about. In operation in the real world, syntax, semantics, and pragmatics are familiar given prior experience and operate as a framing device. As mentioned earlier, Kenneth Goodman (1996) argues that we often make reading and writing difficult by teaching the systems of language in isolation, when in use all of the systems of language together support the reading and writing process.

Conclusion

Viewing the reading and writing connection from a process perspective, as authoring, has constituted one of the biggest breakthroughs in our understanding of English language learning (Pearson & Tierney, 1984; Harste & Short, 1986; Short & Harste, 1996). While there are parallels at the graphophonic, structural, semantic, and pragmatic levels of language, seeing reading and writing in terms of “processes of mind” makes these connections even clearer. Both readers and writers build from their background of experience to make predictions in reading and to get some thoughts down on paper in writing. During both processes revision is necessary, with meaning or semantics being the driving force. By

sharing what one has read or by sharing a first draft in writing, others collaborate in meaning making by asking for clarification or by sharing insights they have on the topic being discussed. Revision, in both reading and writing, often happens both on the page and off the page. For the writer constant reading and rereading is a must. For the reader, composition is an ongoing process, even long after the eyes have left the page. No one rereads a book the same way after once having had a discussion with someone about what was initially read. The text is richer just as is the text in writing after collaboration, reflection, and recomposition. Pragmatically one can see these processes as repositioning oneself in one's world. And it is from this repositioning that a new level of authoring begins.

SEE ALSO: Psycholinguistic Studies of Literacy; Reading and Content Area Learning; Reading and Intertextuality; Reading Comprehension; Relations Between Oral Language and Literacy; Sociolinguistic Studies of Literacy; Writing and Content Area Learning

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Suggested Readings

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