

Chapter 6

Reading and Writing

Michael R. Sampson

Key Questions

1. What is the relationship between reading and writing?
2. Has technology changed the way writers write?
3. Does the technology we use today to read text change the way we read?
4. What are some ways teachers can engage students in the reading and writing process using technology?

Language, Reading, and Writing: The Beginnings

What is reading? It's talk, or language, written down. Thus, we can't discuss reading without talking about the foundation of written language—oral language, and its connection to reading. Roach Van Allen (1999), the father of the Language Experience Approach (LEA), captured it best:

What I can think about, I can talk about...
What I talk about, I can write (or someone else can write for me)...
What I can write, I can read...
I can read what others write for me to read. (p. 41)

For beginning readers, creating a bridge between oral and written language is essential for success. To create a text that children can read, the teacher can write, on a chalkboard or an iPad, as the child talks. This written text then becomes the material for reading and writing instruction. Because the student wrote it, she or he can read it. And comprehend it as well, as the text is a reflection of the language and experience of the child. LEA is a concrete way to help students see that talk is a

M.R. Sampson (✉)
St. John's University, 8000 Utopia Parkway, Queens, NY 11439, USA
e-mail: michael@michaelsampson.com

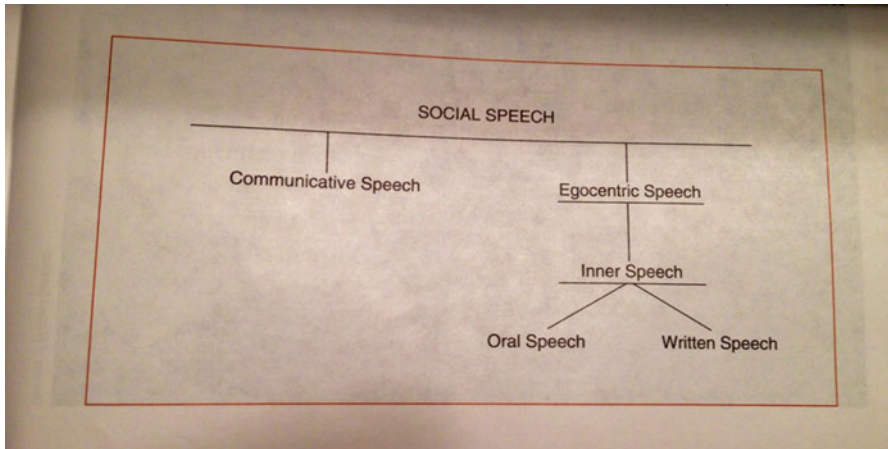


Fig. 6.1 From thought to communication

reflection of experiences and thought, writing is a reflection of talk, and reading is a way to unlock writing and understand the experiences and thoughts of the author.

As children move to independent reading of more sophisticated texts written by others, there is a need to deeper understand what that writing is refined and edited language.

Our definition about what writing is has been significantly influenced by the theories of the Russian linguist Lev Vygotsky. Like Allen, Vygotsky believed speaking and writing to be linked and that, in fact, oral language is the baseline for writing. Vygotsky noted that children’s development of communication skills, including writing, developed and progressed from social speech (Vygotsky, 1962). Such speech includes what Vygotsky termed *communicative speech and egocentric speech*. Learners use communicative speech for telling their caregiver they are need to go to the bathroom, they want to play with an iPad, or asking if they can play outside. Egocentric speech is used as children solve problems and carry out activities, and helps students express, and perhaps overcome, difficulties: Three-year-old Michelle was overheard saying, as she became aggravated with a puzzle, “These pieces don’t fit, I need some help!” She was clearly vocalizing her thoughts.

Vygotsky, (1962, 1978) considered egocentric speech to be the transition from vocal to inner speech. Inner speech is brief and transformed speech—explosions of thoughts and insights that are to pure meanings. These thoughts are what lead to written communication. Writing occurs through the translation of inner speech into the forms of scribbles, drawings, and words or phrases. Figure 6.1 shows the relationships that exist between inner speech and oral and written communications.

Writers often use inner speech to “think out loud” about what they want to express in their written communication. Ideas typically begin with images, but images soon become inner speech with voice. Writers must learn to listen to their inner voice, or their “stream of consciousness,” as they learn to turn thoughts into print (Moffett, 1981).

Teachers must be careful not to interfere with the natural cycle of self-expression by demanding that children write before they are ready to write, or write about something they don't know about. Frank Smith (1993), states Vygotsky's concept clearly: "Anything the child can do with help today, the child will be able to do alone tomorrow. There is, therefore, no point in teaching anything a child does not immediately understand or find relevant" (p. 66).

The Writing Process: Developing Student Authors

Since reading is talk written down, there clearly is a relationship between language and writing. But good writing is more sophisticated and refined than simple speech. How may teachers help students refine their craft as writers? One way to build stronger writing skills is to engage students in the writing process by studying the writing of the authors they read, and using the writing styles of those authors in their personal writing. And when students view themselves as authors, they become more critical readers. Graves and Hansen (1983) break this process into three phases. *Replication* involves children becoming authors by writing their own books. As students struggle to capture their thoughts to text, they are doing what authors do. The second phase, *transition*, is marked by the growing awareness of students that they are writers, just like the authors who wrote the books on display in their classroom and in the school library. *Option-awareness*, the third phase, grows out of writing conferences among and between the teachers and other writers in the room as students question the organization and style of manuscripts written by classmates. The result is "at first an author is distant, then an author is self, finally the self-author questions all authors and assertive readers emerge" (Graves & Hansen, 1983, p. 181).

The teacher plays a critical role in developing writers as they model the writing process and serve as a mentor to student authors. Students must see that their teacher is a reader, and a writer. Graves (1986) puts it best—"It is the literate lives we lead, far more than methodology, that we bring to children: (p. 122). Teachers must show or model to students that reading, as well as writing, is both a pleasure and a tool in daily life.

We next turn our attention to how technology in a media rich environment can facilitate the writing process.

Technology and the Writing Process

The advancement of technology has fundamentally changed how many authors write. Just as e-books are pushing hard copy books off of bookshelves, the computer, iPad, and other electronic tools are replacing notebooks and writing pads in the writing process. In a recent study of best selling professional authors, Sampson

and Leung (2008) reported that 80 % of the authors in their study exclusively compose their works on a computer. Sixteen percent use a combination of writing pads and a computer, while only 4 % write their stories on paper. In discussing his switch to electronic writing, Alan Brennert, author of many *Twilight Zone* and *The Outer Limits* television episodes and the novels *Time and Chance*, *Palisades Park*, and *Honolulu*, pointed out that the speed and readability of his handwriting was the issue: “Occasionally I might write a few paragraphs by hand, but there’s a reason I mostly write on a computer. I nearly failed penmanship in school.” Young adult author Adrian Fogelin sometimes writes by hand “for variety.” She also uses voice recognition software in her work. She reports “I did it initially to save my hands, but I find that it makes the tone of my writing more natural.”

Students in schools are also making heavy use of technology, both in reading and in writing. Almost all (95 %) of teens use the Internet, and the percentage using smartphones to go online has reached 37 %, according to the Pew Research Center (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). A 2012 Pew report found that teens send an average of 60 text messages a day. Clearly, students have shifted from writing on paper to writing on smartphone and computers.

Leaders from the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) who created the Common Core State Standards, did not include the teaching of cursive writing in the standards. Their reason? Children in a digital age must master computer keyboarding; that skill is more important in the twenty-first century than is cursive writing. However, there has been a conservative backlash. One vocal opponent to dropping the teaching of cursive is Linden Bateman, a 72-year-old state representative from Idaho, who provides this strange logic: “The Constitution of the United States is written in cursive. Think about that” (Symthe, 2013). Seven states—California, Idaho, Indiana, Kansas, Massachusetts, North Carolina, and Utah—have forced their state departments of education to keep the cursive requirement. But the future is clear—there is no doubt that writing will increasingly be done using electronic media tools.

E-Books and Reading Comprehension

The reading transition from paper to digital print is well underway among certain segments of our population. On a recent airline flight, the author observed that half the travelers were reading from smartphones, Kindles, or iPads and half from traditional novels. In elementary school libraries, budgets are being adjusted to add more and more e-books to the collection. Authors receive royalties from digital sales that are five times higher than print sales, and are pleased that their books never have to go out of print because of e-book options. But do students and adult readers read from E-Texts as effectively as they do paper text? And how do they feel about reading from digital as opposed to paper copies of books?

One would think that students of the twenty-first century, given their life span in the digital age (digital natives), would be more accustomed to and prefer e-books over hard copy text in books. But one study (Shaffer, 2012) suggests otherwise. His research shows that the students in his study strongly preferred paper over digital texts.

Another assumption is that the reader friendly features of digital text, including bookmarking, jumping to the Web for more in-depth information, and searching the text would lead to increased learning and comprehension. Some studies show this. However, other research studies indicate this is not the case.

In a study comparing students reading performance between digital text and paper text, Kerr and Symons (2006) found that children's reading rate and comprehension varied between the two formats. Reading speed was slower on the computer, but comprehension was higher. Comprehension was assessed using both recall and inference functions.

In a direct contradiction to these findings, Mangen, Walgermo, and Bronnack (2013) found that students who read texts in paper format scored significantly higher on reading comprehension and word recognition measures than students who read the texts digitally. Measures included pretests and posttests in reading comprehension, word reading, and vocabulary. Subjects were Norwegian 10th grade students. The students read non-interactive PDF files.

The bottom line is that the debate between comprehension levels between paper and digital texts that argues that students do better with traditional books is a mute one. There is no question that in the future virtually all texts will be digital and that reading comprehension and vocabulary knowledge will be enhanced (Abrams, 2013). Thus, as educators, we need to accept that fact and work on developing teaching strategies that enhance student success with digital texts. We will share several promising strategies in the application section at the end of this article.

Professional Standards: International Reading Association

In their new *Standards 2010* document, the International Reading Association (IRA) identifies what reading professionals should know and be able to accomplish with students. The IRA identifies the performance criteria recommended for assessing the competency of reading educators and provides templates on how to design programs to promote this competence.

New to the 2010 update are two new professional role categories: (1) the middle and high school content teacher and (2) the middle and high school reading classroom teacher. In addition, added attention has been given to the IRA diversity standard, and the urgent need for preparing reading teachers to teach students from diverse student populations.

Standards 2010 also provides matrixes that list each role with the corresponding elements of each standard; this helps teachers and program leaders to view a specific standard's element and its description across all roles.

Use a wide range of texts (e.g., narrative, expository, and poetry) from traditional print, digital, and online resources.

- Demonstrate knowledge of and a critical stance toward a wide variety of quality traditional print, digital, and online resources.
- Support classroom teachers in building and using a quality, accessible classroom library and materials collection that meets the specific needs and abilities of all learners. [Reading specialists may provide support through modeling, coteaching, observing, planning, and providing resources.]
- Lead collaborative school efforts to evaluate, select, and use a variety of instructional materials to meet the specific needs and abilities of all learners

Fig. 6.2 International reading association standard 2:3

The six standards are:

- Standard 1: Foundational Knowledge
- Standard 2: Curriculum and Instruction
- Standard 3: Assessment and Evaluation
- Standard 4: Diversity
- Standard 5: Literate Environment
- Standard 6: Professional Learning and Leadership

The reading of non-paper sources is specifically addressed in Standard 2: Curriculum and Instruction. The standard calls for teachers to use a wide range of texts, to include digital and online resources (see Fig. 6.2).

New Literacies Strategies: Vignettes

Interactive Writing

Jon Tyler is a 4th grade teacher who knows how to unleash the power of the Internet in his teaching. Jon uses the concepts advocated by McCarrier, Pinnell, and Fountas (2000) in their Interactive Writing strategy termed “Share the Pen.” But he has morphed it into a shared online text that the class contributes to on evenings and weekends. During school days, the class review the latest contributions and are encouraged to ask the author contributor of a new paragraph their thinking process and to see if they wish to make edits after the class discussion. Each month, the class completes an exciting new **YA novel** that has been co-written on line. The new novel is “published” by the class and includes cover art with the PDF publication.



Fig. 6.3 A five-year-old playing Gold Rush! Permission from Ms. Michelle Ivanna Sampson, age 5, was granted

Gold Rush!

Michael Kharchenko, a game designer by trade, is a parent volunteer in his son's kindergarten class. Michael comes by the class twice a week during center time and leads a group of eight 5-year-olds in their quest to discover gold in California. The interactive computer "game" Gold Rush! serves as the platform for the adventure. The game features the excitement of the California Gold Rush. Actually an interactive novel, the children live the role of Jerrod, a young man living in Brooklyn when the story begins. Players are asked to sell their house, pack their bags, and choose among three routes to California from New York. Expedition one takes you by ship to Panama, where you have to cross by through foot through the rainforest and jungles of Central America to the Pacific. Expedition two crosses the heartland of the North America by steamer, stagecoach, and wagon train; Expedition three takes the long, perilous journey from New York around the tip of Cape Horn before sailing northward to California. The game is historically and geographically accurate. Thus, children learn history and geography as they play. But most of all they learn about the relationship between oral and written language as the teacher aide types in the commands children give him and talks out loud about the story as it progresses. At the end of the 12-week adventure that included three all three expeditions, the children were very disappointed to see the story end. It was definitely the children's favorite center. Figure 6.3 contains a screen shot from the game.



Fig. 6.4 Cover of a Web Book created by ten-year-old Josephine. Permission from Ms. Josephine Rosemary Papa-Shorts, age 10, was granted. This RealeBook was created and sent using our RealeWriter (“Really Writer”) software

Web Books

Josephine Papa-Shorts, age 10, became excited about Web Books after discovering them on the Web. She chose to do a book on her school, Foundation Montessori, in the Chicago area. This simple picture book produced by Josephine on a computer and required only a digital camera or smartphone and Internet access. Josephine published to a site that contained not only her book but also books from other children around the world (Condon and McGuffee 2001). This, both the writing process and the reading process was enhanced using this digital technology (Fig. 6.4).

Conclusions

This chapter informed the reader on the relationship between reading and writing, especially to identify the changes to the relationship that technology brings. Language acquisition and self-expression have rapidly moved from paper to digital print and social media expression. Using digital media, recognizing it is ubiquitous, must be matched with promising pedagogical e-strategies that engages students successfully.

Application Activities

Idea 1

In your university classroom, design a social media activity using Facebook, Twitter, Blog, Instagram, etc., to discuss the writing process and best practices in teaching school age students to write.

Idea 2

Visit the NCATE/CAEP Web site (www.ncate.org) and read the section on the International Reading Association SPA on Reading Education (http://ncate.org/Standards/ProgramStandardsandReportForms/tabid/676/Default.aspx#IRA_). Next, compare your reading program to these standards.

Idea 3

Visit with learners of different ages and discuss technology use, including how they use the technology for writing with them. Be sure to include a preschooler and note their proficiency with tablets and smartphones.

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