

Literacy Online

*New Tools for
Struggling Readers
and Writers*



Julie M. Wood

Foreword by
VICTORIA PURCELL-GATES

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FOREWORD

This is a timely and important book for teachers and for teacher educators. In an era of multiliteracies, on-line reading and writing is finally taking its rightful place on center stage, along with paper-based literacies and media literacies. Locating on-line literacies within the discourse of reading and writing development, as Julie Wood has done, makes this text of special importance to teachers. Yes, reading and writing development do occur in the process of reading and writing on-line, just as well, if not more effectively, as with paper-based texts. This book offers research and theory to support this claim. More importantly, though, it offers teachers many rich examples of on-line learning along with a multitude of suggestions and resources.

The content of this book must be understood within the context of the literacy instructional theory and practice within which many of the principles and experiences, related in the book, were developed. Without this context, one could conclude that Chall's Stages of Reading Development lead naturally to the authentic online reading and writing activities Wood advocates for. With this context provided, readers can fill in the historical and pedagogical gaps that link Chall's important foundational work and Wood's online literacy theory and practice.

READING BECOMES LITERACY

Wood describes a year in the life of the Harvard Literacy Lab, during which she conducted her research on which this book is based. The name—*Literacy Lab*—was assumed in 1992 as a change from the original—*Reading Lab*. This name change was not a trivial matter and, in many ways, signifies the theoretical and pedagogical changes that had, and were, occurring in the field of literacy instruction. I had assumed the directorship of the Harvard Reading Lab in 1991, upon the retirement of Dr. Chall, its founder. Part of my charge was to transform the Reading Lab in ways that reflected current research and theory in the field. While numerous curricular changes were conceived and implemented by me and other literacy faculty at the Harvard Graduate School of Education, the course that connected graduate students to the Lab as teachers and the pedagogy instantiated in the Lab underwent significant changes.

As the term *literacy* reflects, *writing* development became as much of a focus for assessment and instruction as *reading* development. This move reflected current theory and practice that saw the development of writing skills and attitude as crucial and previously unattended to by schools and teachers, relative to the attention given to reading. Much research was occurring on the development of writing ability at the time, and many publications were available for teachers, often written by teachers. In addition, current research was providing deeper insights into the reading/writing connections than ever before. As teachers, we could see more clearly how learning to write helped one learn to read and vice versa. By renaming the Reading Lab as the Literacy Lab, we could publicly assume this writing/reading stance as well as more accurately label the diagnostic and instructional activities that were conducted therein.

Beyond this shift to include writing into the pedagogy of the Lab, though, the assumption of the term *literacy* also reflected a deep theoretical shift in the field. *Literacy*, as a label for a field of research and practice, encompasses a broader field than does *Reading*, or even *Reading/Writing*. The term *literacy* denotes a language practice that is cultural, social, cognitive, historically constructed, and ultimately defined by relationships of power. Thus, the "field of literacy" is informed by research and knowledge from such disciplines as psychology, linguistics, sociology, history, anthropology, and education. Course content for the graduate students who taught in the Harvard Literacy Lab reflected this breadth of knowledge. Upon vote of the faculty, the *Harvard Reading Lab* became the *Harvard Literacy Lab*.

As you read in the coming chapters the many descriptions of the opportunities computers offer for engaging writing activities, my hope is that this brief history of the evolution of the Literacy Lab's name will enlighten and provide historical and theoretical context for these activities. Another pedagogical change, though, also contextualized Wood's Lab experience and research, and its import requires explanation.

AUTHENTIC READING AND WRITING

With this broader view of literacy came the notion of *authentic reading and writing*. The definition of authentic reading/writing was loose and fuzzy but the term was being used a lot during the 1990s and during my tenure as director of the Literacy Lab. At its core, the term meant reading or writing of "real" texts as contrasted with doing isolated skill work or skill work that involved "artificial" texts, constructed for the purpose of learning skills. The instructional approach I brought into the Literacy Lab was one I termed

Whole-Part-Whole. This looks very close to what is now referred to as Balanced Literacy Instruction. The essence of this approach is to teach skills in the context of authentic reading and writing.

With this instructional approach, I built on Chall's view that once children learned to decode, they need to read books a great deal to develop fluency and automaticity. I expanded and clarified this (again, reflecting much of the current research and practice at the time) to make authentic reading and writing a central part of all literacy instruction, including that directed toward beginning readers and writers. I also brought my definition of authentic reading and writing into the Lab.

At the time, this definition was not fully clarified to the degree that I could put it into definitional language, but I could describe it enough to ensure that my students learned to incorporate authentic literacy into their instruction of children. Since that time, I have conducted several large-scale research studies that have shown statistically significant outcomes of authentic literacy instruction for both adults and children.¹ In the process, a definition has emerged that allows one to assess a particular literacy instructional activity and judge the degree to which it is authentic.

We conceptualize authentic literacy events as those that replicate or reflect reading and writing events that occur in the world outside of a schooling context. An authentic literacy event is, thus, a communicative event and as such involves two interlocutors—each event has a writer and a reader or a reader of a writer. To judge the authenticity of a literacy event, we look at two dimensions of the event—*purpose/function* and *text*. Authentic *purpose or function* means that the literacy event serves a communicative purpose, like reading to answer questions or writing to provide information for someone who wants or needs it, in addition to learning particular skills or content. To be authentic, a *text* (written or read) must be like, or very much like, texts that are used by readers and writers outside of a learning to read or write context to serve communicative purposes or functions.

Authentic literacy events/activities, thus, involve students in reading or writing textual forms that occur in the lives of literate people for the purposes that literate people read and write them, *in addition to, or aside from,*

¹ Purcell-Gates, V., Degener, S., Jacobson, E., & Soler, M. (2002). Impact of authentic literacy instruction on adult literacy practices. *Reading Research Quarterly*, 37, 70–92. Also, Purcell-Gates, V., Duke, N.K., Hall, L., & Tower, C. (2003). *Explicit Explanation of Genre Within Authentic Literacy Activities in Science: Does it Facilitate Development and Achievement?* Paper presented at the 2003 National Reading Conference, Scottsdale, AZ.

learning to read and/or write. Those texts and reading/writing purposes that reflect primarily literacy learning purposes are counter posed to authentic texts and purposes, and we refer to these as *school-only* texts and purposes. Examples of *authentic texts/purposes* include reading a newspaper for information, writing a personal letter to a friend to maintain friendship and share personal information, reading a novel for relaxation and/or to discuss with a book group, writing an information book about Dolphins to include in the class library for others to read for information, or reading a health pamphlet to learn ways to protect one's health.

Examples of school-only textual forms and purposes include writing a list of words for a spelling test, reading a passage and answering comprehension questions, writing a report on worms to turn in to the teacher for a grade, reading a decodable text to practice just-learned phonics rules, and writing to fill in the blanks on a skill worksheet. At times, one finds authentic texts read for school-only purposes such as when students may be asked to read a newspaper story and find all of the long vowel words or to circle the compound sentences. As stated earlier, research is beginning to document the positive effect on development of involving children in authentic reading and writing in the process of literacy instruction.

AUTHENTIC LITERACY IN THE LITERACY LAB

You will find many examples throughout this book of ways to use technology to facilitate authentic reading and writing while at the same time helping children get a hold of the essential skills needed to learn to read and write. These include such activities as using digital photos to create photo journals to be read by others as part of phonics lessons, capturing Readers' Theatre readings on a camcorder for later showings to an audience, composing and sending emails around the world to new friends, online publishing of texts for others to read and enjoy or learn from, and many, many more. As first a Teaching Fellow and then a Director in the Harvard Literacy Lab, Julie Wood developed her ideas about the possibilities of the marriage of literacy learning and technology within an historically situated theoretical and pedagogical context. The conceptualization of literacy as more than reading and a growing awareness of the role of authentic reading/writing in successful literacy development were, in my opinion, critical to this context.

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*I awoke this morning with devout thanksgiving for my friends,
the old and the new.*

—Ralph Waldo Emerson

Today is Thanksgiving. It seems to me to be the perfect day to acknowledge all the people in my life who have helped me along the way as I've written this book. To each one of them, I am deeply thankful.

First there are the teachers, students, and parents who participated in the Literacy Lab the year I served as director. Each of you taught me more than I can say. And I can still picture each of you in my mind's eye—exactly the way you were that year. Special thanks to Nicole Jernée and Kristin Kellogg for documenting the work of two students, “Richard” and “Jackie,” respectively. They wrote with enthusiasm and were always there for me, ready to exchange ideas and help me get it right. I'm also in deep debt to our two outstanding Teaching Fellows, Julie Park and Natalie LaCroix White.

Then there are the talented wordsmiths who helped me conceptualize what I wanted to say and helped me say it better. My superb editor at Heinemann, Danny Miller, who was always there “in the ether,” even though he lives 3,000 miles away, and who has the patience of a saint; my colleague Ray Coutu, who critiqued my first book proposal over lunch in Harvard Square; stellar copy editor Carol Kort, who read early, *really* rough drafts without flinching—as did David Gordon of Harvard Education Press, each over several cups of coffee, which was important since much energy was required at that stage.

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Affectionate thanks to my family for enduring my writerly angst and encouraging me when I needed it most. I am indebted to you, Georgia Wood, Crispin Wood, Will Riddell, Justine Covault, and Rick, Maureen, Jessica, and Brielle Laffey. And at the very summit of the list is my husband, John A. Wood—muse, best friend, and, as it happens, the illustrator of this book.

Julie M. Wood
Cambridge, Massachusetts

A Thought on Gratitude

Let us be grateful to people who make us happy: They are the charming gardeners who make our souls blossom.

—Marcel Proust

ESSENTIAL LITERACY PRACTICE 5: READING AND WRITING ACROSS THE CURRICULUM

Accomplished readers are avid readers. They read nonfiction texts on topics as far-ranging as Venus or ancient Greece. How can you encourage students to delve into the topics that interest them? How can you use the Web, CD-ROM-based magazines and encyclopedias, and

multimedia reference books to augment their studies? Finally, how can you teach students to use online resources both wisely and ethically?

Children love reading about real things. It gives them an understanding of our world and the way things work. And considering all the newspapers, brochures, guides, maps, Internet sites, and how-to manuals we navigate as adults, it's safe to say that nonfiction is the genre children will read most often when they grow up.

—Sharon Taberski⁴⁹

Why Is Reading Nonfiction Texts So Difficult?

Exposure to nonfiction texts—magazines such as *TIME for Kids*, newspapers, reports, and information books—stimulates children's imaginations and prepares them to describe, explain, and predict natural phenomena. Nonfiction texts also help students understand the natural world and the interconnectedness of all living things. Lack of exposure to nonfiction texts can have a negative impact on a student's school career. Consider this: The average score for students who reported having all four of these types of texts in their home—books, magazines, newspapers, encyclopedias—was higher than those who reported having fewer reading materials, according to "The Nation's Report Card".⁵⁰

Incredible as digital resources are, they can prove a double-edged sword for learners. On one hand they can open new worlds to young researchers. On the other hand, hypertext documents can tempt students to plagiarize, given the ease of cutting and pasting published works into one's own document. And with their branching structures, they can be a boon or a distraction depending on the learner's ability to stay focused on a search without getting derailed by irrelevant information or flashy advertisements. Another concern is that students may access unreliable sources, of which there is no shortage.

Evaluating Information Sources

Teaching students to evaluate Internet information critically

See the professional journal, *Reading On Line*, for useful tips. (See www.readingonline.org/editorial/edit_index.asp?HREF=december2001/index.html)

Internet Detectives

The result of a collaborative effort across Wisconsin, students have evaluated websites themselves as an alternative to filtering software. (See www.madison.k12.wi.us/tnl/detectives)

Teacher Helpers: Critical Evaluation Information

Once again educational technology guru Kathy Schrock comes through with practical guidelines for educators. (See school.discovery.com/schrockguide/eval.html/)

Evaluating Web Resources

An excellent option for teacher trainers, this web site offers an online module through which participants learn to evaluate resources. PowerPoint slides included for conducting seminars. (See www2.widener.edu/Wolfgram-Memorial-Library/weevaluation/webeval.htm)

Beyond that, locating accurate information that's written on the right grade level, with just the right number of challenging vocabulary words for every student in your classroom, is a daunting task. English Language Learners (ELLs) deserve particular consideration; acquiring knowledge in English poses special challenges for students who may be fluent in English socially, but not academically. Bear in mind that it may take an ELL student five to seven years to catch up to native English-speaking peers, according to Language expert, James Cummins.⁵¹ We need to give them all the support we can as they learn vital concepts in content area topics.

Despite these drawbacks, reading content area texts can be richly rewarding for students, even in the primary grades. Information books can motivate them to read and learn. You've probably noticed how much children enjoy just plain *knowing things*. They take delight in applying what they read about to real-world situations—how to cultivate a vegetable garden or how bees make honey. Not only that. Many literacy experts, including Chall, Jacobs, and Baldwin, hypothesize that greater emphasis on informational books in the primary grades can help students avoid the “fourth-grade slump,” which is of

particular concern with poor children. Briefly, many fourth-graders have difficulty making the transition from stage two of reading development (typically acquired in grades 1 through 3) in which they're "learning to read," to stage three of reading development, in which they're "reading to learn." Stage three, typically acquired in grades 4 through 8, is characterized by the numerous cognitive demands placed upon the reader (see Part 3 for Chall's Stages of Reading Development).⁵²

Children who have difficulty making the transition from *learning to read* to *reading to learn* are at a great disadvantage academically. They must compete against students who have read broadly and deeply in nonfiction subject areas—children who have had many opportunities to satisfy their curiosity about the universe. These information-rich children will be way ahead of the game when it comes to their ability to learn from the sorts of nonfiction materials (i.e., textbooks) that will be required reading in the upper-elementary grades. They'll be able to draw upon a deep reservoir of specialized vocabulary words to help them make sense of the world and all that they're learning. How can we level the playing field?

Promoting Real Learning in the Content Areas

First, decide what sort of pedagogical framework you use to guide your content area teaching. Second, ask yourself what your big goals are. Third, think through what concepts you want your students to *really* understand? (None of this is easy, so expect this process to take some time.)

"Nurturing understanding is one of the loftiest aspirations of education and also one of the most elusive," points out Tina Blythe and her associates in their book, *The Teaching for Understanding Guide*. "The very concept of understanding raises a host of complex questions for thoughtful educators," Blythe continues, "What does it mean to understand something?... How do we know how well they [students] understand something?..."⁵³

Blythe and her colleagues at Harvard's Project Zero have developed a framework for deepening students' understanding of any curricular topic. Called Teaching for Understanding (TfU), this four-pronged approach to conceptualizing math, science, and social studies units has

The Four Cornerstones of Teaching for Understanding (TfU)

- 1. Choose a *generative topic*, meaning that it is focused around a few main ideas and allows students to make a personal connection.** Once you've established your generative topic, students can engage in genuine inquiry. (*Nongenerative topic*: the distance of planets from the sun. *Generative topic*: the interrelatedness of planets in our solar system and how they were formed.)
- 2. Be sure your understanding goals are clear and explicit.** This can mean posting them in the classroom. It can mean daily discussions in which you meet with students to discuss and reflect on their overarching goals.
- 3. Have students demonstrate their understanding early and often.** You might have students collaborate, reflect on their own work, or display their work-in-progress. As for your role, variety is the key. You might serve as a coach, lecturer, leader, participant in discussions, and so on.
- 4. Consider assessment a part of the fabric of classroom life.** That way you'll know whether your students are getting it or not because you assess them frequently. This doesn't mean formal tests and pop quizzes. Talk to students informally. Be spontaneous. Encourage them to critique each other's work and make revisions. Figure out ways to have students *share* the responsibility for assessing what they've learned.⁵⁴

gained currency with teachers across the country. In the accompanying box is a quick summary of this method.

To my thinking the TfU approach has three clear benefits. First, it's an infinitely flexible approach to most any content subject area. Once a teacher has internalized the process, he can apply it to topics as diverse as fractions or electricity. Second, TfU puts teachers in charge; they're not asked to follow scripts. This approach gives them a chance to call the shots. And third, many teachers comment that TfU empowers their students. Students are viewed as an integral part of teaching and learning, not empty vessels into which we pour facts and figures.⁵⁵

How Can You Use Technology to Support Teaching for Understanding?

At what point would it be advantageous for TfU and technology to converge? Where are some of the potential intersections? As an example of how to use new tools to support the TfU approach, imagine that you are beginning a study of marine life. You might begin by showing a video about ocean life to the entire class so everyone has a common jumping-off point. After establishing generative questions (such as *What characteristics do these ocean creatures share? What physical properties help them adapt to their environment?*), you and your students are ready to create clear and explicit understanding goals (such as *Students will understand marine ecosystems; and Students will develop their understanding of environmental issues related to the particular marine life they investigate*). A volunteer captures these goals using a wordprocessing tool, prints them out, and displays them in the classroom.

Once students are clear on the understanding goals, they begin their research on oceanlife, drawing from as many sources as possible—traditional books, the Internet (with bookmarked links to preselected sites), and encyclopedias, both real and virtual (*Encarta*, for example).

Web-based Tool for Developing Curricular Units

Designed primarily for teachers, **TrackStar** helps organize and annotate a collection of websites around a curriculum unit. For example, if you're studying humpback whales and have five key sites you want students to explore, this is the tool for you. TrackStar makes it possible to line up the five sites and annotate them (e.g., Be sure to read about what whales eat). You can also search databases of ready-made tracks, adapt them for your class, and post your own "tracks." (See trackstar.hprtec.org)

Students create their final research paper using a variety of new tools. They create a database of marine life found in the Pacific Ocean during the research phase. They write their reports on a word processor, importing diagrams and illustrations into their documents.

Students are required to meet at regular intervals to comment on each others' work in progress. You decide to capture the work they share at these meetings and archive it using an electronic portfolio that will become part of your assessment program.

Electronic Assessment Portfolios

Multiple Intelligences and Portfolios: A Window into the Learner's Mind by Evangeline Harris-Stefanakis (Heinemann)

This book provides a lively discussion of how culture, environment, and language all play into a student's intelligence. The accompanying CD-ROM offers actual examples of student work and how it developed over time.

"Beck's Bits and Bytes"

Technology specialist, Sandy Beck of Cummin, Georgia, discusses the advantages of online portfolios and how to create them. (See www.forsyth.k12.ga.us/sbeck/writing/)

For a more formal assessment, you work with students to devise an *electronic* rubric to capture the desired characteristics of a project. This process can jump-start a conversation in which students compare the characteristics of a *good* research report with those of an *outstanding* research report.

Primary Source Material to Enhance Social Studies Units

Primary source material that at one time could be accessed only by visiting museums is now just a few clicks away. For example, you can access Civil War photographs, letters written by Abraham Lincoln, the Civil Rights movement, and Jefferson's handwritten draft of the Declaration of Independence, to name but a few treasures. Check out these sources:

- "WayBack: U.S. History for Kids." (See www.pbs.org/wgbh/amex/kids)
- Library of Congress. (See memory.loc.gov/)⁵⁶

These are just a few ideas for research projects. You can devise a completely different scenario based on *your* curriculum, students, and the media you're able to get your hands on.

Handheld Computers and Detachable Keyboards

When it comes to capturing students' ideas on the fly, consider implementing a writing program that takes advantage of handheld computers and detachable keyboards. At roughly \$300 for a small computer (detachable keyboard included), many teachers are able to outfit their students with this combination of portable tools without paying a king's ransom. For example, fifth-grade teacher Tony Vincent in Omaha, Nebraska, has been using them since the 2001–2002 school year. He believes these tiny computers, which, ironically, are more powerful than the PCs of the 1980s, have had a strong impact on his students' writing abilities in all subject areas. As reporter Roberta Furger notes:

Students use the small devices to record, graph, and chart observations and to animate cell structures in science. In math, they use a variety of free software to create and solve word and numeric problems. They use handhelds to surf the Web, manage classroom projects, and share their work with peers.⁵⁷

These small devices also make passing documents back and forth for peer review very easy. Students can easily send comments on articles or essays back and forth, fostering collaboration. (For more information about Vincent's experiences with handhelds see www.mpsomaha.org/willow/p5.)

ESSENTIAL LITERACY PRACTICE 6: WRITING

Word processors are a natural ally for students at all stages of the writing process. How can students use them in ways that resonate with what it means to be a writer?

Battle-hardened professionals do not see a first draft as a final draft. They expect the first draft to be like a blob of clay that a skilled potter flings onto a