Have you ever tried to keep track of every print encounter you have during the course of your routine day? If you have, you know it’s nearly impossible to catch and monitor each time you interact with text. From the moment we glance at our alarm clock as it signals the start of a new day and flip on the various electronic devices that caffeinate, groom, and inform us, we’re immersed in print. And, as we dash to school or the workplace, we are likely bombarded by the commercial signage that lines our community’s roadways, the street signs that point the way, and even the illuminated print on our car’s dashboard that enables us to monitor everything from the car’s GPS, to its sound system, to our attempts to control our lead foot on the gas pedal. If we ride the bus, rail, or subway, we count on maps, schedules, and signs to guide us safely to our destination. On the job, we slip seamlessly in and out of print as we consult our daily planner, respond to email, skim the report a colleague left on our desk, and, depending on our age, text multiple times an hour (American teens text more than six times every waking hour, Nielsen survey, 2010). We read and write all day, almost without thinking, as we use literacy to propel ourselves successfully through one busy day after another. And, as our day begins with print, so it ends. Once we’re home, we sort through the mail, assemble dinner with our thirty-minute recipe book, peruse TV’s offerings, and, finally, crawl into bed with our iPad and a New York Times nonfiction bestseller.

A Sea of Information
We’ve got text—in abundance—and much of it is informational in nature. As UC Berkeley researchers Peter Lyman and Hal Varian, both with the School of Information of Management and Systems, observe: “It is clear that we are all drowning in a sea of information. The challenge is to learn to swim in that sea rather than drown in it. Better understanding and better tools are desperately needed if we are to take full advantage of the ever-increasing supply of information … (2000, p.1). Consider these statistics:

- Information is exploding exponentially. According to the International Data Corporation (IDC), by 2011 the digital universe will be ten times the size it was in 2006, and the amount of new technical information is doubling every 72 hours (Darling-Hammond, 2010).

- 84% of parents say their child must handle far more information than they had to as a child (Scholastic Kids & Family Reading Report, 2010).

- Most of the reading we do now involves highly visual digital texts read nonlinearly and selectively (Greenhow, Robelia, & Hughes, 2009); 96% of websites contain nonfiction informational text (Kamil & Lane, 1998).

- Ten years ago, Web usage was focused on an academic information exchange; today, the most popular sites are dynamic, interactive, and cover multiple areas, such as e-commerce, entertainment and communication (Weinreich, et al., 2008).

- “The amount of information that we can transmit over optical fibers doubles every nine months; all the books ever written can be transmitted over an optical fiber the width of a human hair in just a couple of seconds” (Paschotta, 2008 as reported in Trilling & Fadel, 2009).
• Informational literacy is so inextricably linked to success in American higher education, citizenship, and work that our current era is widely known as the Knowledge Age (Trilling & Fadel, 2009, p.15); the NAEP reading assessment includes discontinuous informational texts such as charts and graphs (Reading Framework for the 2009 National Assessment of Educational Progress).

• Today, content such as traditional print, personal communication, music, photographs, and DVD clips can be delivered, watched, heard, or read on multiple portable devices (Trilling & Fadel, 2009)

Now consider these statistics:

• In recent decades, the U.S. share of the global college-educated workforce has fallen from 30 percent to 14 percent as young workers in developing nations demonstrate employer-satisfying proficiency in the full range of complex literacy with diverse texts (National Center on Education and the Economy, 2007).

• A new digital divide is emerging with Latinos and blacks being challenged by more, not less, access to technology. Fifty-one percent of Latinos and 46 percent of blacks use their phones to access the Internet, compared with 33 percent of whites. But blacks and Latinos may be using their increased Web access more for entertainment than empowerment (Washington, 2011).

• Students may struggle with science because of their challenges with informational text (Kamil, M. L. & Bernardt, E.B. 2004).

• American adolescents, particularly students of color from high poverty communities, are challenged by complex, academic informational text (NCTE Research Policy brief, 2007).

Given the ubiquitous nature of informational text in the world, particularly in our highly literate environment, it may seem ironic that students need special help accessing it. We’ve long known that even very young children notice text in the environment and interact with it (Durkin, 1966; Ferreiro, 1982; Schickendanz, 1999). And, as Trilling & Fadel note (2009), today’s “digital natives” are “bathed in bits” from birth—clutching smart phones, iPads, computer mice, and remote controls to access all manner of digital print from a very early age (p. 69). Still, as Duke & Carlisle (2011) remind us, “Schooling has a tremendous influence.” The extent to which students control diverse, complex informational text typically correlates with their in-school exposure to and instruction in how these various texts work (p. 220). Our students are successful when they understand that texts serve a wide range of functional purposes and we help them navigate the everyday literacy practices that will ease their travel into the world beyond our classrooms.
Informational Text: What Is It and How Does It Work?

Before we can figure out how to help our students crack open and navigate informational text, we need to determine what informational text is, how it differs from narrative or poetic text, and why all students, K–8, need a helping hand as they learn to read and use it.

First, what is informational or factual text? While it fits within the broader category of nonfiction, its primary purpose is to convey information. Nell Duke, a researcher who studies children's developing informational literacy, defines informational text as text written with the primary purpose of conveying information about the natural and social world (typically from someone presumed to be more knowledgeable on the subject to someone presumed to be less so) and having particular text features to accomplish this purpose (2003, p. 14).

Additionally, informational text is often discontinuous in nature; that is, unlike sentences and paragraphs inside a narrative text, it may stand alone—not part of a rich semantic network of connected sentences. And this discontinuity may well alter the ways in which comprehension unfolds. Linguists Bestgen and Vonk (1999) explain: “Understanding a text is generally seen as an incremental process in which new sentences are integrated with the preceding sentences to construct a coherent mental representation of the text content.” In other words, the reader of continuous text follows the “default principle of comprehension, called the nextness principle . . . or the principle of continuity: ‘Readers assume, by default, that continuity is maintained’” (p. 74).

A sign or one-word caption, on the other hand, is discontinuous text and, at some point, children who are learning to read must figure out how this text operates differently from the connected narrative they typically encounter in picture books. Often discontinuous text is embedded in a visual display, which may feature an array of graphics with varying colors, fonts, and illustrations, all of which provide the reader with meaning.

What About Leveling?

While all texts make “demands on readers in terms of how they are written, illustrated, or designed” (Pinnell & Fountas, 2009)—and the successful reader is the one who figures out how to meet the demands—discontinuous text defies the logic of leveling. The gradient of text, a twenty-six point (A–Z) text rating scale of difficulty that helps teachers consider a range of textual supports and challenges as they work to match books to readers, simply doesn’t apply, apparent as we consider these examples of text:

- Maps
- Schedules
- Menus
- Brochures
- Catalogs
- Advertisements
- Charts and posters
- Web pages
- Tax returns
- Directions
- Games and instructions
- Programming guides
- Almanacs, guide books
- Recipes
Everyday text of this nature also differs in other important ways from fictional or poetic text. As Fountas & Pinnell (2006) explain, factual texts:

- are organized into sections or categories indicated by headings and subheadings, rather than the narrative structure of fiction.
- present, as needed, an index, table of contents, glossaries, and bibliographies.
- often include graphics such as maps, charts, and diagrams that add meaning.
- illuminate text with realistic illustrations, photographs, and captions.
- feature specialized fonts such as boldface and italics.
- reflect a range of organizational patterns to provide information to readers such as description, enumeration, comparison and contrast, cause and effect, chronological sequence, problem/solution, and question/answer—all of which help the reader search, find, and understand specific information.
- showcase factual text that’s accurate or scientifically true; readers of informational text enter with the belief that what they are reading accurately represents the facts.
- may feature specialized, content-rich, technical vocabulary related to the topic.

(p. 146)

**Informational Text: The Swiss Army Knife of Written Language**

Duke and Bennett-Armistead (2003) note that “Genre theorists believe that differences among texts develop based on the purposes for those texts (Halliday & Hasan, 1991; Miller, 1984).” As the authors note, “a text written for the purpose of advertising a new car, for example, is fundamentally different from a text written for the purpose of explaining how that car works, which is in turn fundamentally different from a text that chronicles someone’s adventures driving that car across the country” (p. 19). These texts serve different purposes, are written for different situations, and feature different characteristics. Genre research reveals that even young children are sensitive to these differences. Ask a four-year-old to write a shopping list for a trip to the grocery store and she will inevitably create a vertical list, perhaps with numbers or bullet points before each needed item (Harste, Woodward, & Burke, 1984). Even though the child is using pretend writing to create her list, she demonstrates that she is well-aware of the particular features of “list-ness,” which typically include a vertical display of listed words or phrases (rather than connected text) accentuated by bullet points (Duke & Purcell-Gates, 2001).

**Surviving the Information Age: Why We Need More Everyday Text in Our Classrooms**

Research suggests that in our complex, interconnected world, informational text may be the key to success in later schooling. In his chapter “The New World of Work and the Seven Survival Skills,” Tony Wagner (2007) identifies the sixth survival skill as “accessing and analyzing information.” Today, it’s not only the “sheer quantity of information” that confronts us, but the fact that it’s flowing in from a myriad of sources and constantly changing (p.37). And, perhaps in recognition of this reality, the Common Core Standards call for more informational text than ever before, and, in response, districts around the country are ramping up their use of nonfiction and informational texts (Fertig, 2010). Plus, as our attention shifts to the so-called “new literacies”—civic, technological, global, economic, health, and environmental—and 21st century learning
skills, which emphasize problem solving and collaboration (Trilling and Fadel, 2009)—we can draw on potent research that demonstrates the learning potential of informational text. When students read to find answers to their own questions about the world, they become engaged and motivated. And once they are emotionally hooked on their reading because they are searching for answers to issues that matter to them—no surprise—they achieve or even exceed our instructional goals for them (Guthrie, 2008).

There may be no better, more efficient way to build world knowledge and an extensive vocabulary than processing lots and lots of informational text. Since informational text is written to convey key facts about the natural and social world and often contains a highly specialized vocabulary, it provides a jump start to building both a robust vocabulary and wide-ranging conceptual knowledge for even very young children (Duke & Carlisle, 2011). And the benefits of immersion in informational texts extend to writing development as well. In one study, kindergarten students who simply listened to informational books read aloud, incorporated content knowledge, vocabulary, and informational text structures such as diagrams and scientific illustrations, in their own writing (Duke & Kays, 1998).

**Students Prefer Informational Text**

Not surprisingly, many students prefer to read informational text. This may be truer than ever, given its abundance, particularly in a digital format, and may also be especially true for boys. As middle school English/language arts teacher Joelle Brummitt-Yale (2008) notes,

> While boys generally perform lower than girls on reading assessments, there is one area in which they actually “outscore” the girls. Boys' scores on sections of tests featuring informational texts are often higher than those of their female counterparts. This seems to indicate that informational texts are the boys' forte. Teachers and parents should provide boys with informational texts to read and learn from. These can include magazine and newspaper articles, nonfiction books about topics boys are interested in (like hobbies or sports) and instructional manuals…. Offering these texts to boys as instructional tools or for pleasure reading will increase their interest in reading (p. 2).

Even struggling readers may prefer and benefit from informational text in ways not possible with narrative. Vulnerable readers are often challenged by limited vocabularies, which then, in turn, make processing complex narratives difficult. An infusion of informational text—particularly about topics that stoke students’ interest—may be the easiest way to build their conceptual knowledge and vocabulary base, essential for comprehension in general (Duke & Carlisle, 2011). What’s more, informational text features such as headers, labels, sidebars, and diagrams scaffold readers, enabling them to more easily navigate the text and access the content. In her small case study of two struggling readers, Duke writes, “We found that the boys’ reading development finally took off when their teachers provided them with a reading and writing diet rich in informational text—a type of text these boys strongly preferred” (p. 3).

**Digital Differences**

In general, in this era of ebooks, laptops, and hours logged online, it seems recreational reading has changed for our students, but as Kim Patton, president of the Young Adult Library Services Association, notes, “It’s not that they’re reading less; they’re reading in a different way” (St. George, *Washington Post*, 2010).

This assessment is confirmed by a detailed analysis of “reading for fun”—books, newspapers and magazines—by researcher Sandra Hofferth of the University of Maryland, who analyzed the detailed daily time-use diaries of a nationally representative sample of young people ages 12 to 18.
Her findings are corroborated by Stanford researcher Michael Kamil as reported by St. George:

Pleasure reading dropped 23 percent in 2008, compared with 2003, from 65 minutes a week to 50 minutes a week—with the greatest falloff for those ages 12 to 14. Still, Hofferth says: “They could be reading on the cell phone, in games, on the Web, on the computer. It doesn’t mean they’re not reading, but they’re not reading using the printed page.”

Michael Kamil, an education researcher at Stanford, sees it much the same way, noting that teens “still read quite a bit but in different ways and for different reasons than the adults believe they should.” The question of what really constitutes “reading” has been debated for decades, says Kamil, whose own definition is broad: It includes not just books, magazines, newspapers and blogs but text messages, multimedia documents, certain computer games, and many Web pages. “It’s all important,” he said.

As a sign of the times, some members of the American Association of School Librarians (AASL) believe that “librarians are becoming 21st century digital directors championing the effective use of information technologies in schools” (Trilling & Fadel, 2009, p. 66).

**What Good Readers Do:**
**Why Explicit Teaching Matters**

Research suggests that students typically do not learn the comprehension strategies needed to fully process informational texts without the support of explicit teaching (Dymock, 2005). This may account for the struggles some students experience as they attempt to understand textbooks filled with content-specific vocabulary, bold textual features, and unique procedural displays. Without specific how-to-read-an-informational-text instruction, some students may become lost and give up. While most students are comfortable with the familiar structure of narrative and its elements of theme, plot, conflict and resolution, characters, and setting, informational texts, which we understand may be discontinuous in nature, offer a whole new set of elements and structural patterns that we would do well to introduce and teach.

And Vicki Benson Castagna (2007) reminds us that while students may be technologically literate, they may not be “information literate.” In other words, it’s our essential responsibility to help them develop the skills they need to access, evaluate, and use information effectively. In this way, our students develop skills that enable them to move beyond a literal interpretation and develop the healthy skepticism needed to read with a critical eye and evaluate the factual or theoretical soundness of all material they access, whether it’s downloaded from the Internet or appears in a printed magazine, textbook, or newspaper. One alarming finding of the *Scholastic 2010 Kids & Family Reading Report* is 33% of students 9-17 agree with the statement: “the information I find online is always correct.” Teaching alert! In the Internet age, our kids need lots of instruction in developing their critical thinking skills.

**What All Readers Need:**
**Everyday Literacy and Guided Reading**

Given the explosion of informational text, its pivotal role in creating and preserving an informed citizenry, its complexity, and the processing demands it places on the reader (Fountas & Pinnell, 2006), we can sum up in two points what’s needed to assure success with informational text for all students:

1) Access to informational print in the classroom

2) Explicit teaching at the guided reading table
As we consider how to create an informational text-rich classroom that provides many opportunities to use and interact with all manner of everyday text, we might also keep in mind this checklist. Informed by Fountas & Pinnell (2006) and Duke (2006), it identifies the experiences students need with informational text—and the means through which teachers can meet that need:

- Opportunities to read informational text—dedicate time for reading informational text in class
- Authenticity—read real texts for real reasons
- Range—read informational text across a range of genres
- Talk about text—note and discuss the unique features and functions of informational text in a variety of instructional settings
- Word study—explore the conceptual weight of new words
- Processing skills—help all students build a solid base of decoding, comprehension monitoring, and fluency; provide opportunities for guided and independent practice
- Writing: create informational texts for others to process

**Align Instruction With the Demands of Informational Text**

Consider the way in which you relish a 600-page beach book versus what happens to you when you're confronted with the programming instructions for your new smart phone. While you may be using the same basic cognitive strategies to process the two texts, you make numerous unconscious adjustments based on what you are reading and for what purpose. Research on the nature of text and the reading processes explains why these adjustments are needed. As stated by the 2009 NAEP Reading Framework: “the characteristics of literary and informational text differ dramatically” (p. 7). In other words, it's no longer enough to simply focus on our reading instruction; we also need to pay careful attention to the nature of the text we're asking our students to read and understand that they must adjust their reading processes to accommodate the differences among the texts they encounter in our classrooms and in the world beyond. And just as they must adjust their reading process to accommodate new text types, so we must align our instruction with the demands of the text our students are processing. Fountas and Pinnell (2009) explain:

At all levels, readers may slow down to problem-solve words or complex language and resume a normal pace, although at higher levels this process is mostly unobservable. Readers make adjustments as they search for information; they may reread, search graphics or illustrations, go back to specific references in the text, or use specific readers’ tools. At all levels, readers also adjust expectations and ways of reading according to purpose, genre, and previous reading experiences. At early levels, readers have only beginning experiences to draw on, but at more advanced levels, they have rich resources in terms of the knowledge of genre (p. 225).

Trilling and Fadel (2009) summarize the skills every student needs in order to handle the “massive amounts of information, media, and technology” that characterize our Knowledge Age; students must know how to:

- Access information efficiently and effectively
- Evaluate information critically and competently
- Use information accurately and creatively (pp.64-65)
And related to informational text, of course, is information and communication technologies, or ICTSs, which Trilling and Fadel describe as the “quintessential tools of the 21st century” (p. 68); even young children are learning their way around these “power tools”, and all entail processing and creating literacy, both visual and print:

- Camcorders, microcams, & flip video
- CDs & DVDs
- DVD players & drives
- Game consoles
- Memory sticks
- Internet (Websites, blogs, Nings, tweets)
- iPads, Kindles, Nooks & other ebook readers
- iPods & MP3 Players
- Smart phones; text messaging

In 2009, Don Tapscott conducted a ground breaking study of more than eleven thousand young people aged eleven to thirty-one and found eight common attitudes, behaviors, and expectations that clearly distinguish them from their parents; this group expects:

- choice; freedom to express their personal views and individual identity
- customization and personalization in ways that better fit their own particular needs
- scrutiny; detailed, behind-the-scenes analysis
- integrity and openness in their interactions with others
- entertainment and play integrated into their work, learning, and social interactions
- collaboration and relationships; vital in everything they do
- speed in communication: asking questions and getting answers
- innovation in products, services, employers, schools, and in their own lives

To this end, students need more real-world problem solving and more immersion in a wide range of authentic text. Educators simply can’t afford to ignore the explosion of literacy forms, formats, and features—delivered through a wide range of mediums. We can play a profound role in helping our students successfully access and use the full spectrum of informational text by bringing it into our classrooms and showing our students how to access, navigate, process, interpret, synthesize, infer, comprehend, and use this multi-faceted text.

Everyday Literacy and the 21st Century

*Multiple literacies, including digital, visual, textual, and technological, have now joined information literacy as crucial skills for this century.*

~American Association of School Librarians

Today’s literacy opportunities swirl around us in ever-evolving print and digital formats. Even ten years ago, we couldn’t have imagined a world that now includes social networks such as Facebook and NINGs together with media devices such as MP3 players, PlayStation Portable (PSP), iPods, iPads, and smart phones. And ten years from now, these tools and resources may have vanished from our schools, replaced by another array of, as of now, unimagined devices and communication channels. Whatever the form or format of text, we can be sure that our students will survive and thrive to the extent that they are literate and adept at navigating the constellations of informational text—everyday literacy that’s not so “everyday” at all, but full of potential and promise for new ways of thinking and learning about our world. As language educator Margaret Mooney (2003) writes, “Our challenge is to ensure our students’ lifelong travels in reading and writing open new vistas, extend their understandings, and widen their experiences as they explore their world and the worlds of others (p. 17).
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