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Literacy Debate: Online, R U Really Reading?



Nicole Bengiveno/The New York Times

The Simses of Old Greenwich, Conn., gather to read after dinner. Their means of text delivery is divided by generation.

By **MOTOKO RICH**

Published: July 27, 2008

BEREA, Ohio — Books are not Nadia Konyk's thing. Her mother, hoping to entice her, brings them home from the library, but Nadia rarely shows an interest.

The Future of Reading Digital Versus Print

This is the first in a series of articles that will look at how the Internet and other technological and social forces are changing the way people read.

Multimedia



Instead, like so many other teenagers, Nadia, 15, is addicted to the Internet. She regularly spends at least six hours a day in front of the computer here in this suburb southwest of Cleveland.

A slender, chatty blonde who wears black-framed plastic glasses, Nadia checks her e-mail and peruses myyearbook.com, a social networking site, reading messages or posting updates on her mood. She searches for music videos on YouTube and logs onto Gaia Online, a role-playing site where members fashion alternate identities as cutesy cartoon characters. But she spends most of her time on quizilla.com or fanfiction.net, reading and commenting on stories written by other users and based on books, television shows or movies.

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Nicole Bengiveno/The New York Times

A NEW GENERATION Nadia Konyk, 15, has a small book collection but prefers reading online.

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Nicole Bengiveno/The New York Times

Zachary Sims, 18, likes finding different points of view and interacting with other readers online.

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Nicole Bengiveno/The New York Times

Her mother, Deborah Konyk, would prefer that Nadia, who gets A's and B's at school, read books for a change. But at this point, Ms. Konyk said, "I'm just pleased that she reads something anymore."

Children like Nadia lie at the heart of a passionate debate about just what it means to read in the digital age. The discussion is playing out among educational policy makers and reading experts around the world, and within groups like the National Council of Teachers of English and the International Reading Association.

As teenagers' scores on standardized reading tests have declined or stagnated, some argue that the hours spent prowling the Internet are the enemy of reading — diminishing literacy, wrecking attention spans and destroying a precious common culture that exists only through the reading of books.

But others say the Internet has created a new kind of reading, one that schools and society should not discount. The Web inspires a teenager like Nadia, who might otherwise spend most of her leisure time watching television, to read and write.

Even accomplished book readers like Zachary Sims, 18, of Old Greenwich, Conn., crave the ability to quickly find different points of view on a subject and converse with others online. Some children with dyslexia or other learning difficulties, like Hunter Gaudet, 16, of Somers, Conn., have found it far more comfortable to search and read online.

At least since the invention of television, critics have warned that electronic media would destroy reading. What is different now, some literacy experts say, is that spending time on the Web, whether it is looking up something on [Google](#) or even [britneyspears.org](#), entails some engagement with text.

Setting Expectations

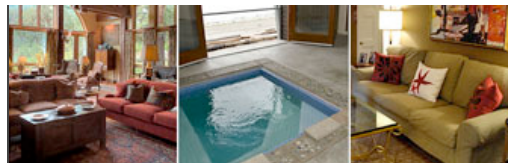
Few who believe in the potential of the Web deny the value of books. But they argue that it is unrealistic to expect all children to read "To Kill a Mockingbird" or "Pride and Prejudice" for fun. And those who prefer staring at a television or mashing buttons on a game console, they say, can still benefit from reading on the Internet. In fact, some literacy experts say that online reading skills will help children fare better when they begin looking for digital-age jobs.

Some Web evangelists say children should be evaluated for their proficiency on the Internet just as they are tested on their print reading comprehension. Starting next year, some countries will participate in new international assessments of digital literacy, but the United States, for now, will not.

Clearly, reading in print and on the Internet are different. On paper, text has a predetermined beginning, middle and end, where readers focus for a sustained period on one author's vision. On the Internet, readers skate through cyberspace at will and, in effect, compose their own beginnings, middles and ends.

Young people "aren't as troubled as some of us older folks are by reading that doesn't go in a line," said Rand J. Spiro, a professor of educational psychology at [Michigan State University](#) who is studying reading practices on the Internet. "That's a good thing because the world doesn't go in a line, and the world isn't organized into separate compartments or chapters."

Some traditionalists warn that digital reading is the intellectual equivalent of empty calories. Often, they argue, writers on the

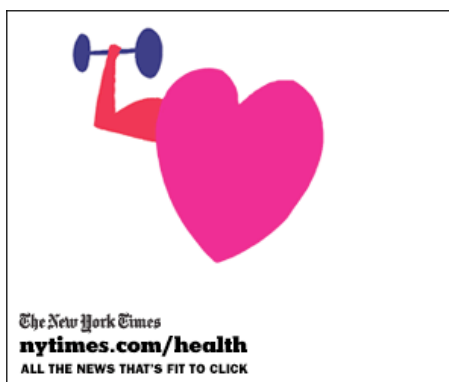


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WORDS AND PICTURES Hunter Gaudet, 16, is more comfortable reading on a computer.

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Nicole Bengiveno/The New York Times
Deborah and Yashca Konyk with a drawing by Yashca.

Internet employ a cryptic argot that vexes teachers and parents. Zigzagging through a cornucopia of words, pictures, video and sounds, they say, distracts more than strengthens readers. And many youths spend most of their time on the Internet playing games or sending instant messages, activities that involve minimal reading at best.

Last fall the [National Endowment for the Arts](#) issued a sobering report linking flat or declining national reading test scores among teenagers with the slump in the proportion of adolescents who said they read for fun.

According to Department of Education data cited in the report, just over a fifth of 17-year-olds said they read almost every day for fun in 2004, down from nearly a third in 1984. Nineteen percent of 17-year-olds said they never or hardly ever read for fun in 2004, up from 9 percent in 1984. (It was unclear whether they thought of what they did on the Internet as “reading.”)

“Whatever the benefits of newer electronic media,” [Dana Gioia](#), the chairman of the N.E.A., wrote in the report’s introduction, “they provide no measurable substitute for the intellectual and personal development initiated and sustained by frequent reading.”

Children are clearly spending more time on the Internet. In a study of 2,032 representative 8- to 18-year-olds, the Kaiser Family Foundation found that nearly half used the Internet on a typical day in 2004, up from just under a quarter in 1999. The average time these children spent online on a typical day rose to one hour and 41 minutes in 2004, from 46 minutes in 1999.

The question of how to value different kinds of reading is complicated because people read for many reasons. There is the level required of daily life — to follow the instructions in a manual or to analyze a mortgage contract. Then there is a more sophisticated level that opens the doors to elite education and professions. And, of course, people read for entertainment, as well as for intellectual or emotional rewards.

Readers' Comments

Readers shared their thoughts on this article.

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It is perhaps that final purpose that book champions emphasize the most.

“Learning is not to be found on a printout,” [David McCullough](#), the [Pulitzer Prize](#)-winning biographer, said in a commencement address at [Boston College](#) in May. “It’s not on call at the touch of the finger. Learning is acquired mainly from books, and most readily from great books.”

What’s Best for Nadia?

Deborah Konyk always believed it was essential for Nadia and her 8-year-old sister, Yashca, to read books. She regularly read aloud to the girls and took them to library story hours.

“Reading opens up doors to places that you probably will never get to visit in your lifetime, to cultures, to worlds, to people,” Ms. Konyk said.

Ms. Konyk, who took a part-time job at a dollar store chain a year and a half ago, said she did not have much time to read books herself. There are few books in the house. But after Yashca was born, Ms. Konyk spent the baby’s nap time reading the [Harry Potter](#) novels to Nadia, and she regularly brought home new titles from the library.

Despite these efforts, Nadia never became a big reader. Instead, she became obsessed with Japanese anime cartoons on television and comics like “Sailor Moon.” Then, when she was in the sixth grade, the family bought its first computer. When a friend introduced Nadia to fanfiction.net, she turned off the television and started reading online.

Now she regularly reads stories that run as long as 45 Web pages. Many of them have elliptical plots and are sprinkled with spelling and grammatical errors. One of her recent favorites was “My absolutely, perfect normal life ... ARE YOU CRAZY? NOT!,” a story based on the anime series “Beyblade.”

In one scene the narrator, Aries, hitches a ride with some masked men and one of them pulls a knife on her. “Just then I notice (Like finally) something sharp right in front of me,” Aries writes. “I gladly took it just like that until something terrible happen”

Nadia said she preferred reading stories online because “you could add your own character and twist it the way you want it to be.”

“So like in the book somebody could die,” she continued, “but you could make it so that person doesn’t die or make it so like somebody else dies who you don’t like.”

Nadia also writes her own stories. She posted “Dieing Isn’t Always Bad,” about a girl who comes back to life as half cat, half human, on both fanfiction.net and quizilla.com.

Nadia said she wanted to major in English at college and someday hopes to be published. She does not see a problem with reading few books. “No one’s ever said you should read more books to get into college,” she said.

The simplest argument for why children should read in their leisure time is that it makes them better readers. According to federal statistics, students who say they read for fun once a day score significantly higher on reading tests than those who say they never do.

Reading skills are also valued by employers. A 2006 survey by [the Conference Board](#), which conducts research for business leaders, found that nearly 90 percent of employers rated “reading comprehension” as “very important” for workers with bachelor’s degrees. Department of Education statistics also show that those who score higher on reading tests tend to earn higher incomes.

Critics of reading on the Internet say they see no evidence that increased Web activity improves reading achievement. “What we are losing in this country and presumably around the world is the sustained, focused, linear attention developed by reading,” said Mr. Gioia of the N.E.A. “I would believe people who tell me that the Internet develops reading if I did not see such a universal decline in reading ability and reading comprehension on virtually all tests.”

Nicholas Carr sounded a similar note in “Is Google Making Us Stupid?” in the current issue of the Atlantic magazine. Warning that the Web was changing the way he — and others — think, he suggested that the effects of Internet reading extended beyond the falling test scores of adolescence. “What the Net seems to be doing is chipping away my capacity for concentration and contemplation,” he wrote, confessing that he now found it difficult to read long books.

Literacy specialists are just beginning to investigate how reading on the Internet affects reading skills. A recent study of more than 700 low-income, mostly Hispanic and black sixth through 10th graders in Detroit found that those students read more on the Web than in any other medium, though they also read books. The only kind of reading that related to higher academic performance was frequent novel reading, which predicted better grades in English class and higher overall grade point averages.

Elizabeth Birr Moje, a professor at the [University of Michigan](#) who led the study, said novel reading was similar to what schools demand already. But on the Internet, she said, students are developing new reading skills that are neither taught nor evaluated in school.

One early study showed that giving home Internet access to low-income students appeared to improve standardized reading test scores and school grades. “These were kids who would typically not be reading in their free time,” said Linda A. Jackson, a psychology professor at Michigan State who led the research. “Once they’re on the Internet, they’re reading.”

Neurological studies show that learning to read changes the brain’s circuitry. Scientists speculate that reading on the Internet may also affect the brain’s hard wiring in a way that is different from book reading.

“The question is, does it change your brain in some beneficial way?” said Guinevere F. Eden, director of the Center for the Study of Learning at [Georgetown University](#). “The brain is malleable and adapts to its environment. Whatever the pressures are on us to succeed, our brain will try and deal with it.”

Some scientists worry that the fractured experience typical of the Internet could rob developing readers of crucial skills. “Reading a book, and taking the time to ruminate and make inferences and engage the imaginal processing, is more cognitively enriching, without doubt, than the short little bits that

you might get if you're into the 30-second digital mode," said Ken Pugh, a cognitive neuroscientist at [Yale](#) who has studied brain scans of children reading.

But This Is Reading Too

Web proponents believe that strong readers on the Web may eventually surpass those who rely on books. Reading five Web sites, an op-ed article and a blog post or two, experts say, can be more enriching than reading one book.

"It takes a long time to read a 400-page book," said Mr. Spiro of Michigan State. "In a tenth of the time," he said, the Internet allows a reader to "cover a lot more of the topic from different points of view."

Zachary Sims, the Old Greenwich, Conn., teenager, often stays awake until 2 or 3 in the morning reading articles about technology or politics — his current passions — on up to 100 Web sites.

"On the Internet, you can hear from a bunch of people," said Zachary, who will attend [Columbia University](#) this fall. "They may not be pedigreed academics. They may be someone in their shed with a conspiracy theory. But you would weigh that."

Though he also likes to read books (earlier this year he finished, and loved, "The Fountainhead" by [Ayn Rand](#)), Zachary craves interaction with fellow readers on the Internet. "The Web is more about a conversation," he said. "Books are more one-way."

The kinds of skills Zachary has developed — locating information quickly and accurately, corroborating findings on multiple sites — may seem obvious to heavy Web users. But the skills can be cognitively demanding.

Web readers are persistently weak at judging whether information is trustworthy. In one study, Donald J. Leu, who researches literacy and technology at the [University of Connecticut](#), asked 48 students to look at a spoof Web site (<http://zapatopi.net/treeoctopus/>) about a mythical species known as the "Pacific Northwest tree octopus." Nearly 90 percent of them missed the joke and deemed the site a reliable source.

Some literacy experts say that reading itself should be redefined. Interpreting videos or pictures, they say, may be as important a skill as analyzing a novel or a poem.

"Kids are using sound and images so they have a world of ideas to put together that aren't necessarily language oriented," said Donna E. Alvermann, a professor of language and literacy education at the [University of Georgia](#). "Books aren't out of the picture, but they're only one way of experiencing information in the world today."

A Lifelong Struggle

In the case of Hunter Gaudet, the Internet has helped him feel more comfortable with a new kind of reading. A varsity lacrosse player in Somers, Conn., Hunter has struggled most of his life to read. After learning he was dyslexic in the second grade, he was placed in special education classes and a tutor came to his home three hours a week. When he entered high school, he dropped the special education classes, but he still reads books only when forced, he said.

In a book, "they go through a lot of details that aren't really needed," Hunter said. "Online just gives you what you need, nothing more or less."

When researching the 19th-century Chief Justice Roger B. Taney for one class, he typed Taney's name into Google and scanned the [Wikipedia](#) entry and other biographical sites. Instead of reading an entire page, he would type in a search word like "college" to find Taney's alma mater, assembling his information nugget by nugget.

Experts on reading difficulties suggest that for struggling readers, the Web may be a better way to glean information. "When you read online there are always graphics," said Sally Shaywitz, the author of "Overcoming Dyslexia" and a Yale professor. "I think it's just more comfortable and — I hate to say easier — but it more meets the needs of somebody who might not be a fluent reader."

Karen Gaudet, Hunter's mother, a regional manager for a retail chain who said she read two or three business books a week, hopes Hunter will eventually discover a love for books. But she is confident that he has the reading skills he needs to succeed.

"Based on where technology is going and the world is going," she said, "he's going to be able to leverage it."

When he was in seventh grade, Hunter was one of 89 students who participated in a study comparing performance on traditional state reading tests with a specially designed Internet reading test. Hunter, who scored in the lowest 10 percent on the traditional test, spent 12 weeks learning how to use the Web for a science class before taking the Internet test. It was composed of three sets of directions asking the students to search for information online, determine which sites were reliable and explain their reasoning.

Hunter scored in the top quartile. In fact, about a third of the students in the study, led by Professor Leu, scored below average on traditional reading tests but did well on the Internet assessment.

The Testing Debate

To date, there have been few large-scale appraisals of Web skills. The [Educational Testing Service](#), which administers the SAT, has developed a digital literacy test known as iSkills that requires students to solve informational problems by searching for answers on the Web. About 80 colleges and a handful of high schools have administered the test so far.

But according to Stephen Denis, product manager at ETS, of the more than 20,000 students who have taken the iSkills test since 2006, only 39 percent of four-year college freshmen achieved a score that represented “core functional levels” in Internet literacy.

Now some literacy experts want the federal tests known as the nation’s report card to include a digital reading component. So far, the traditionalists have held sway: The next round, to be administered to fourth and eighth graders in 2009, will test only print reading comprehension.

Mary Crovo of the National Assessment Governing Board, which creates policies for the national tests, said several members of a committee that sets guidelines for the reading tests believed large numbers of low-income and rural students might not have regular Internet access, rendering measurements of their online skills unfair.

Some simply argue that reading on the Internet is not something that needs to be tested — or taught.

“Nobody has taught a single kid to text message,” said Carol Jago of the National Council of Teachers of English and a member of the testing guidelines committee. “Kids are smart. When they want to do something, schools don’t have to get involved.”

Michael L. Kamil, a professor of education at Stanford who lobbied for an Internet component as chairman of the reading test guidelines committee, disagreed. Students “are going to grow up having to be highly competent on the Internet,” he said. “There’s no reason to make them discover how to be highly competent if we can teach them.”

The United States is diverging from the policies of some other countries. Next year, for the first time, the [Organization for Economic Cooperation and Development](#), which administers reading, math and science tests to a sample of 15-year-old students in more than 50 countries, will add an electronic reading component. The United States, among other countries, will not participate. A spokeswoman for the Institute of Education Sciences, the research arm of the Department of Education, said an additional test would overburden schools.

Even those who are most concerned about the preservation of books acknowledge that children need a range of reading experiences. “Some of it is the informal reading they get in e-mails or on Web sites,” said Gay Ivey, a professor at James Madison University who focuses on adolescent literacy. “I think they need it all.”

Web junkies can occasionally be swept up in a book. After Nadia read [Elie Wiesel](#)’s Holocaust memoir “Night” in her freshman English class, Ms. Konyk brought home another Holocaust memoir, “I Have Lived a Thousand Years,” by Livia Bitton-Jackson.

Nadia was riveted by heartbreaking details of life in the concentration camps. “I was trying to imagine this and I was like, I can’t do this,” she said. “It was just so — wow.”

Hoping to keep up the momentum, Ms. Konyk brought home another book, “Silverboy,” a fantasy novel. Nadia made it through one chapter before she got engrossed in the Internet fan fiction again.

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