Participatory culture, in which citizens feel and exercise the agency of being cocreators of their culture and not just passive consumers of culture created by others, depends on widespread literacies of participation. You can't participate without knowing how. And cultural participation depends on a social component that is not easily learned alone or from a manual. That's where school libraries and school librarians have a critically important part to play.

Librarians have always been stewards of literacy as well as curators of knowledge: knowing how to find what you want (starting with how to know what you want to find) has always been part of what people get from human librarians. But today, the personal and social importance of skills of critical information consumption, infotention (managed media attention), ethical collaborative research and networked coproduction of knowledge, digital citizenship, and network know-how is magnified multifold by digital media and networked publics.

I use the word "literacies" to encompass the social element as well as the individual ability to encode and decode is of limited value. Today's literacies require knowledge of how to use information skills in effective collaboration with others.

Even if there was sufficient public enthusiasm and political will to educate today's students to engage effectively with participatory culture, fiscal necessity makes it unlikely that building new campuses, and then training and hiring thousands of digital-literacy specialists will happen. It's a good thing we already have the buildings and the specialists. In school libraries and librarians, we already have a public place and a community of experts to help us learn the cognitive and social skills as well as the technical skills for navigating today's infosphere.

No Gatekeepers in Participatory Culture
I've been writing about life online since my 1987 article on virtual communities. And I was one of those kids who found refuge in the school library when the imprisoning rows and columns of chairs in my first classrooms couldn't contain me. I was introduced to literacy as both skillful reading and writing, but also (by librarians) as a community that I could join one day. In those stacks of books were conversations about philosophy and science, engineering and theology, conversations that were unfolding over centuries—a community of thought that the alphabet and printing had made possible. To join the community of active print-literate as a writer, however, I had to pass through the gatekeepers of magazine and book editors of the pre-Internet era.

When I first explored text-only computer bulletin board systems in the early 1980s, I was immediately excited about the lack of gatekeepers. The community of active literates—those who knew enough about digital networks to bypass the gatekeepers—grew explosively as a significant portion of the entire human population got online and began publishing as well as consuming culture.

New Social Skills Everyone Needs
The power of individual digital media—a printing press and television production studio in your pocket—is truly active only when the power is accompanied by the new social skills that apply to networked publics. Knowing how to craft a blog post, edit a Wikipedia page, edit and upload a video is only part of the picture. Now we need to know how to behave in an online community, grow a personal learning network, and ethically share cultural productions. Again, where else but the school library, and who else but school librarians are better equipped to facilitate these new literacies? And with the massive bypassing of gatekeepers, how do we deal with the massive floods of inaccurate information, misinformation,
disinformation—to say nothing of spam, porn, and political invective? On the Internet, anybody can publish. It’s heaven. On the Internet, anybody can publish. It’s hell.

When I wrote about the future of personal computers in 1985 (Tools for Thought), virtual communities in 1993 (The Virtual Community), the convergence of telephones, personal computers, and the Internet in 2003 (Smart Mobs), I dealt with criticism and debate over the question: "Is all this digital stuff any good for us?" To answer the question, first one has to define what one means by "us." Some people benefit; others are left behind, and still others are unwitting victims of new media. It only makes sense to think about who you mean by "us" and about the social circumstances of digital inclusion. The economic and education divide between the world’s haves and have-nots is a real one, but markets and microchips are driving down the cost of admission to the infosphere; there are already six billion mobile subscriptions (Whitney 2012) and two billion Internet users on a planet of seven billion (based on Exploredia 2011). The gap between those who know and those who don’t know how to use a text message or a social network to their advantage, and how to avoid the dangers associated with texting and Facebooking is an even more serious divide.

Good for Us? It Depends...

After a couple decades of thinking about "Is all this digital stuff any good for us?" I grew convinced that the answer is: "It depends on how many people know how to detect bogus information online, manage their infotention, participate as a contributing digital citizen, collaborate in virtual communities and collective intelligences, and navigate a world of social networks, social contagion, and social capital."

In other words, the critical uncertainty about the future of digital media is literacy. That’s why I set out to coauthor *Net Smart: How to Thrive Online*, an evidence-based guidebook to today’s essential literacies of attention, participation, collaboration, crap-detection, and network know-how. Coauthor Anthony Weeks and I had in mind creation of a tool for librarians, teachers, and parents, as well as a vehicle for bringing some new lore to the knowledgeable and a wealth of otherwise non-obvious clues to the vast majority of new Internet users.

### The critical uncertainty about the future of digital media is literacy.

#### Fostering Infotention

Attention—the basic material of thought and communication—is severely challenged by today’s always-on, available-everywhere media. From looking at your Blackberry when your child is talking to you, to physically colliding with people while texting and walking, to Facebooking in the classroom, entirely new distractions and competing legitimate claims on attention require a conscious and learnable discipline of attention management. It isn’t clear that librarians ought to consider themselves teachers of attention management, but certainly they ought to be interested in ways to foster mindful infotention among their constituencies.

1 Pew Internet and American Life survey revealed that one in six Americans admitted bumping into something or someone while texting (Madden and Rainie 2010).

### Think Like a Detective

After attention, the second essential literacy is critical consumption of information (or "crap detection," as Ernest Hemingway called it); this skill was part of what librarians provided for centuries during the print era. Critical thinking about what we read and discover in our research has always been fundamental, but now that everybody can publish anything, the loss of gatekeepers means that for the first time in the history of publishing it is the responsibility of the consumer of information, not the producer, to verify it.

If nothing else, helping people understand a little more than they do now about how to find information online and how to test that information, whether they find it on their own or someone else feeds it to them, is a crucial mission for today’s librarians. Not just search techniques, but "thinking like a detective" and other active, critical, mental mindsets are essential. If it had been possible to regulate what people could publish, we’d have far less bad information online. And we wouldn’t have the Web. The best way to improve the quality of the information commons is to raise the crap-detection literacy of the online population.
Disinfotainment Distraction or Collective-Wisdom-Sharing Machine?

Besides reducing the amount of bad information, school librarians have an opportunity to increase the amount of good information by helping their constituents learn how to become productive, mindful, effective participants. Blogs, wikis, knowledge-sharing sites, and collective encyclopedias may not have existed in previous decades of librarianship, but today they are the gateways to the community of digital literates. Participation is the third literacy I wrote about in Net Smart. Knowing how to use a blog to advocate and a wiki to organize, and how to curate resources with social bookmarking or other curation services are not that difficult to learn, but the technologies that make these practices possible don’t come with user manuals. Engineers have provided the infrastructure for the most explosive growth of access to knowledge in human history. But the know-how of populations is what will make the difference between that infrastructure becoming an always-on Panopticon and disinfotainment distraction or becoming a collective-wisdom-sharing machine.

Understanding How Structure and Dynamics of Networks Affect Participants

The ethics, mechanics, and mindset of collaboration and sharing are also within the school librarian’s portfolio. Knowing about copyright, Creative Commons, public domain, the line between collaborative investigation among students and cheating, and the ways in which groups of people learn and produce knowledge together online are essential today. As David Weinberger has explicated in Everything is Miscellaneous (Times Books 2007) and Too Big to Know (Basic Books 2011), technology has transformed knowledge into a networked phenomenon—for better and for worse. Although humans have been enmeshed in our own social and economic networks throughout the history of our species, the technological networks of satellites, fiber optics, and smartphones have changed the ways we know, what we know, and what knowledge itself means. Understanding the way the structure and dynamics of networks affect participants and participatory cultures has become another essential literacy. Bits of lore that have been confined to specialists have now become universally useful—sometimes essential: knowing what a small-world network is, how social capital is a network property, why a diverse portfolio of strong and weak ties is socially useful, how bridging networks profits the bridge-maker, how happiness and diseases spread in social networks, and how claims of fact are buttressed, contested, debated, and linked into networks of knowledge.

The digital knowledge-production and knowledge-distribution tools we have today were inspired by people such as Vannevar Bush, J.C.R. Licklider, and Douglas Engelbart, who emphatically believed that new information tools were necessary to address the significant problems humans were making for themselves. These pioneers understood that knowledge is power, and engineers made knowledge-machines that distributed power to billions. What has not yet been understood is how to teach those billions to become active participants. The question of how to use our tools to deal with the problems we’ve created with our previous tools begs the question: “How many people really know how to use the tools that are suddenly available?” Literacies are infectious, but they need stewards, catalysts, and teachers—librarians—to spread fast and far.


Works Cited


In school libraries and librarians, we already have a public place and a community of experts to help us learn [the cognitive, social, and technical skills] for navigating today’s infosphere.