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'Screen Language': The New Currency for Learning

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*Kids are on to something big, says **John Seely Brown**. In a recent talk at Harvard Business School, Seely Brown—the chief scientist at Xerox and knowledge provocateur—challenged his listeners to consider lessons from the average teenager.*

by Martha Lagace, Senior Editor, *HBS Working Knowledge*

John Seely Brown has had an epiphany.

In the past year and a half, the knowledge expert and chief scientist of Xerox Corporation said he's gained a new respect—indeed an awe—for screen language. And what is screen language? It's simply the vernacular of digital culture, the way technology is increasingly put in the service of human imagination in sophisticated ways. For the shorthand version, just think of any teenager's natural affinity for instant messaging, video games, movies, open source, and eBay.

How can that affinity be tapped and how can those abilities be understood and applied to lifelong learning?

As Seely Brown told a group of about twenty educators who attended his talk at Harvard Business School on April 29, "If you can't deal with screen language, you are not literate!"

Lacing his message with wit and a copiously illustrated slide presentation, Seely Brown offered his thoughts on the new wave of knowledge transfer to educators who came to HBS for a three-day program in adult and distance learning. The program, held April 28-30 and organized by the HBS Division of Research, included sessions on designing interactive learning activities and issues in adult learning. Seely Brown, who gave the kick-off speech, is also the director of the Palo Alto Research Center (PARC) and the author (with Paul Duguid) of *The Social Life of Information* (HBSP, 2000).

According to Seely Brown, there is a new kind of digital divide now and it is the divide between faculty and students. Faculty, stuck in yesterday's analog world, are confronted with students who arrive nicely fluent in digital technology and the virtues of hyperspeed. Students already have a handle on how to convey their emotional states electronically. It's up to adults to learn that vernacular, he said. Educators who create programs for adult learning and distance learning need to apply the vernacular and deepen and strengthen these new means of communication.

A Cold Medium?

As an engineer, he has continually battled the problem of how to convey context through technology that only deals in content. The content side is easy. At PARC, for instance, one of the great ideas that fell flat was to invite well-known individuals to address a PARC forum every Thursday afternoon. The speeches were to be Webcast throughout the premises so 300 PARC employees could follow them at their workstations.

"Efficiency is not the same as effectiveness," Seely Brown said to the HBS participants. It was disconcerting for speakers to arrive at the huge auditorium, he said, find only four or five people sitting there and be told, "It's okay, you've got X number of eyeballs on the Webcast. So you can feel good now."

No one enjoys talking into thin air; a good speaker, like an actor, is always engaged in conversation with the audience during the performance. That sense of unleashing a dialogue between the speaker and the audience was lost with Webcasting, said Seely Brown.

The experience taught him how important both content and context are to learning, and how desirable yet elusive it is to find a way to facilitate that interplay. "Technology is not good at context today," Seely Brown said.

One intriguing exception is offered by the Linux open source movement. With Linux, programmers write code to be read by their peers all over the world. In crafting the code, they build on each other's progress. The system is a

form of "cognitive apprenticeship," Seely Brown said, because a programmer who wants to be part of the Linux community adapts to the style and tastes of how Linux works. The aesthetic—the context—underlying this building process, not just the fact of code itself, is worth taking seriously, he said.

Reading the Screen Language

Delving into screen language is another promising start for sharing knowledge through both content and context.

Several methods Seely Brown has witnessed in the past year have greatly impressed him, although he admitted it was a hard sell for a long time. "I must have been a dinosaur. I thought hypertext was a joke. I hated video games; I thought they were a complete waste of time." He met three people who encouraged him to adjust his attitude: Stephanie Barish, of the Annenberg Center for Communication, at the University of Southern California; Shigeru Miyagawa of MIT, a specialist in technology, language and culture; and J.C. Herz, author of *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds* (Little, Brown & Company, 1997). They challenged him to think about experiments in new media and about how media might fundamentally alter how people communicate among themselves as well as with students.

One project of Barish's, for example, coaxed undergraduates and graduate students to think about more than mastering some fun tools. Students had to write their term papers in a multimedia language. Print was not allowed. The project included not just film students but also students of humanities such as history, philosophy, English, and women's studies. At the start of a women's literature course, for instance, the students were asked to pick a feminist they admired, find four photographs that expressed the power of that particular woman, and write a very simple paragraph under each photograph to explain why they chose the photo. Said Seely Brown, "The beauty of doing that is that in the visual world you have no room for caveats or commas or qualifiers or parentheses. In fact, Picasso does not traffic in commas...It's so very clear what he wanted to say."

Other classroom projects included making an "interpretive film" around a favorite poem, and creating a composite image with Photoshop to reveal important aspects of the students' autobiographies. The latter project was not complete until students went to the front of the class and explained to their classmates what they were trying to express through the images.

At HBS, Seely Brown was quizzed by several participants on whether images have a tendency to distort information. Art images can be deceptive, observed one educator. While it is good to approach media with an open mind, and while many students can indeed learn some "nifty" techniques that yield seemingly impressive results, real—as opposed to surface—learning requires navigating much tougher terrain. Another educator said she was troubled by the prospect of summing up a feminist's complex life story in four photographs. Much can be captured in a photo, but "much is lost" as well, she said.

Seely Brown accepted their reservations to a degree. However, he said, none of these projects constituted "a final event" in the learning process. Rather, they provided a powerful entryway to engage hearts and minds. The real learning of students in the Photoshop project he mentioned, for example, was not the creation of composite photos but the remarkable experience of getting up in front of their classmates and discussing their autobiographies.

The Web is a medium that "honors" multiple forms of intelligence and has tools that amplify and express content as well as contextual aspects of emotion, passion and feeling, he observed. "I'm not saying you can't do that with text. But I'm saying, 'Here is the vernacular. We aren't paying much attention to how that vernacular could enable us to open up forms of communication, expression and so on.' That, I think, is going to become increasingly important." Improvements in technology will make such forms of communication easier and easier to do.

"I spent my life reading corporate memos that were written so they couldn't be misread. And I'll tell you, every department reads them differently," Seely Brown said. Image texts and music texts are similarly open to interpretation, he allowed. "The real catch for me is not that this is an end in itself. I'm not arguing that we should never have text qua print text. I'm suggesting that this may be a powerful way in for kids in terms of appreciating more their vernacular, in order then to be able to open up experiences, get a more expressive medium...and then build on that." Cultivating a sense for different vernaculars and how we use them is something we don't think much about, he added.

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