

**Title:** "The New Literacies: Research on Reading Instruction with the Internet"

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**Subject(s):** Technology

**Grade Level:** K-8

**Synopsis:** This article emphasizes the speed with which new technologies are being introduced into society and the importance of them to our economy. For instance, in 1994, only 3 percent of K–12 classrooms had access to the Internet; in 2000, 77 percent of classrooms had this access. "By any measure, this is unprecedented change; never before has such a powerful technology for literacy entered so many classrooms in such a short period of time." (p. 311) Leu mentions some examples of new literacies on the Internet, including various Web sites where you can see ongoing classroom projects: classroom-to-classroom communication, collaborations between classrooms and scientists, cross-cultural conversations, literature discussion groups, and video conferencing between students and scientists worldwide.

What are the "new literacies"? "The new literacies include the skills, strategies, and insights necessary to successfully exploit the rapidly changing information and communication technologies that continuously emerge in our world." (p. 313)  
The skills that are necessary include:

1. the ability to deal with change. "Regular change is a defining characteristic of the new literacies. . . . The continuously changing technologies of literacy mean that we must help children *learn how to learn* new technologies of literacy." (p. 314)
2. the ability to critically evaluate information. The openness of the Internet means that anyone, with any political, economic, religious, or ideological stance, can publish anything. "We must assist students in becoming more critical consumers of the information they encounter." (p. 314)
3. the ability to locate, evaluate, and use information. Leu calls this "new forms of strategic knowledge." "The extensive information networks of ICT require new forms of strategic knowledge to exploit them effectively." (p. 314)
4. the ability to use social learning strategies. The new literacies are highly social. For one thing, "The technologies of literacy change too quickly and are too extensive for us to be literate in them all. Each of us, however, will know something useful to others. Reading an instructional manual for a new technology, for example, is often less efficient than simply asking another student who is familiar with the software for help." (p. 314) "We will need to support children in learning how best to learn from others." (p. 328) "Social learning strategies also become important because networked technologies

for literacy permit us to communicate more extensively with people around the world.” (p. 315)

These new literacies build on but do not replace the old literacies. Students still need to read and write. However, reading and writing will change in important ways when using new technologies. “Reading and writing will take new forms as text is combined with new media resources and linked within complex information networks requiring new literacies for their effective use.” (p. 315)

New aspects of “meaning construction” become important with networked information such as on the Internet. Speed is much more important, as is the ability to locate and evaluate information. “Locating useful resources quickly becomes just as important as comprehending those resources.” (p. 316)

It’s difficult to conduct research on the use of technology in the classroom, because the forms of technology change so rapidly. By the time a long-term study is done and published, the technology that was used in the study may have been replaced by something newer. “It appears that technology may be changing faster than our ability to evaluate and communicate its utility for literacy using traditional research approaches.” (p. 325)

However, some findings have been reported that seem to apply to various of the new technologies:

1. Greater interest and motivation from students and teachers. “Reinking (in press) suggests readers are more engaged with hypermedia texts because they promote a more active orientation to reading, are easier to read for most readers, meet a wide range of social and psychological needs, and make reading a more creative and playful activity.” (pp. 319–320) Users of technology may feel they have greater control over their learning.
2. Greater gains in comprehension and learning? Results from the research have been mixed and challenged. However, this may be a moot point, since these technologies are here. The President’s Committee of Advisors on Science and Technology (1997) “argued that ICT and other digital technologies were so central to the future of the United States that additional data on their efficacy were unnecessary before moving to systematically integrate these technologies into schools.” (p. 321)
3. Talking storybooks have been found to increase comprehension in children using them to access digitized speech support. Most of these studies have been done with older students (8 years and older) who were having difficulty learning to read, although some studies have been done with K–1 students beginning to read.
4. Internet use in classroom research projects. A study of 500 students in grades 4 and 6 (CAST, 1996; Follansbee et al., 1997) found “significantly greater achievement on a number of measures for classrooms using Internet resources.” (p. 324)

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“One of the more compelling and consistent findings from the research literature in this area is that children are highly motivated and interested in the new literacies (Reinking, in press; U.S. Congress, 1995).” (p. 328)