

## The Scientific Body Electric

the future. As the refereed scientific journal becomes more and more reliant on electronic technology, new roles and functions for editors, reviewers, and the journal itself will emerge.

**Covi LM. Debunking the myth of the Nintendo generation: how doctoral students introduce new electronic communication practices into university research. *J Am Soc Inf Sci* 2000;51:1284-94.**

The previous article maintains that electronic technology affects academic research communities. This article acknowledges that it is less well understood how these changes take place. One explanation is that they occur generationally: In applying electronic communication skills learned from an early age, doctoral students may transform disciplines. To examine this possibility 28 graduate students and their advisers in four disciplines at eight US research universities were studied. Among other findings, students' patterns of electronic communication mimicked those of their advisers. This observation should not be surprising; as Eisenstein noted in her 1979 classic work, *The Printing Press as an Agent of Change*, the use of new technology begins as an imitation of the old.

**Walsh JP, Kucker S, Maloney NG, and others. Connecting minds: computer-mediated communication and scientific work. *J Am Soc Inf Sci* 2000;51:1295-1305.**

Among 333 scientists surveyed, the biggest effect of e-mail use or computer-mediated communication (CMC) was in helping to integrate scientists into professional networks. CMC also was positively associated with scientific productivity and collaboration.

**Kling R, McKim G. Not just a matter of time: field differences and the shaping of electronic media in supporting scientific communication. *J Am Soc Inf Sci* 2000; 51: 1306-20.**

Different scientific fields have developed distinct communicative forums, both on

paper and electronically. A perspective called "social shaping of technology" identifies social forces affecting disciplines that create these differences—differences that will persist even as electronic communication increases.

**McCain KW. Sharing digitized research-related information on the World Wide Web. *J Am Soc Inf Sci* 2000;51:1321-7.**

Full bibliographic records containing URLs (n=527) were downloaded from SCISEARCH to explore the extent of Web publication of scientific research-related information. These sites were classified by resource type, subject, and degree of intellectual-property protection. Of 410 Web pages, 67% allowed unrestricted public access, 11% requested citation of a related journal article, and the remainder stated conditions for use or relied on a statement of copyright. The World Wide Web appears to have become a significant information channel for scientists.

**Weller AC. Editorial peer review for electronic journals: current issues and emerging models. *J Am Soc Inf Sci* 2000;51:1328-33.**

Studies of peer review in an electronic environment have focused on attitudes toward electronic publications and citation patterns of electronic journals. Future trends and levels of acceptance of new electronic methods are discussed.

**LaFollette MC. Observations on fraud and scientific integrity in a digital environment. *J Am Soc Inf Sci* 2000;51:1334-7.**

Five subjects deserve special attention: ensuring the accuracy and truthfulness of content; building trust among editors, reviewers, and authors; sustaining civility in electronic forums of scientific debate; protecting intellectual property; and preserving editorial independence from government interference.

The *Journal of the American Society for Information Science* "serves as a forum for new research in information transfer and communication processes". Frequently a journal within the journal, called "Perspectives", is included and contains collections of papers on single topics. In December 2000 Perspectives addressed electronic scientific communication. The theme seems to be "the more things change, . . .".

**Hurd JM. The transformation of scientific communication: a model for 2020. *J Am Soc Inf Sci* 2000; 51:1279-83.**

The personal computer and the Web affect how scientists communicate, but Hurd argues that behavioral and organizational factors are equally important in shaping