

Crises and Collaboration in the New Millennium

In February 2000, near the start of the “new millennium,” many unsecured college and university computers, among other computers, were used by hackers on the Internet to launch “denial-of-service” attacks on popular commercial Web sites. Even though campus computers represented only a fraction of those used in the attacks, the colleges and universities received much

rage: both the Senate and the House Judiciary Committees held public hearings. Industry witnesses testified that no federal oversight was required and that the private sector should be left to create its own network security solutions. Interestingly enough, while the U.S. Department of Justice and commercial Internet security experts were asked to testify, no witnesses were called from

the higher education community. This is not to say that college and university administrators know more about criminal acts or computer security than Attorney General Janet Reno or the private, commercial sector. However, unlike in government and industry, the weak security of many college and university computers has made them prime targets for hackers and other would-be evil-doers.

The negative media publicity and the fear that their networks could be easily compromised spurred the higher education community into action.

This past June, the SANS (System Administration, Networking, and Security) Institute, an educational and research organization for network administrators and security officers, released the results of its study “How to Eliminate the Ten

Most Critical Internet Security Threats: The Experts’ Consensus.”¹ A new EDUCAUSE Task Force on Systems Security was created shortly thereafter. The task force will work with noted security experts and partner associations such as Internet2 to identify short-term actions and long-term projects to address the network security challenges faced by higher education. This new group will also act as an information clearinghouse to share best practices and to publicize improved procedures and policies for finding, fixing, and preventing security flaws. EDUCAUSE’s interest in related security issues is nothing new. Its working group on Public Key Infrastructure (PKI) has been instrumental in maintaining a dialogue with the federal government on developing common standards for PKI as the accepted manner of conducting electronic transactions with institutions of higher education.²

Another issue that tested the technological capacity and user policies of the higher education community this year was the explosive growth of the MP3 file-sharing application Napster among college and university students. Some institutions found that almost 60 percent of their available bandwidth was being used by this application alone! In addition to bandwidth problems, this issue involved copyright infringement. In its lawsuit against Napster, the rock group Metallica cited four universities as contributing to copyright piracy, bringing more unwanted publicity to the higher education community.³ Again, Congress held hearings without requesting input from college or university representatives.



media scrutiny, mainly for their high profiles and their close relationships with federal research.

As is usually the case after the occurrence of such a high-profile crime, Congress expressed its dismay and out-

Despite initially being put on the defensive, the higher education community has taken active steps to find technical and policy solutions to this dilemma. Many institutions chose to ban Napster outright—at least in the short term—as their administrations grappled with the problem. Others have chosen to use Napster as a test case on how to better manage their networks, implementing technical solutions that place priority on academic over recreational use of the network. Initiating a dialogue with students and educating them on the limitations of the network and current copyright law constitute still another policy approach that is gaining momentum. Colleges and universities are trying to teach their faculty and students to be responsible network users—users who are aware that their individual actions can affect the entire networked community.

EDUCAUSE promotes dialogue between students and higher education administrators on this and other IT-related issues. At Networking 2000, the annual higher education and library IT policy conference held each spring in Washington, D.C., a featured panel focused on new broadband applications and their influence on campus IT policies. One of the best-received dialogues took place between University of Indiana sophomore Chad Paulson, an ardent Napster supporter and founder of Students Against University Censorship, and Mark Bruhn, the information technology policy officer at the University of Indiana.

It is highly unlikely that the federal government will step in and mandate a new licensing regime. It is even more unlikely that a compromise will be reached between Napster and the Recording Industry Association of America, which has taken the lead to ban unauthorized sharing of MP3 music files. In any case, the technical and policy challenges will continue to mount as a number of other file-sharing applications, such as Gnutella, gain in popularity among the mainstream Internet community. Institutional administrators will be forced to grapple with how to best manage these highly distributed applications while attempting to implement fair network-user policies.

The omission of higher education from testimony at the security and Napster hearings is not typical. Congress and the federal agencies often solicit college and university leaders' opinions on IT-related policy issues. This past July, EDUCAUSE President Brian Hawkins was invited to testify before the Congressional Commission on Web-Based Education.⁴ Although this particular hearing focused on the impact of distributed learning in higher education, the witnesses were asked to comment on thirteen questions that explored how all Americans access the network and information. Hawkins offered three recommendations, regarding expanded network access, standardized PKI requirements, and balanced copyright legislation.⁵

Higher education is often the first to experience any new challenges involving the network and also the first to hear the corresponding new suggestions for government intervention. For this reason, the higher education community needs to recognize and explore emerging issues in a *proactive* mode, before it is forced to react to a brewing crisis. Although EDUCAUSE provides a number of excellent forums for discussing these issues and crafting potential solutions, success requires the active participation of EDUCAUSE members who are on the front lines when these crises erupt. As we head into the new millennium—yes, the beginning of the *true* new millennium is still a couple of months away—continued proactive collaboration will be necessary if colleges, universities, and other higher education associations are to remain IT policy leaders.

Notes

1. See the SANS Institute Web site: <<http://www.sans.org/topten.htm>> (accessed August 2, 2000).
2. See the Net@EDU Web site for more information: <<http://www.educause.edu/netatedu/groups/pki/>> (accessed August 2, 2000).
3. Metallica dropped its lawsuit against those universities that agreed to ban Napster.
4. For further information on the Congressional Commission on Web-Based Education, see <<http://www.hpcnet.org/webcommission>> (accessed August 2, 2000).
5. To view Hawkins's testimony, see <<http://www.educause.edu/page2/WECtestimony.html>> (accessed August 2, 2000).

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Transforming Education Through
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