Peer-to-Peer File Sharing on University Campuses

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to appear before the subcommittee today to discuss the important issue of the use of peer-to-peer file sharing on college and university campuses. As President of The Pennsylvania State University, I am responsible for the management of an institution that has 24 campuses, 5000 faculty, and 83,000 students.

Penn State has actively and comprehensively incorporated information technology into virtually every aspect of its mission of teaching, research, and service. Computer networks have greatly facilitated communication between students and faculty, have enabled new pedagogical and research capabilities, and have enhanced our campus connections with local communities. Information technology has expanded the educational boundaries of traditional classroom teaching and dramatically increased the potential for distance education.

Beyond academic uses, information technology and networked communications have also improved our ability to establish and maintain personal connections with our alumni, with potential students, and with the public. Email, instant messaging, and personal web sites enable our students’ ability to reach each other on campus and connect with the world beyond the campus boundaries with ease.

Unfortunately, the same technologies that so powerfully expand and enrich the academic and personal experiences of our students and faculty can also be misused. The capacity of information technology to be used for both legitimate and illegitimate purposes is clearly demonstrated by peer-to-peer (P2P) file sharing technologies. P2P technology has the potential to expand dramatically the ease, speed, and breadth of information exchange. Such capacity will clearly benefit a wide range of educational and research activities. Indeed, federal agencies such as the National Science Foundation are funding research into P2P development to realize this potential. But P2P can also be used to carry out the unauthorized retrieval and distribution of copyrighted material.

The misuse of P2P technology on college and university campuses—the subject of this hearing—is a serious problem that is now acutely confronting higher education
administrators. Fully understanding the nature and scope of the problem and how to deal with it raises a series of challenges that we are working hard to meet.

University officials are working with representatives of the entertainment industry to address the problem of misuse of P2P technology. Last October, two letters—one from entertainment industry organizations and one from the six major national higher education associations—were sent to college and university presidents. The higher education letter urged university officials to examine the use of P2P on their campuses and to take appropriate actions to reduce its misuse.

Last summer and fall, university and higher education association officials also began a series of discussions with representatives of the entertainment industry, culminating in the formation of the Joint Committee of the Higher Education and Entertainment Communities, co-chaired by Cary Sherman, President of the Recording Industry Association of America (RIAA), and me; a list of the full committee is attached to my testimony.

The purpose of the committee is two-fold: (1) to examine ways to reduce the misuse of P2P technology on campuses, and (2) to attempt to reduce differences between the higher education and entertainment communities on federal intellectual property legislative issues. The committee met in December to discuss these issues and how to proceed in addressing them. The committee agreed that we would form three task forces: The first focuses on educational efforts about copyrights, rights and responsibilities, and the appropriate and inappropriate use of P2P file sharing. The second deals with the appropriate role, availability, and functionality of technology in managing P2P use. And the third task force will focus on legislative issues.

The work of the task forces is underway. We expect that they will report back to the full committee later this spring, and we will soon thereafter conclude our formal joint activity with a final review of task force work, formulation of recommendations, and a consideration of final steps.

I believe that we have a process that can make real progress in effectively addressing peer to peer piracy on university campuses, and I am hopeful that we can educate our two communities about our common and differing interests and concerns with respect to this and other copyright-related issues. Higher education is clearly on the record in agreeing with the entertainment community that copyright infringement is wrong, and that P2P file trading that constitutes copyright infringement is illegal and should be stopped. We in higher education understand the concerns of the entertainment industry about the impact of P2P misuse on their markets and the loss of opportunities that both creators and consumers may suffer as a consequence. Moreover, university administrators recognize that our institutions have an obligation, through a variety of mechanisms, to educate our students about their legal and ethical responsibilities, not only as members of our university communities, but as members of our society.
We hope, in turn, that entertainment industry officials and policy makers, such as the members of this subcommittee, understand the challenges that lie before university administrators in trying to implement ways to reduce or eliminate inappropriate uses of P2P without at the same time eliminating legitimate uses of P2P technologies; without constricting academic freedom and the free and open exchange of information that underpins the creativity, vigor, and productivity of our education and research programs; and without invading the privacy of our students, faculty, and staff.

A song downloaded or uploaded by a student using P2P typically constitutes copyright infringement; but in selected cases it might also be a fully legitimate, desired fair use of copyrighted material as part of an educational or research project. A technology may exist or be created that can block P2P transactions, but we would be reluctant to embrace technology that would block both legitimate and illegitimate uses indiscriminately. Nor do we wish to stifle the very creativity and experimentation that has brought us the extraordinary technological capacities that enrich our lives today. Many aspects of this nation’s capabilities in information technology and networked communications were developed on research university campuses; we want to be certain that we preserve and nurture that continuing capacity within the academic community for creation and discovery.

Let me illustrate how these concerns play out at my own university. Penn State has a vigorous program of copyright education for our students and employees. Before getting an account, individuals must agree that they understand and will comply with federal and state laws in addition to Penn State's acceptable use policies. The account agreement has a lengthy section dealing with copyright compliance. Likewise, when they get additional services they must agree to policies that include a proscription against copyright infringement.

We also have an indirect enforcement effort. Audio and video files are large, and we monitor the amount, but not the content, of traffic to and from individual machines. Residence Hall users are limited to 1.5 gigabytes of inbound or outbound traffic per week. There are increasingly severe restrictions for offenders who exceed these limitations, beginning with a decrease in the speed allowed for the network connection. For persistent violators there is a complete suspension of network access. The limitation on bandwidth, coupled with the threat of suspension of access, is intended to discourage copyright infringement. Additionally, when notified by copyright holders of infringement, we comply vigorously with the Digital Millennium Copyright Act (DMCA) and immediately suspend access until the issue is resolved. We received 153 such complaints in calendar year 2001. Although we do not currently monitor content to detect the fingerprints of pirated, copyrighted material, we would consider such a possibility if technology, functional for a university of our size, allowed us to maintain the educational principles to which we subscribe.

We also employ proactive technical means to disrupt infringing activities. For example, we routinely scan our networks to find machines that have been compromised in some way or another. One of the primary motivators for intruders to compromise our
machines is the establishment of unauthorized outside "Warez" servers, which are generally used for illegally trading copyrighted materials. In just the last few weeks alone, our scanning efforts have located more than 100 such intrusions. Network access to compromised computers is disabled and the illicit software is removed. We also educate the victim whose system has been compromised on how to prevent future compromise of their computer.

Yet despite these educational efforts, despite our compliance with DMCA, and despite our technical interventions, it is probably fair to say that thousands of our students illegally download some amount of copyrighted material. They are typical of college students nationally in this regard and are party to a practice that is morally wrong, is damaging to the entertainment industry, and is inconsistent with the values of honesty and integrity that students more typically profess.

I believe that the work of our joint committee’s education and technology task forces will identify a number of useful practices that we intend to share broadly within the higher education community.

One of the great strengths of this country’s system of higher education is its extraordinary diversity—public and private institutions, research universities, liberal arts colleges, and community colleges. No single set of policies and procedures for managing P2P technologies is likely appropriate for all, but if we identify a number of educational and technological approaches that have been effective in different settings, we can provide useful examples to colleges and universities that will both encourage and guide them in taking actions appropriate to their local circumstances.

At the same time that higher education officials are developing and implementing educational policies and technological interventions, the content community is developing new business models for marketing copyrighted material, including music and movies. I am hopeful that this combination of effort will go a long way to eliminating the misuse of P2P technologies and facilitate the development of the positive potential of P2P.

The capacity for the illegitimate use of P2P is of course not limited to colleges and universities. Indeed, the entertainment industry has sent letters to private sector companies expressing their concern about such misuse. Moreover, as this nation develops greater broadband capacity throughout society, from K-12 education to home connections, we will face the same potential in many other settings.

This is not a new problem; the nation has faced such challenges with each advance of communications technology—the VCR is but one familiar example. The ideal intellectual property model for higher education today, in this new digital territory, is one that finds appropriate and effective ways of balancing, in the tradition of Copyright law, the proprietary rights of copyright owners and the limitations and exceptions to those rights.
Let me close by saying that I believe higher education is taking seriously its responsibility to deal appropriately with these new intellectual property challenges. I believe our cooperation with the entertainment industry in this effort will help both sectors identify appropriate actions to take. I appreciate the interest of this subcommittee in this important issue, and I would be pleased to keep you informed of the work of our joint committee.