April is full of memorable days in the United States: April Fool’s Day, Opening Day, Tax Day, Earth Day. Thanks to a recent circuit court decision, April 6 may become another day to honor, or revile, depending on your point of view.

On April 6, 2010, the U.S. Court of Appeals for the D.C. Circuit flatly rejected an effort by the Federal Communications Commission (FCC) to enforce “net neutrality”—the policy intended to ensure an open and transparent Internet. Although the mainstream media interpreted the decision as a blow to Google and other commercial providers of Internet-based services, the decision could have even more significant consequences for education, research, and online learning.

The court’s decision in Comcast Corp. v. FCC runs counter to the basic foundation of the Internet. From its inception, the Internet was designed to be open to anyone and used for any lawful services or information. The Internet protocols were developed to operate over a neutral platform, with the transmission system largely operated by the telephone companies, which were regulated as “common carriers.”

This neutral platform spawned a multitude of innovative Internet-based services and applications, many of which were developed on college and university campuses. In fact, higher education has led the way in incorporating Internet-based services and technologies into its core curriculum and standard practices. Students register for classes and receive syllabi online, faculty require students to use wikis to collaborate on assignments, master music classes and other forms of interactive instruction are provided via videoconferencing, researchers share and process data among multiple locations simultaneously, and distance learning programs allow even remote rural students to benefit from the best teachers around the world. Broadband access to the Internet is as fundamental to higher education in the 21st century as blackboards, pens, and paper were in the 20th century.

In 2002, federal regulators abandoned the requirement to operate a neutral platform for Internet traffic; now, in 2010, higher education’s reliance on Internet-based services is in jeopardy. The FCC decided that broadband access to the Internet would not be regulated under the “common carrier” rules that applied to traditional telephone companies. The FCC reasoned that broadband Internet access, when bundled with transmission facilities, should be deregulated under the theory that broadband providers (i.e., cable and telephone companies) would invest more in their networks if they were subject to less regulation.

The FCC assured consumers and users that it could nonetheless protect the “neutrality” of the Internet by using what is called its “ancillary authority” (based on Title I of the Communications Act of 1934). In fact, in 2005, the FCC issued a set of four principles that it believed would serve as a guide to broadband providers. One of these four principles said that consumers have a “right” to use the Internet services and applications of their choice.

The FCC attempted to enforce these four principles for the first time in 2008. The FCC found that Comcast had secretly blocked certain Internet traffic using the BitTorrent file-sharing protocol. Based on its ancillary authority, the FCC found that Comcast had violated the principle that consumers have a right to use the services of their choice. It reprimanded Comcast and ordered the company to change its network management practices.

Comcast challenged the FCC’s decision in court. In a sweeping opinion, the court agreed with Comcast that the FCC had exceeded its ancillary authority by trying to regulate Comcast’s broadband Internet access service, and the court vacated the FCC’s decision. Although the court left the door slightly ajar by stating that it would review each future FCC decision on a case-by-case basis, the chances are slim that any future FCC regulation of broadband services will pass muster.

The court’s decision has wide-ranging implications for future broadband policy. Austin Schlick, the FCC’s general counsel, said that the decision “undermines the legal approach the FCC adopted in 2005 to fulfill its statutory duty of being the cop-on-the-beat for 21st Century communications networks.” He went on to say that the decision may affect a significant number of important proceedings before the FCC, including “accelerating broadband access and adoption in rural America; connecting low-income Americans, Native American communities, and Americans with disabilities; . . . consumer protection, including transparency and disclosure; and consumer privacy.”

The decision is especially significant for higher education. There are no rules or regulations in place today to govern the behavior of broadband Internet access providers. Cable, telecommunications, and wireless broadband providers are free to block, slow, censor, and redirect Internet traffic on their networks. What are the implications for distance learning? For research? For online learning and web-based collaboration?

The answers to these questions are not yet known. In the short run, higher education is not likely to see any immediate changes. The broadband providers—largely the cable and telephone companies—have said that they do not intend to block or interfere with Internet traffic. In fact, they maintain that it would be foolhardy for them to interfere with Internet
traffic, because they compete with each other; if one provider degrades certain traffic, consumers would simply switch to the other provider.

In the long run, however, the court’s decision opens the door to some disturbing scenarios. For instance, broadband network operators often assert that they need additional sources of income if they are going to invest in sufficient broadband capacity to keep up with burgeoning Internet traffic (which by some estimates continues to grow at 40–50% per year). Cable and telephone companies could charge additional fees for heavy Internet users. Or they could sell enhanced access to certain content providers. Each of these practices could allow certain users to receive more favorable treatment than others based on their ability to pay.

These scenarios would fundamentally change the nature of Internet access. Today, users pay an “entrance fee” for access to the Internet. As the FCC’s four principles recognized, once connected, all Internet users are treated equally; they may go anywhere, provide any lawful service, and deliver any lawful content. By curtailing the FCC’s authority to enforce this principle, the court potentially gives free reign to broadband providers to adopt the kind of discriminatory pricing strategies described above.

What are the implications for higher education? Educational institutions are very heavy users of the Internet. The prospect of paying more (through higher usage fees) simply to maintain their existing level of broadband Internet access is not attractive.

Perhaps more significant is the potential impact on privacy, academic freedom, free speech, and equal opportunity. The Internet has revived the marketplace of ideas; it allows everyone to be both speaker and listener. But providers of broadband access to the Internet control the keys to this marketplace; they are the “gatekeepers.” New “deep packet inspection” technologies give broadband providers more tools to make individualized decisions about Internet traffic. They could, for instance, examine the source or content of certain bits and give some traffic priority treatment, for a fee.

If broadband providers are allowed to sell priority access, Hollywood could be first in line. Streaming video requires more bandwidth than ordinary web surfing, and movie studios, broadcasters, and other video distributors may be willing to pay for enhanced broadband bandwidth to retain their viewers (and their advertising revenues).

The problem is that giving priority access to some content may mean degraded access for everyone else. The result could be enhanced access for entertainment and lower-quality broadband access for education. Will educators be able to depend on the availability of a neutral Internet for teaching and learning purposes? Will the quality of broadband connections become worse, especially for low-income students and for schools in rural areas where bandwidth is scarce?

Furthermore, once the neutrality dam is breached, how can the floodwaters of discrimination be contained? What other market segments could broadband providers create in their quest for additional revenue? Would they give priority access to real-time commercial services (e.g., VoIP and multi-player gaming) over non-commercial services, e-mail, and basic research? Would broadband providers differentiate traffic based on its content?

The answers to these questions are not yet known and will depend on the response of the FCC and Congress to the court’s decision. What options does the FCC have? One option is for the FCC to reverse its 2002 decision and reclassify broadband access to the Internet as “common carriage,” like traditional telephone service. Phone and cable companies have already mounted a lobbying blitz against this approach, which they claim would subject future broadband services to an old-fashioned and burdensome regulatory regime. A second option is for the FCC to obtain “voluntary” commitments from broadband providers to adhere to the four principles. But voluntary commitments are unenforceable if the broadband provider changes its mind.

The FCC has recently proposed a third option, a “Third Way.” Under this proposal, the FCC would reclassify broadband services as “common carriage” (as in option #1) but would subject them to only a few provisions of the Communications Act. The proposal would apply only to networks providing retail services to the public, not to “private” networks (although additional clarification on this point will be necessary). Although the broadband providers continue to claim that the Third Way is overly regulatory, it is an attempt at a compromise that preserves the minimum nondiscrimination requirements necessary to guarantee an open Internet while avoiding the excessive regulatory baggage formerly applied to telephone networks.

The FCC is currently considering whether to adopt the Third Way approach before the November mid-term elections—in what could become a showdown between the net-roots community and the established broadband providers. Given the importance of broadband services and the Internet to the future of education, it will be critically important for higher education to participate in these proceedings to ensure that the FCC preserves the free flow of information and learning over the Internet.

Notes
1. “Carnegie Mellon University’s Ope n Learning Initiative has shown that online learning, when ‘blended’ with in-person instruction, can dramatically reduce the time required to learn a subject while greatly increasing course completion rates.” Federal Communications Commission, National Broadband Plan: Connecting America, chapter 11, “Education,” <http://www.broadband.gov/plan/11-education/>.

John Windhausen, Jr. (jwindhausen@telepoly.com) is a telecommunications and broadband policy consultant to EDUCAUSE and is based in Washington, D.C.

© 2010 John Windhausen, Jr.