The Bandwidth Battle
Why a ‘neutral’ Internet matters to higher education

By COURTNEY YOUNG and KAREN WILLIAMS

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The Federal Communications Commission recently concluded nearly a year of robust debate by asserting strong rules to protect equality on the Internet. This bodes well for research and learning—although higher education and library concerns have still been overlooked in much of the conversation. Over the past year, national organizations such as the American Library Association and the Association of College and Research Libraries have tried to change that by emphasizing the importance of treating online information equally. We have advocated for network neutrality rules to prevent Internet service providers from blocking or degrading digital content from competitors or others who do not pay for priority network access. Now the debate likely turns to Congress and the courts.

WHAT IS NET NEUTRALITY?
The term network neutrality was coined by Columbia University law professor Tim Wu in 2003. The idea? That Internet service providers and governments should treat all online information equally—not discriminating or charging differently by user, content, website, platform, application, or mode of communication. The only area where content may be filtered is to address issues like congestion, security, and spam, as long as the power isn’t used as a pretext to pick winners and losers among online content.

The FCC has twice adopted net neutrality rules, but they were overturned in court over questions of legal authority and definitions. In May 2014, it launched a third public proceeding. In November, President Barack Obama laid out network neutrality goals: No blocking of legal websites or Internet-based services; no throttling the transmission of Internet content, applications, or services; increased transparency of network management practices; and no paid prioritization on some content over other traffic sharing the same network facilities. In other words, ISPs should not be opaque gatekeepers in the transmission of Internet communications. As the president noted, these elements are “built into the fabric of the Internet since its creation.” Institutions of higher education developed the initial protocols for the Internet, and universities were the first to deploy private data networks for what later became the public Internet.

Opponents of net neutrality argue that the market (rather than government regulation) should determine who and how to charge for transmitting content. They suggest that mandating an open Internet could hurt innovative business practices and slow broadband investments.

Most of the debate has focused on commercial content providers (Netflix and Amazon, for example), individual consumers, and commercial broadband and Internet providers. But focusing on the commercial use of the Internet (to stream or download movies faster, for instance) is not enough.

WHY IT MATTERS FOR HIGHER EDUCATION
The loss of net neutrality would most threaten the high bandwidth applications and services that enable real-time collaboration, content creation, sharing, and learning by education and other community institutions, including libraries. A non-neutral Internet could affect universities in these ways:

• Most universities and colleges do not have deep financial pockets to pay ISPs for faster access to reach off-campus students, researchers, and faculty, compared to large corporations or for-profit institutions. This hurts educational institutions’ ability to support research collaboration and off-campus access to remote digital learning, digitized collections, and essential open educational resources. This impact is likely to be unevenly distributed based on budgets and niche research areas. Our students and faculty don’t distinguish between a video from...
YouTube and one from the educational video provider Kanopy. If a specific content provider has paid a premium for smooth, consistent streaming with no lag, our users will expect no less from us and will abandon slow sites for faster ones.

- Students and researchers seeking to launch their own businesses and enterprises may struggle to compete online with network neutrality protections. In a “pay to play” Internet model that moves some content more quickly and efficiently, it could be more expensive and difficult to reach targeted customers and partners. Prioritized access benefits established players over new, disruptive, and diverse creators.

- The cost for university libraries to access journal articles and online systems will increase because the vendors that provide these services must pay higher premiums. Increased budgets to pay these costs mean students will face increased tuition.

Other trends compound these issues. The move to cloud services increases reliance on broadband networks for access to content. Continued mergers and market consolidation are also factors. For example, ISPs may acquire major content providers (as in the 2013 merger of Comcast and NBCUniversal), which increases the financial incentive to favor affiliated digital content over content from competitors. In another example, one ISP may acquire a competitor (Comcast and Time Warner Cable or AT&T and DirecTV), reducing choice among broadband providers. FCC Chair Tom Wheeler described the issue in a February 2015 Wired article: “Broadband network operators have an understandable motivation to manage their network to maximize their business interests. But their actions may not always be optimal for network users.”

Fundamentally, colleges and universities deeply value academic freedom. The Internet is the primary open platform for information exchange, intellectual discourse, research, civic engagement, teaching, and learning. Protecting and promoting an open Internet is essential to our democratic and pedagogic principles.

AN OPEN FUTURE?

Net neutrality will only become more important as new technologies transform education and the economy. The FCC’s public proceeding on this issue in 2014 resulted in more than 4 million comments, the most ever filed on a single subject. As we write this, cable and telecom companies are considering court challenges, and Republicans in Congress oppose the rules. The House and Senate committees charged with telecommunications oversight may consider draft legislation that could limit FCC authority or reduce its funding. Legislators may even attempt to overturn the anticipated regulations through a rarely used power called the Congressional Review Act. As busy as 2014 was for the issue of net neutrality, this year could be equally contentious and momentous.

Higher education institutions and libraries must remain vigilant and defend the need for an open and neutral Internet. We can do this individually or through our professional organizations and by reaching out to our members of Congress and the FCC. We can encourage our vendors and partners to actively support an open Internet. And we can monitor our networks for any sign that our ISPs are blocking or prioritizing content. Preserving the free flow of information over the Internet is critical to our educational purpose and mission.

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American Library Association:
www.ala.org/advocacy/telecom/netneutrality

EDUCAUSE:
www.educause.edu/library/net-neutrality

Public Knowledge:
whatisnetneutrality.org/timeline