

The Broadband Divide: A Widening Chasm in Higher Education?

The Federal Communications Commission (FCC) recently released its second report on the availability of high-speed and advanced telecommunications services in the United States. Echoing its first report, the FCC concluded: "Advanced telecommunications capability is being deployed in a reasonable and timely fashion."¹ However, the report cited several categories of consumers who may never have access to advanced services if deployment is left to market forces alone: inner-city, rural, and tribal residents; low-income Americans; and minorities. This is an especially important issue for higher education professionals, who are becoming more reliant on broadband to deliver sophisticated instructional and research applications for their researchers and students anytime, anywhere. A major challenge for colleges and universities is gaining affordable access to the national high-speed networks via the local loop.

The FCC was directed, under Section 706 of the Telecommunications Act of 1996, to facilitate the deployment of advanced network services. To date, the agency has taken a "hands off" approach, explaining that broadband deployment is still in its infancy and that competition and private investment should be given more time before federal intercession takes place. Until recently, both the FCC and Congress have been satisfied to let the competitive marketplace and the private sector determine when and where advanced services will be available. Contrary to expectations and promises, however, the Telecommunications Act has not re-

sulted in increased options and lower prices for broadband. Businesses have not deployed advanced networks in a uniform manner but instead have concentrated on the nation's population centers, with a primary focus on the business-to-business marketplace. Lacking short-term economic gains, broadband vendors have no incentive to extend their networks into rural, inner-city, or low-income areas. And although some progress has been made with wireless and even satellite technologies, these technologies still cannot match the two-way transmission capacity of cable lines or digital subscriber lines run over telephone wires. Compounding the lack of new vendors willing to deploy into rural and underserved areas, incumbent carriers complain that regulatory hurdles designed for voice traffic are preventing them from deploying data services across inter-LATA (local access transport areas) boundaries.

Under increasing pressure, the FCC is now considering several recommendations: allowing multiple Internet service providers access to cable companies' infrastructure for the delivery of advanced services (open access); examining ways to make more licensed and unlicensed spectrum available for broadband services; and sharing school and library facilities with surrounding communities. Likewise, many members of Congress, especially those representing rural states, have become impatient with the lack of progress by the FCC and industry in providing advanced net-

works to their constituents. Both Republicans and Democrats are introducing legislation at a furious pace, hoping to spur competition and therefore facilitate broadband deployment. The majority of bills introduced over the past two years, though espousing different deregulatory approaches, have reflected a common goal: the granting of inter-LATA relief for the incumbent carriers. None of these bills, however, have made it to the president's desk. And even though removing regulatory hurdles may help some colleges and universities, doing so probably will not produce any immediate positive results for those institutions located in the remote rural areas where competitors do not see any economic advantage to building the necessary infrastructure.

In another move intended to bridge the digital divide, Congress offered tax incentives to telecommunication providers that deployed in underserved areas in 2000. Bills focused on different components of the divide, from providing tax credits for broadband deployment to purchasing computer technology and equipment to offering information technology training. The Broadband Internet Access Act of 2000, introduced in the latter part of the congressional session, appeared to have the best chance for passage. The bill provided a two-tiered (depending on the level of megabit service deployed), five-year tax credit to any service provider that deployed bandwidth services to underserved areas. It was industry-

technology-neutral and was designed to kick-start competition. Since the tax-incentive approach corresponds with EDUCAUSE policy, as articulated by EDUCAUSE President Brian Hawkins last July before the Congressional Commission on Web-Based Learning,² EDUCAUSE sent letters to the White House and to the entire Congress in support of the legislation. Unfortunately, the measure fell victim to the recent congressional budget battles and was not considered a top priority. Nevertheless, given the strong support shown in the Senate and the growing support in the House, this legislation and other similar bills will be reintroduced in the 107th Congress.

Is an industry tax incentive the most expedient solution for ensuring that all Americans have access to advanced networks? Despite the broad support of ad hoc groups composed of individuals, nonprofit associations, and industry, not everyone favors the tax-incentive approach. The Consumer Federation of America (CFA) and the Consumers Union (CU) released a statement noting that the Broadband Internet Access Act was "misguided" and that tax dollars or subsidies for corporations should instead go directly to the people who cannot afford access to the technology.³ On the other hand, some states and counties have already taken the tax-incentive approach. Many states are seeking to emulate Colorado's Rural Technology Enterprise Zone Act, passed in 1998. The Colorado law provides a taxpayer with income tax credits equal to 10 percent of total technology infrastructure investments that improve Internet access within a designated rural technology zone. The Colorado Public Utility Commission is expected to report on any progress to Colorado's general assembly by September 2003. Although the Colorado approach does not focus specifically on advanced networking, it is one that should be monitored closely.

Also worth close monitoring are EDUCAUSE initiatives that seek to increase competition. Net@EDU, the networking arm of EDUCAUSE, has a member-driven working group focused on helping higher education institutions

find alternative strategies for obtaining affordable access to high-speed networks. The Broadband Pricing Working Group (BPG) has produced several documents, available on-line,⁴ that may help higher education institutions market themselves to broadband vendors and negotiate affordable pricing for the usage of high-speed fiber networks. Over the past year, the BPG has been engaged in a dialogue with the broadband vendor community, particularly new companies, on how best to meet this challenge within the competitive marketplace. The group plans to offer detailed recommendations to EDUCAUSE in early 2001.

Considering the number of people who do not have even "low-speed" access to the Internet, access to advanced networks may appear to be a trivial issue. But the situation of information "have-nots" will not improve if they are not able to skip a step in the Internet-access paradigm. Instead of a digital divide, we must be wary of a broadband divide, particularly in higher education. Acting as facilitators for public discourse and research, those in higher education *must* have access to advanced networks. For as we come to expect the network to support the high-speed applications necessary for collaboration and learning, the type of access available—whether to the regular or to the advanced network—could determine our capacity to contribute and participate in society.

Notes

1. Federal Communications Commission, "Deployment of Advanced Telecommunications Capability: Second Report," August 2000, 2, <http://www.fcc.gov/Bureaus/Common_Carrier/Orders/2000/fcc00290.pdf> (accessed November 20, 2000).
2. Brian L. Hawkins, EDUCAUSE president, "Testimony Submitted to the Congressional Commission on Web-Based Education," July 14, 2000, <http://www.hpnet.org/cgi-bin/global/a_bus_card.cgi?SiteID=163428> (accessed November 20, 2000).
3. "A Persisting Digital Divide Puts Millions of Americans at an Economic, Social, and Political Disadvantage" (press release), <<http://www.consumersunion.org/telecom/disconnectdc1000.htm>> (accessed November 20, 2000).
4. Net@EDU Broadband Pricing Working Group, <<http://www.educause.edu/netatedu/groups/pricing/>> (accessed November 20, 2000).

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Transforming Education Through
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EDUCAUSE, a consolidation in 1998 of Educom and CAUSE, is a nonprofit consortium of colleges, universities, and other organizations, dedicated to the transformation of higher education through the application of information technologies. Through direct services and cooperative efforts, EDUCAUSE assists its members and provides leadership for addressing critical issues about the role of information technology in higher education.

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