Google plans to revamp Internet with fiber network

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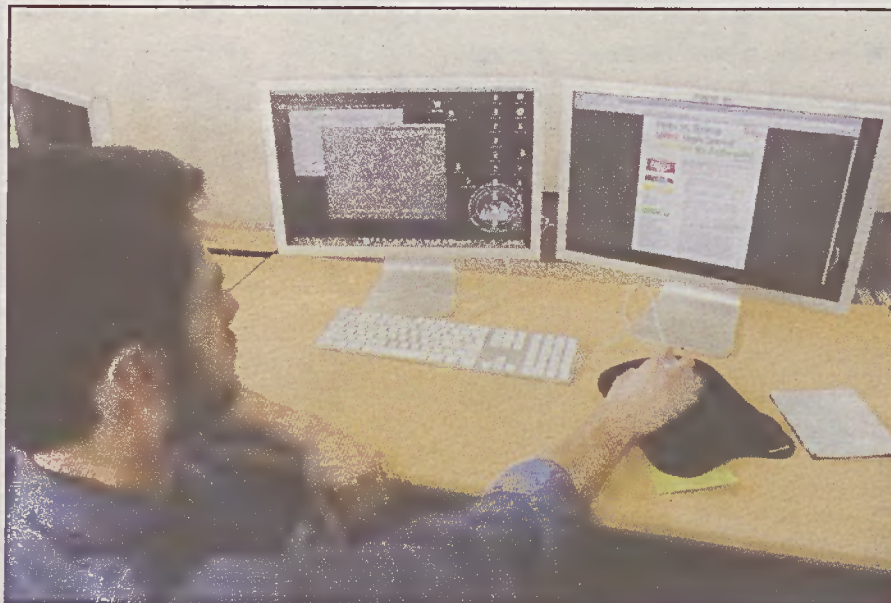
Jim Kuhlman, UNC Asheville's head librarian and chief information officer, attempts to provide massive amounts of digital information to students through the university network but, without high-speed Internet for off-campus students and faculty, this information remains difficult to access. However, that could change if Google chooses to install its new Google Fiber network in Asheville.

UNCA recently signed an agreement with Films Media Group, providing access to thousands of educational films, and allows faculty to choose which clips they wish to stream online for students, according to Kuhlman.

"This would allow the work in that hybrid environment for a lot of the basic looking at information, using less and less class time with someone talking to you and deliver it across the Web. Then you can use class time talking about it and working on it," he said. "The fact that students would be off campus, even if it's locally in the community, to be able to go in and look at that much more content across the Web would be terrific."

UNCA participates in various distance learning programs, allowing Western Carolina University and N.C. State to utilize the university for various graduate programs, as well as co-teaching courses with community colleges. As Asheville attempts to be chosen for the new Google Fiber network, UNCA operates on a faster network and would benefit from the surrounding areas gaining access to high-speed Internet from their homes, according to Kuhlman.

"What I think we're more interested in, and what's more intriguing are what's called hybrid courses, where you in fact attend class, but it's also a hybrid because a lot of it's provided via the Web," Kuhlman said. "If you don't have broadband at home, this is much tougher."

UNCA offers students unique oppor-

Ian Shannon- Photography Editor

Kyle Levitan, a multimedia arts and sciences student, works in the Zeis hall computer lab. UNCA's communication structures would benefit from the Google Fiber Network, according to campus officials.

tunities to work with organizations like the National Climatic Data Center, one of the world's largest repositories of climatic data and progressive programs such as megatronics and multimedia arts and sciences.

These programs require large amounts of digital data to be downloaded and transmitted between institutions to succeed and grow, according to Edward Katz, associate provost and dean of university programs at UNCA.

"Having a higher speed and bigger pipe to convey that type of digital information in a more rapid manner would create a lot of opportunities for NCDC and the university to collaborate on bigger research projects," he said.

According to Katz, better Internet access for residents of Asheville would allow more community involvement from undergraduate students and faculty.

"Without the capacity to handle that size of digital packages, we would have far fewer opportunities, and eventually NCDC may struggle to do the work that it needs to do," he said. "Which would

be a problem for us if we have been enjoying a relationship with that agency downtown."

Libraries allow people Internet access but limit the amount of time an individual stays. Competition for computers and rules concerning what sites are accessed create complications for people who desire a part in research projects, according to Jim Kuhlman.

"It is of critical nature, in my opinion, that we do more and more to solve the problems about there being a digital divide. In essence, between people with money, computers in their homes and broadband access for the speed, and the people who don't," he said. "Whether it's the computers anymore, the fact is that if all you've got is dial up, it disenfranchises people based on economics."

Google recently announced a plan to install a new fiber network within a community of 50,000 to 500,000 residents that would allow access to high-speed Internet for everyone. The company plans to spend $500 million to install the infrastructure, at no cost to the city, ac-

cording to Gordon Smith, an Asheville City Council member.

"Nowhere in the request for information does it indicate that there will be any financial responsibility whatsoever," he said. "The operating procedure, for any request for information, is that if there's going to be a cost, it is disclosed. So since it hasn't been disclosed, my operating assumption is that this is not going to cost the city any money."

Google operates open access networks, allowing other Internet providers to utilize the fiber, according to Smith.

"You may still be able to get your cable from Charter, it will just be on Google's pipes," he said. "Google isn't in the business of becoming an Internet service provider, they simply want the infrastructure laid."

Asheville, and several other cities across the country, are campaigning for Google to install the network.

Jose Ibarra, designer and manager of the GoogleAvl Web site, a grassroots style domain devoted to getting community involvement for the fiber network, said this type of infrastructure brings new development, capital and an open network to businesses and residents.

"The big thing is, they put out this idea of getting fiber to the homes," he said. "They'll put fiber all over the place and then rural areas, the remote areas, could shoot out a wireless signal that connects that home, business or school back onto the Google network," he said.

Google plans to use pre-existing network infrastructure and improve what already exists, according to Ibarra.

"If they can do it here in our geography then they can do it anywhere in the world, which is what they want to do," he said. "We have a very robust area and it's going to be a little bit difficult."

According to Kuhlman, UNCA would benefit if the surrounding areas could connect to the campus.