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WINSTON-SALEM, N.C. — Children who show up this month for basketball camp at the Carl Russell Recreation Center here will find some unexpected drills on their schedule.

Aaron Bailey, the recreation center's director, plans to take advantage of breaks in the hoops action to send the campers to the center's newest addition, a computer room stuffed with 10 refurbished computers, all with high-speed Internet connections. The aim is to help make the youngsters as agile on computers as they are on the courts. "I might even send the campers in before I let them play basketball," Mr. Bailey told a visitor recently.

Mr. Bailey's center is being linked to 35 other sites around Winston-Salem — recreation centers, churches in the city's poorest neighborhoods, libraries, schools and a homeless shelter — in the first phase of WinstonNet, one of the most advanced and broadest efforts yet by public and private groups in an American city to bridge the so-called digital divide between the haves and have-nots.

For years, community activists and politicians around the country have talked about the need to help people who have been left behind in the digital revolution because of poverty, disabilities or fear of new technology. Without computer literacy, the argument goes, disadvantaged groups will become more excluded in the high-tech economy. Yet many efforts have meant little more than making it possible for people to surf the Web from a library terminal.

WinstonNet — which is based on a fiber optic ring that surrounds the city center and links to Internet 2, the newest, highest-capacity piece of the Internet — goes beyond providing free access to computers for those who do not own them.

It will allow any resident with a library card to have an e-mail account; transact business with the city, like payment of parking tickets; and store homework or other documents on a central server so they can be easily retrieved from any site on the network. Documents can be stored in a private file, in a file available to a limited number of other users or in a file open to the public. Parents can gain access to school assignments and communicate with teachers by calling up Learning Village, a software program donated by the I.B.M. Foundation.

Perhaps most important, the plan focuses on giving first-time users plenty of computer training. Instructors at the WinstonNet site in the basement of the Union Baptist Church, for instance, helped teenagers from a nearby housing project learn to use computers in creating business plans for their own summer businesses.

"The digital divide problem has been defined mainly in terms of access, but it needs to be defined more broadly as a matter of skill," said Karen Mossberger, an associate professor of political science at Kent State University in Ohio.

As a bonus, the training process can also open the door to mentoring disadvantaged youngsters.

Winston-Salem officials say WinstonNet, in addition to doing social good, can be an economic catalyst for the city, best known as the home of the R. J. Reynolds Tobacco Company. The city is struggling to reduce its dependence on tobacco and manufacturing.

The fiber optic ring will provide a broadband communications link for engineering and biotechnology businesses that need to send and receive huge masses of data. Targacept, an RJR spinoff that is developing medical products based on nicotine, is expected to connect to WinstonNet by the end of this year.

Tying so many organizations into the same system will make it easier to train many more users, said Johannes Boehme II, associate dean for academic computing at the Wake Forest University School of Medicine, who serves as WinstonNet's volunteer president.

"Very few communities do this holistically," Mr. Boehme said. While that may be true, some social service organizations and communities had digital access programs long before WinstonNet.

Boys and Girls Clubs of America, for example, has used \$100 million in software and cash from Microsoft to create more than 1,000 community technology centers around the country where children use computers to do homework and learn skills like designing Web sites.

The Blacksburg Electronic Village, a project of Blacksburg, Va., and the Virginia Polytechnic Institute and State University, says it has helped 87 percent of the community's residents and most of its businesses become connected to the Internet, with more than 60 percent receiving low-cost high-speed connections from local cable and phone companies.

And Atlanta estimates it has attracted about 15,000 residents, over one-third of them children, in the last two years to 15 community technology centers in poor neighborhoods. That program also includes a mobile computing center in a bus that carries 12 computers with wireless broadband connections to Poor neighborhoods, according to William Lindsey, a spokesman for the Mayor's Office of Community Technology.

"We think we are making big strides to eradicate the digital divide," Mr. Lindsey said.

But some experts have their doubts. Dr. Lynette Kvasny of Pennsylvania State University recently published a study that concluded that Atlanta's technology centers and a program in La Grange, Ga., offering free Internet access for subscribers to a city-owned cable television system, did little to improve the lives of the poor. The Atlanta model was criticized by some regular users of the centers for providing inadequate training, Dr. Kvasny said.

Some critics say the digital divide evolves so rapidly as technology advances that big initiatives, specially those driven by government policy, can lock users into obsolete technology.

"It's misguided to look at it as a serious social problem that needs to be dealt with with aggressive subsidies," said Adam D. Thierer, director of telecommunications policies at the Cato Institute, a libertarian policy group in Washington.

In fact, Mr. Thierer said, computer technology is spreading to underserved segments of society unusually rapidly compared with other innovations. Nearly two-thirds of American homes now have a computer, according to Odyssey, a research firm based in San Francisco.

But the gap between those who are able to use computers effectively and poorer citizens with little exposure may actually be widening, said W. Frank Newton, executive director of the Beaumont Foundation of America, which focuses on digital divide programs.

Government has become less eager to pay to bridge that gap. President Bush has tried to eliminate technology access programs created by the Clinton administration in the Education and Commerce Departments to help communities bridge the digital divide. Just under \$50 million of the cuts was restored by Congress in the spring after a lobbying campaign by a coalition of more than 180 groups.

And while a controversial universal service charge on long-distance phone bills, established by Congress in 1996, helps some schools and libraries connect to the Internet, that multibillion-dollar fund cannot be used to finance broader projects like WinstonNet.

State financing for such programs has also been sharply reduced because of budget problems, according to Kavita Singh, executive director of the Community Technology Centers Network in Cambridge, Mass.

WinstonNet began to take shape in flusher times. It grew out of Wake Forest University's drive in the 1990's to make itself a leader in using computers in education.

Wake Forest has been giving every student a laptop since 1996. It decided in 1998 to replace the first-generation broadband lines connecting its medical school with the main campus on the other side of the city and a research center downtown, replacing them with the ultimate in broadband, a private fiber optic highway.

That network, later sold to a telecommunications subsidiary of Duke Energy, had enough spare capacity to spur community discussions about who else might use it. Among the groups involved were Forsyth Technical Community College, which trains student volunteers to refurbish donated computers and wire them into the network; Winston-Salem State University, a historically black college that has extensive outreach programs into the city's most depressed neighborhoods; and several local government agencies.

"Turf was removed as an issue at the beginning," said Claudette Weston, who represented the library system in the meetings. "People came to cooperate."

Each WinstonNet host site pays its own operating costs, including monthly fees to local phone or cable service providers for access to WinstonNet's broadband ring. Hosts are also responsible for developing their own filtering policies.

Now there are discussions about allowing individuals to connect to the WinstonNet system through local phone or cable lines, without going to a WinstonNet site. The local Habitat for Humanity group is proposing that all its renovated homes come equipped with WinstonNet access.

"As people become more aware of it, the pressure will mount for more access," predicted Don Martin, superintendent of the Winston-Salem/Forsyth County Schools. Mr. Martin said one possible WinstonNet expansion would create a site in the sprawling Hanes Mall south of the city. "One thing we've learned is that everyone can find their way to the mall."