

Chapter 5

CASE STUDY: PITTSBURGH, PENNSYLVANIA

THE PITTSBURGH CONTEXT

For more than a century, the steel industry powered the Pittsburgh regional economy. The decline of the steel industry in the 1970s and 1980s forced the city and the surrounding region to diversify its economy. As steel has become increasingly peripheral to the city's economic base, universities and high-tech firms have become viewed as engines of economic growth.

As a result of technology-led redevelopment strategies, Pittsburgh is now home to software, biomedical, and environmental services firms as well as the U.S. Department of Defense's Software Engineering Institute, the Pittsburgh Supercomputing Center, and the Pittsburgh Technology Center. According to local development officials the Pittsburgh metropolitan area ranks fifth in the nation in computer software employment behind the Silicon Valley, Boston, Austin-Dallas, and Seattle. Thanks to Carnegie Mellon University and the University of Pittsburgh, the city's two major institutions of higher education, Pittsburgh ranks tenth in university research and development spending (City of Pittsburgh 1999).

A number of community-based organizations have followed the city's redevelopment strategies and adapted technology to their programs. Pittsburgh's shift from a heavy manufacturing center to a high-tech service economy, coupled with the presence of major research universities, has certainly helped drive the multitude of community technology activities in the region. However, many of Pittsburgh's technology activists assert that the community technology movement has not yet sufficiently linked with and taken advantage of local industry and university resources. They point to leadership on the part of community members and local government, partnerships with well-established institutions, financial support from local foundations, and strong neighborhoods organizations as other important factors that have contributed to community technology initiatives.

HISTORY OF PUBLIC SUPPORT

Local Government Support

In 1994, city officials set out to help create and develop community technology centers for Pittsburgh citizens left unserved by more traditional purveyors of technology, namely schools and libraries. Facing a city deficit, officials had to turn to external sources of funding. Two years prior, Pittsburgh's historic center of African American culture and commerce, the Hill District, was named an Operation Weed and Seed site. Operation Weed and Seed, a U.S. Department of Justice initiative that seeks to "weed" violent offenders, drug traffickers, and other criminals out of target neighborhoods and to "seed" the areas with human services and neighborhood revitalization efforts, proved to be a flexible funding source for Pittsburgh's community technology initiatives.

At the time Common Knowledge: Pittsburgh (CK:P) (a joint effort of the Pittsburgh school district, the University of Pittsburgh, and the Pittsburgh Supercomputing Center) was working in the Hill District with the Hill House Association to help link the area public schools and community organizations to the Internet. Through Operation Weed and Seed, the Mayor's Office joined the alliance, and in 1995, the Hill House became the first recipient of Weed and Seed funds. The funding helped establish the server at the Hill House computer lab as the hub and the Internet service provider (ISP) for community centers and public schools in the Hill District.

The goals of the Operation Weed and Seed Community Technology program are fourfold: add computer and Internet technology components to existing after-school and summer activities; build on and learn from the programmatic and instructional successes of existing community sites; create a "wired community" among community groups, neighborhood organizations, schools, and libraries in the area, and suggest ways that Internet resources can be used to bridge the gaps between them; and build information technology/literacy skills and skills for workforce development.

To date, the City of Pittsburgh has used "seed" monies for community technology centers and networks in 33 sites in Weed-and-Seed-designated neighborhoods throughout the city and in the neighboring rustbelt municipalities of Homestead and West Homestead. The sites are in various stages of development and cover a range of community facilities including public schools, a public-housing facility, youth tutorial projects at local churches, YMCAs, a substance abuse treatment center, and a community development corporation (CDC). All of the Weed and Seed funding has gone to established organizations and agencies and has been used exclusively for the purchase of hardware and software.

Community Involvement in Cable Negotiations

Local community technology activists have proposed that the City of Pittsburgh require TCI of Pennsylvania, Inc., to build an Institutional Network (I-Net) as a condition of renewing TCI's franchise agreement. TCI's current franchise agreement expires on October 30, 1999.

An I-Net is a telecommunications network, provided in conjunction with a cable company's cable television network, that can serve the internal communication needs of, and provide Internet access for, state and local government, schools, libraries, and community groups. Recent renewals of franchise agreements have resulted in the creation or expansion of I-Nets in Austin; Boston; Portland, Oregon; and King County, Washington.

According to the Pittsburgh proposal, which was submitted by Carl Redwood, program director at the Kingsley Association, and approved by the Cable Communications Advisory Committee:

The City should require TCI to provide for the construction of a discrete, two-way Institutional Network (I-Net) that links city facilities, schools, libraries and community centers for communication, educational and Internet services. The I-NET should utilize fiber-optic cable to I-NET user locations. All available

bandwidth on the I-NET would be allocated at the discretion of the City and could include video programming and the Internet. At a minimum there should be provision for one I-NET distribution/drop point in each of Pittsburgh's 88 neighborhoods. All basic and expanded basic cable services and full Internet access should be provided over the I-NET without charge (Network Democracy 1999a).

Local activists have revised this proposal to include schools, libraries, museums and city facilities as the major community hubs from which other community based organizations can get on line.

The goal of the I-Net is to promote equity and affordability in the availability of new telecommunications technologies and services. Ideally, each of Pittsburgh's neighborhoods will have at least one computer/Internet lab to accompany the I-Net drop point, where residents and community groups can use computers, e-mail, and the Internet. In addition to providing community organizations with affordable access to the Internet, the I-Net can increase access to government and community information and provide a forum for residents and community groups to present input to government agencies. Negotiations between the City and TCI are ongoing and will be settled in the fall of 1999.

PITTSBURGH'S COMMUNITY TECHNOLOGY PROGRAMS

Many community technology initiatives exist in the greater Pittsburgh region; each program has unique goals and is at a different stage of development. While most initiatives focus in some way on community development, Pittsburgh's CTCs differ in their approach and orientation. Some centers focus on access, others are oriented toward literacy and training, and still others emphasize the content of community technology programs. This section is not an attempt to enumerate all of these efforts; such a task is beyond the nature and scope of this study. Instead, it briefly examines four initiatives and how they have used IT to encourage community development.

Hill House Community Access Network (HHCAN)

The Hill House Community Access Network (HHCAN) is a public-access computer network that helps link the students, parents, residents, organizations and businesses of the Hill District. The mission of the HHCAN is to "help meet personal and professional information needs of people; foster communication among individuals and the institutions that serve them; support community groups in their efforts at professional development outreach and community service; enhance opportunities for sustainable community-based economic development; create a favorable environment for business and employment growth; and serve as a working model to be replicated in other communities" (Hill House Association 1999).

As noted above, HHCAN grew out of a partnership between the Hill House Association (a multipurpose service agency serving the Hill District) CK:P, and Operation Weed and Seed in the mid-1990s. However, the Hill House Association's involvement in community technology dates back to 1980, when the former program director, Nate Johnson, started a community computer lab in the basement of a Hill

district auditorium. The lab, which was available to anyone in the community, was up and running for more than 10 years when the Hill House developed the alliance with CK:P and Weed and Seed.

With the establishment of the HHCAN, the city's first community access network, the Hill House became the hub for a neighborhood network. The HHCAN originally brought together six public schools and three community centers in the Hill district: New Beginnings Learning Center; Wadsworth Hall Recreation Center; and Youth Fair Chance, a school-to-work program affiliated with Hill House. The HHCAN has since expanded to bring together a number of neighborhood-based organizations and agencies. Fourteen Hill District organizations and agencies provide information through the HHCAN.

In 1996, HHCAN membership exceeded 800, with approximately half of the members from the Hill District and the other half from other neighborhoods in Pittsburgh. For a one-time fee of \$35, members receive e-mail accounts and may take advantage of basic literacy, Internet, and e-mail training. The network is funded by financial and in-kind donations from members, grants, and private sponsors. HHCAN employs one full-time staff person who manages the lab, develops the training program, and coordinates a cadre of volunteers who assist users.

Although HHCAN offers some structured workshops, its emphasis is on providing access, not training. Some technology advocates emphasize the importance of open-access labs. For example, Carl Redwood (1999), former associate director of the Hill House Association and HHCAN states:

The free aspect of these centers, I think, is very important. I think there is a danger in the technology center movement, particularly as it relates to low-income communities, to assume that we're doing something for people. . . . I think what we have to do is just make resources available to the community and the community will figure out what, when and how to use them. And they may not use them the way the mayor's office or someone else thinks they should use them. . . . But I think it just needs to be open like that.

At HHCAN, users have the unrestricted access Redwood recommends. "At Hill House," he recalls, "sometimes there were classes but most of what happened was not programmed, it was free time where people could just come in and do things. People came in and they made business cards, worked on business plans, used software that they downloaded for free from some site. Preachers would come in and do their sermons for Sunday" (Redwood 1999).

Community organizations are currently adapting the HHCAN model to help make Internet technologies available to residents in the East Liberty, or the East End, section of Pittsburgh. The East End Community Access Network (EECAN) currently consists of three CBOs, all of which are recent Weed and Seed recipients: Bloomfield Garfield Corporation Youth Development Center; East End Cooperative Ministries; and Kingsley Association. Rather than follow the hub-and-spoke configuration of the HHCAN (the Hill House Association server acts as the hub for neighborhood schools and CBOs), the East Liberty activists are planning a slightly different approach in which they will have only a

centralized e-mail server for the East Liberty community. Internet access is to be provided by the I-Net.

New Beginnings Learning Center

New Beginnings Learning Center (NBLC) is an active after-school program that provides academic tutoring to school-age children in two predominantly African American neighborhoods—West Oakland and the Terrace Village section of the Hill District. One of the most established CTCs in the city, NBLC was started in 1989 as a spin-off of the youth programs of the Friendship Community Church. Realizing that technology was going to be an integral part of the future, NBLC began developing a technology component for its tutoring programs in the spring of 1990. One of the primary objectives of NBLC is to provide a supportive learning environment and access to technology necessary “to help make the possibility of college or vocational training a reality for youth who are unlikely to consider such alternatives” (Pittsburgh Presbytery 1999).

NBLC upgraded and expanded its technical infrastructure in 1995 when it received two PCs, a printer, a scanner and an ISDN link to the HCCAN from the Weed and Seed Initiative. In 1996, NBLC won an award from Apple Computer Inc. that included five Macintosh Performas, a printer, a scanner and a digital camera. NBLC offers one-on-one and small-group tutoring and computer literacy projects for youth as well as basic computer training courses for adults. NBLC also has open-lab hours during which community residents have free access to e-mail and the Internet and a variety of software applications.

Since she became director of NBLC in 1997, Roxanne Epperson has sought to expand NBLC’s programs. For example, in 1998, NBLC offered a pilot project called “Seniors and Technology” or “Sen-Tech”, a five-week workshop designed to introduce seniors citizens to computer basics including keyboarding, Windows, the Internet, and e-mail. Twenty senior citizens participated in the workshop, which was offered free of charge to the residents of West Oakland and Terrace Village. Participants from other neighborhoods were charged a fee of \$10.

Realizing that NBLC is a “community technology center and more,” Epperson also expanded the center’s non-technology based programs to include nutritional programs for children and field trips for children and families (Epperson 1999). NBLC also has recently partnered with the Greater Pittsburgh Literacy Council to offer “ALMA,” (Adult Literacy Media Alliance), a video-based literacy program for adults.

NBLC currently receives support from two area foundations, the Pittsburgh Presbytery, Pittsburgh Presbyterian churches, private contributions, program registration fees and service fees from adult computer training classes. NBLC’s two full-time and one part-time staff members coordinate center activities, conduct fundraising activities, and teach courses. In addition, NBLC uses youth volunteers in two unstructured mentoring programs: Adolescents Aiding Adolescents, a program in which peers help each other improve reading, writing, and computer skills, and Adolescents Aiding Adults, a program in which kids assist adults in the computer lab. NBLC staff have found that adults are oftentimes intimidated by new technology. Having children as instructors and helpers

often eases the situation creating a fun and comfortable learning atmosphere. It also offers a unique opportunity for students and adults to develop mutually empowering relationships through which they can both learn (Schroerlucke 1997).

To help meet its technical assistance needs, NBLC has hired work-study students from Carnegie Mellon as computer technicians. Epperson states that this partnership has been a true blessing to the center because NBLC only has to pay 25 percent of the students' salary, which comes to roughly \$2 per hour. In addition, NBLC has recently developed a partnership with the University of Pittsburgh's America Reads Challenge. Through this relationship, work-study students will tutor students at NBLC at no cost to the center.

MCC/HACP Technology Learning Center

The MCC/HACP Technology Learning Center (established in September 1998) is a collaborative effort of the Manchester Citizens Corporation (MCC) and the Housing Authority of the City of Pittsburgh (HACP). Representative of many technology initiatives undertaken by housing authorities, the center focuses on skills training and workforce development. The mission of the center is to make computer and Internet access and skills available to all Manchester residents, especially those living in subsidized housing.

The center is funded entirely by HOPE VI monies. The U.S. Department of Housing and Urban Development's HOPE VI Program makes grants available to public housing authorities for demolition, planning, technical assistance, revitalization implementation, and planning and implementation of self-sufficiency programs. The MCC/HACP Technology Learning Center was created as part of the self-sufficiency component.

The center is equipped with 36 networked computers. Technical assistance and maintenance are provided by the HACP IT division. However, the lab's design enables the center's one full-time and two part-time staff members to perform most of the basic upkeep and maintenance tasks. The center offers a variety of computer literacy courses for all Manchester residents over three years of age. The center is also working with Manchester Works, a union apprenticeship program, to help provide basic computer skills to residents interested in the building trades.

The MCC/HACP Technology Learning Center is the first of several such initiatives planned for the city. While the center will certainly serve as a model for other HACP technology efforts, the HACP is determined to base each initiative on the particular needs of Pittsburgh's housing communities. This approach is necessary because the communities differ in composition. For example, Manchester is a mixed-income neighborhood on the North Side of Pittsburgh with a scattered-site housing community, other housing communities are largely campus-based.

Community Literacy Center

The Community Literacy Center (CLC) is a community-university collaborative of the Community House, an 80-year-old settlement house on Pittsburgh's North Side, and the Center for the Study of Writing at Carnegie Mellon. CLC's projects lead with an educational vision and apply technology to help teenagers from Pittsburgh's inner-city schools build their problem-solving, collaboration, and strategic-thinking skills. The center fully integrates technology into its programs, but, as Kathy Schroerlucke (1999) (a community technology consultant and staff member at CLC) notes, "It's not about technology. The technology is a tool to really allow people to play with and to work with the substance of their lives."

At CLC, literacy means not just reading but writing as well. "Writing lets community members—like the teenagers you'll see represented here—take action, build consensus, and be heard on a broad range of issues, including school reform, risk, and rebuilding neighborhoods" (CLC 1999). Initially, participants used computers as a means to write text. However, information technology and the World Wide Web provide other tools that open up new avenues for participants to communicate and publish their ideas. Advances in technology prompted the CLC leadership to rethink the direction of the organization. As Dr. Wayne Peck (1999), minister, Carnegie Mellon faculty member, and director of the Community House, explains:

We decided to focus in on being what we called . . . 'a strategy-based, project-oriented, technologically attuned, community learning technology center'. We tried to go around to places like the Computer Clubhouse up at MIT, LEAPS around Yale, Plugged In out in Palo Alto. There was no similar type of community technology agency in Pittsburgh, and you had the University of Pittsburgh and Carnegie Mellon as leaders in the field, so we figured that we would kind of throw down the gauntlet down around there.

CLC's programs are well supported by six major foundations in the Pittsburgh region. The church with which the Community House is affiliated also has positioned its resources behind the CLC. CLC's programs are located at the Community House. Peck (1999) says:

The Community House has five floors of different clusters of computers. It's really networked. It's organized around people doing work around a particular issue and problem. It doesn't look like a lab situation. In some cases, there would be teenagers doing entrepreneurial projects, building Web pages, using those kinds of resources to support teenagers solving their own problems. In other places you would find media labs in which people are constructing stories of their own lives. In other places you would find connections between public and charter schools, where both the public and charter schools can't afford the kind of technology that we've put into this building.

PARTNERSHIPS

Pittsburgh has a long history of partnerships between institutional actors, made possible by the region's wealth of established institutions in the public, private, and nonprofit sectors. According to Dave Farley, Weed and Seed project director for the City of Pittsburgh, "there's a natural inclination for people [in Pittsburgh] to work together and align themselves" (Farley 1999b). This 'culture of collaboration' pervades many of the city's community technology initiatives.

Partnerships among CTCs

Technology provides new mechanisms through which partnerships and collaboration can develop and information can be shared. The development of the HHCAN serves as a case in point. The collaborative efforts of the Hill House Association, CK:P, and Weed and Seed have been able to make Internet access available to the underserved residents of Pittsburgh's Hill District. The nature of the technology initiative—a community access network—has brought together numerous community organizations and entities and provided a forum through which they can easily communicate and exchange information. One such example is a listserve of staff persons at the CTCs affiliated with HHCAN. Through the Internet, participating organizations have been able to discuss issues related to their organizations and the problems they face.

Partnerships however, are not always easy to forge. As Gerry Balbier (1999), program officer of the Heinz Endowments, points out, "there's a sense of competition . . . among different nonprofits that, you know, you want to develop your identity so that you attract funding." Despite difficulties, local funders encourage collaboration and partnerships in community technology initiatives. According to Arleen Lipsman, manager of the Foundation Center at the Carnegie Library, "[foundations] feel their money would be best used if organizations worked together" (Lipsman as quoted in Tascarella 1998). For example, when funding community technology programs, the Heinz Endowments favor community leaders who are willing to partner with other organizations and agencies.

Carnegie Mellon University and Community Technology Initiatives

An undergraduate computer science course titled "Computer Science and the Community" has forged a unique partnership between Carnegie Mellon University and CTCs throughout the city. The partnership provides CTCs with much needed user support. The course, created and taught by community technology consultant Kathy Schroerlucke and Dr. Joe Mertz, associate director of the Center for University Outreach at Carnegie Mellon University, pairs computer science students with community-based organizations (CBOs). The course fosters the ideal type of interaction between universities and the community in that it involves students and CBOs as contributing partners; students learn from the expertise in the community while the community gains technical knowledge from the students. The course has been well received by students, community partners, and Carnegie Mellon administration, and it has served as a model for community-based courses on the Carnegie Mellon campus.

The role of the course, from the perspective of the CBO, is to develop the technical capability of the organization. For students, the course offers the opportunity to develop leadership and communication skills while providing a broader perspective of the meaning and role of computer science and information technology. Students take on the role of apprentice rather than of expert. It is essential, Mertz (1999) explains, “that students understand what their role is in the community and how to do that. . . . [They’re] not going out to solve a problem but to help the community partner identify and solve the problem.” CBOs and agencies throughout Pittsburgh and in neighboring municipalities have participated in the course since it was first offered in the spring of 1998. Many of the community partners have received hardware and software from the Weed and Seed initiative.

Students work with community partners to identify their technical needs and problems; discuss the options for meeting those needs and solving problems; and help integrate technology into the organization’s programs. Throughout the semester, the students help community partners with minor technical problems. By making their troubleshooting techniques visible, the student’s knowledge is transferred to the community partner, and by the end of the semester, the community partner is able to do much of the troubleshooting independently. Students aid community partners with a variety of projects: for example, building spreadsheets, planning networks, and installing labs. Although the completed projects may appear rather insignificant, Schroerlucke and Mertz emphasize that their course provides real value for students and community partners. “Sometimes they look like small projects,” Mertz (1999) notes, “but from the community side they’re really significant, scaffolding steps in understanding what the technology can do for [the community partner] more directly either in their job, in their program, or just kind of learning.”

The experience of Helen McDonald, senior reading center manager at the Glen Hazel Recreation Center, adds testimony to the value of the course for community partners. The reading center she manages is part of a citywide initiative of the Carnegie library system and the Pittsburgh housing authority. Prior to her involvement in the Carnegie Mellon class, McDonald had no computer experience and the center’s two Weed and Seed computers were rarely used.

I’m so proud of myself, I understand computers now. . . . Since I learned the computer I have added so much to the program. It’s wonderful. I’ve designed forms, I know where things are. I can have my student list. I can update and locate everything. . . . It’s a *whole new world* that makes my job easier, makes it more successful, and brings me into this way of life. I’m not way back there not understanding and not doing. Now I know the importance of it all. Now I can relate it to someone else. (emphasis in original) (McDonald 1999)

McDonald has improved and expanded the reading center’s programs. The center is equipped with five computers and it offers computer courses for adults and children. Her enthusiasm has motivated residents of the Glen Hazel housing community to get involved in the computer classes and encouraged four other reading centers in the city to acquire

computers for their offices. McDonald has been instrumental in helping her colleagues at other reading centers integrate technology into their jobs.

WHAT IS UNIQUE ABOUT THIS CASE?

Level of Community Technology Activity

Pittsburgh is unique in the level and diversity of its community technology initiatives. The city is home to a number of CTCs that range in age, size, target population, and goals. Most initiatives focus in some way on community development, yet Pittsburgh's CTCs differ in their approach and orientation. As explained above, some CTCs focus on access, others emphasize the content of community technology programs, and still others are oriented toward literacy and training.

When asked what accounts for the level of community technology activity in the Pittsburgh area, some of the community technology practitioners were surprised by the question. Many had not thought of Pittsburgh as unique. One interviewee attributed this reaction to the modesty of most Pittsburghers, "If there's something good going on in Pittsburgh then we think it must be going on elsewhere." After a moment of reflection community technology activists pointed to a host of factors that have driven community technology initiatives in the city: leadership on the part of community members and local government; partnerships with well-established institutions; financial support from local foundations; the university presence; and strong neighborhood organizations.

Commitment from the Public Sector

The level of community technology activity in Pittsburgh has been bolstered by city support. Few city governments have nurtured community technology initiatives as has Pittsburgh. Pittsburgh's Weed and Seed community technology initiative is a flexible and creative use of external funds to promote community technology centers and networks. Other cities have followed Pittsburgh's lead and have begun to sponsor similar Weed and Seed initiatives.

Many community technology activists assert that although the Weed and Seed program has made computers and software available to CBOs and agencies that would not otherwise have access to them, the city government has not gone far enough to ensure the sustainability of community technology programs. They suggest that city officials seek more resources to help CTCs with technical assistance, staffing, operating and maintenance costs, and program development. Although there had been a community technology consultant, whose role was to help Weed and Seed community technology sites troubleshoot some basic technical problems and integrate technology into their programs, the city did not have adequate funding to continue the position.

Farley (1999b) admits that the Weed and Seed funds are insufficient to effectively run CTCs:

Places where we made investments five years ago, some of them, you know, withered on the vine, some of them have developed in ways that we never suspected they would. And largely it's attributable to the individuals. You get away from the technology. Technology doesn't drive this, it's who you've got on what you do.

In addition to strong leadership, a committed staff, well-developed technology programs, and technical assistance are necessary to ensure center success. Yet, Farley asserts that support and energy cannot be handed down from government but must come from the communities themselves if the technology programs are to be successful and sustainable. Success and sustainability further require that CTCs partner with institutional investors: for example, the housing authority, libraries, foundations, private industry, and other CBOs.

Foundation Support

Pittsburgh's wealth of locally based foundations sets the city apart from most other cities of its size. In 1997, the region's 25 largest foundations paid out a record \$290.2 million (Tascarella 1998). The foundation community has been particularly influential in the development of community technology initiatives and stands to greatly affect the field's future growth.

Responsible grant making requires that foundations understand and use technology. According to Mertz (1999):

A lot of foundations are slow to adapt technology. To understand what you're funding and really make leadership judgements you've got to at least use your e-mail regularly and surf the Web occasionally, know what these things are about. Not that you have to be expert in these things, but [you should] know what they're about so that you can make decisions about them.

In an effort to educate the funding community, Mertz, Peck, and Schroerlucke recently facilitated a professional development seminar for the Grantmakers of Western PA.

Area funders are becoming more attuned to the importance of technology and CBOs' needs, and, in the process, they have become more active in the community technology arena. Funders are likely to continue to do so in the future, particularly as more community technology programs mature and show results. As Balbier (1999) notes:

There's growing interest on the part of our funders [in community technology]. . . . But to their credit, they want to see what the goals are for using technology in some of these community-based organizations. It's not good enough to know that people are developing skills to use the mouse and keyboard. . . . [Funders] are beginning to see more [programs that are reaching their potential] and so I think there's definitely reason to be encouraged that more funders will be involved in this work.

Labor Market Restructuring

Although Pittsburgh's technology-led redevelopment strategies have helped this once smoky city prepare for the twenty-first century, the region's labor market has become increasingly polarized. For years, greater Pittsburgh boasted a solid, blue-collar middle class. Although unemployment in the region is rather low, many residents have had to substitute low-wage service positions for well-paying manufacturing alternatives.

The region's low-level of unemployment is due to out-migration of the workforce as well as the creation of new jobs. According to Census Bureau estimates, the Pittsburgh region led the nation in population loss from 1980 to 1988 (Sbragia 1990). Although the rate of decline has leveled off in recent years, Pittsburgh still faces an exodus of residents, particularly young people. Some fear that structural changes in the economy, underemployment, and the continued out-migration of young people from the region will only exacerbate this polarization. According to community technology consultant Kathy Schroerlucke (1999):

Young people are leaving [Pittsburgh] and we're bringing in the high-tech companies but we don't have a population who can get those jobs. So high-tech companies are going to be importing people and so the [policy] problem is . . . we're going to have a bigger divide here. How can we affect that? How could the local workforce get those jobs?

CHALLENGES

Although each of Pittsburgh's CTCs is unique, they face some common challenges: for example, securing funding and technical support and integrating technology into community development programs (all of which are discussed in chapter 7). Perhaps Pittsburgh's greatest challenge is the need for greater integration among community technology efforts.

Technology provides new mechanisms through which partnerships and collaboration can develop and information can be shared. Some technology advocates feel, however, that some of Pittsburgh's established institutions have not been able to break out of their traditional roles and take advantage of the collaborative possibilities that technology offers. Collaborative efforts sometimes get "muscle-bound" by the involvement of public, private and nonprofit elites, making it difficult for community groups or newcomers to enter into partnerships on an equal footing. A number of individuals interviewed for this research spoke of the need for individuals at the neighborhood level to drive the partnerships.

As Schroerlucke (1999) notes, "[the Pittsburgh area] is one of the most resource-rich areas I've been in—but they're not connected and people don't know how to use them. There's no coordinated effort so everybody's reinventing the wheel, everybody's doing the same research, everybody's doing the same digging, trying to figure out what to do." Gerry Balbier (1999) echoes Schroerlucke's frustration and calls for greater integration among community technology initiatives:

We're all craving information about how other groups are doing it because we're realizing that we have something to offer as far as our own experience, but we know that other groups are doing things that we haven't thought of or haven't experienced. How do you connect all those sources of knowledge? We've got to get a network going somehow.

Some of Pittsburgh's community technology practitioners have submitted a proposal to the U.S. Department of Education for grant funding for a project that would help create a regional community technology collaborative to address some of the issues raised by Schroerlucke and Balbier. The project would bring together a number of major institutional players, including the Carnegie Institute, the Electric Information Network (EIN), the Three Rivers Free-Net, and the Heinz Endowments. The collaborative would help coordinate community technology initiatives and make it easier for people to network, get the resources they need, and put some training and support staff and programs in place. The collaborative would also include a mini-grant pool from which centers could obtain small amounts of money.