Special Conference Issue

All Affiliates Gather in Pittsburgh

Conferences in Seattle, Los Angeles, Harlem, and Columbus
Reports from Brooklyn, Akron and Austin

*AmeriCorps*VISTA Volunteers at Ohio Centers*

Focus on Youth, HUD, and Public Policy

Mario Morino, Audrie Krause, Barry Forbes, Armando Valdez, Don Samuelson

Software, Activities, Resources for Centers

Antonia Stone on the CTCNet "Startup" Manual; Phil Shapiro on MultiMedia;
Gwen Solomon on the Well-Connected Educator; Apple Partnership Awards

CTCNet

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About This Issue

Sixty-four pages—and it's a squeeze at that. CTCNet has two hundred affiliates now—we are covering centers by groups and multitudes. And conferences are one major place where you'll find lots of centers.

This special conference issue begins with the CTCNet gathering in Pittsburgh in June, and Kathy Schoerlucke lays out for us how such events can catalyze local community technology development and vice versa. And then we look all across the country—last December in Los Angeles, February in Harlem, March in Seattle, April in Columbus, looking towards July in Milwaukee. Youth, HUD, community networking, the arts, PEG-access-transforming-into-new-

media-centers and a whole new generation of multi-media youth programs, a rural contingent starting to emerge—and the Affiliate Steering Committe has even made a place for Special Interest Groups at the governance table along with regional group-ings. Of course, there are key sites and stories, too—the East Austin Media Lab, El Puente in Williamstown, Brooklyn, and the Akron Community Service Center and Urban League.

The Steering Committe Report and the publication of the official version 1.0 of the CTCNet "Start Up" Manual are two major events for the conference in Pittsburgh—and the rest and more will be there, too. —PM ❖

Cover: AmeriCorps*VISTAs at the OCCCN quarterly meeting at Columbus Volunteers of America Westside Neighborhood Community Computing Center, January 22, 1997. (L to r) Jill Weidner, Marietta Area CCC; Cristy Lorente, Columbus North Education Center; Jennie Sethna, Dayton-Edgemont Neighborhood Coalition; Willie Harris, Dayton-Otterbein Computer Center; Angie Adams, Akron Urban Minority Alcoholism and Drug Abuse Outreach Program; Heidi Lorash, North Education Center, Columbus. Photo by Marsha McDevitt-Stredney.

Other photos: p. 20, the Morino Institute; p. 23, Josh Merrow; p. 32, unnamed waiter; p. 35, DSSA; p. 40, National Housing Enterprise Corporation; pp. 41 and 43(r), Marsha McDevitt-Stredney; pp. 42 and 43 (l) Benji Krause; others, Peter Miller. Special thanks for this issue to Kate Snow and Jed Miller.

Connecting Pittsburgh

KATHY SCHROERLUCKE

A special collaboration is working to bring an infrastructure of support and Internet connectivity to communities in the Greater Pittsburgh Area. Building such an infrastructure would be helpful anywhere, but it has special significance given the peculiar challenges being faced by this region.

Kathy Schroerlucke is a program development and technology consultant working in the Greater Pittsburgh Area, where she has recently assessed the technical support and training needs of a number of community technology programs. From 1994 through 1995, Kathy helped develop the Community Technology Centers' Network in its growth and transition from the Playing to Win Network. She coordinated the 1995 4th Annual CTCNet Conference held in Washington, D.C., is helping coordinate this year's conference in Pittsburgh, and can be reached at kathys@ctcnet.org.

Pittsburgh consists of some 90 boroughs scattered throughout the mountains, communities that have historically functioned as self-contained neighborhoods. They were thriving communities when major industry provided a strong economic base, but since large industries have left the region, many of these communities are now in economic crisis.

In the technological revolution, the area is shifting now from an industry-centered and community-based economy to a technology-centered and regionally-connected economy. Through community networks, residents will be able to gain technical skills, begin to communicate with others within and without their own communi-ties, and take advantage of and help shape the emerging economy. That's the good news. The bad

news is that it is much easier said than done.

The technology itself does not make changes (though it can be a catalyst), it's the people who make the changes. To transform the region's economy while maintain-ing community identity, individu-als and organizations need to connect with others outside their own familiar territory. Common to mountain life is the pattern of burrowing in. While the close-knit relationships that develop make for a strong community, they do not promote connections or relation-ships outside the community. It is not uncommon to meet people here who have never been downtown, driven on the highway, or been to a major mall. In a regional economy, individuals will have to change their patterns of relationship and

ctcnet

6th Annual All-Affiliates Conference

Communities and Collaborations:
Working Together for Technology Access

June 13–15, 1997
Carnegie Mellon University, Pittsburgh, Pennsylvania

Sponsors

Apple Computer, Inc. • Education Development Center, Inc. (EDC) • The Morino Institute
National Science Foundation • NYNEX

In-Kind Sponsors

Alliance for Community Media • Carnegie Mellon University • City of Pittsburgh
Computer Professionals for Social Responsibility • HandsNet • Institute for Global Communications • LatinoNet
Libraries For the Future • National Low-Income Housing Coalition • National Urban League
Ohio Community Computing Center Network • SeniorNet
Open Studio, a Benton Foundation project in cooperation with the National Endowment for the Arts

Friday, June 13
- CTCNet Welcome, Introductions
- Community Collaborations: Pittsburgh Initiatives
- Concurrent Sessions
- Reception & Presentation of 2nd Annual Innovative Initiative Award

Saturday, June 14
- Public Policy Plenary
- Concurrent Sessions
- CTCNet: Self-Governance Plan
- Regional Gatherings

Sunday, June 15
- Concurrent Sessions & Demonstrations
- CTCNet Self-Governance Plan
- **Ben Davis, "Art and the Internet," Getty Information Institute**

Keynote Address, Friday Afternoon
Katie Hafner, "Online Communities," Technology Correspondent, *Newsweek*

Collaborations

Building Partnerships with Municipalities • HUD Supported Centers: Special Issues • Center Sustainability and the Funding Community • Productive Relationships with Schools • Citizenship Development and Online Democracy • Opportunities in Community Networking • Collaborations with Public Libraries • Expanding Partnerships with Community Access Cable TV

Program Content

Inter-Generational Programs and Activities • Youth Programs: Activity and Content Alternatives • Evaluating Learning Systems • Coming of Age: Seniors and Technology • Evaluating Software for Target Populations • Becoming a Certified Microsoft Training Site • Career Exploration, Job Preparation and Employment • Open Studio: Arts and Technology • Encouraging Media Literacy in Young Adults • Incorporating Math and Science Into Your Program • Strategies for GED, ABE, ESL and Literacy Assistance • Spawning Entrepreneurs and Business Initiatives in Your Center • Assistive Technologies: Resources for People with Disabilities

Technology-Centered Workshops

Anatomy of a Computer (PC) • The Internet: An Overview • Telecommunications Access and Resources • The World Wide Web: How to Use It and How It's Useful • Creating a WWW Page: The Basics & Beyond the Basics *(series)* • Hearing is Believing: Using RealAudio Files on Your Web Page • Multimedia Publishing on the Web: Scanners, Digital Cameras, Video • Networking Your Equipment: Issues and Strategies • Multmedia: Music and Technology • Advanced Communications in Cyberspace

Center Development

Using the *CTCNet Start-Up Manual* • Starting a Community Technology Center: Stories from Experience • Developing Volunteer Programs that Work • Effective Grant Writing • Starting and Managing Your Public Access Component • The Hows and Whys of Community Research • Strategies for Sustainability • Accessing and Using Recycled Hardware • Developing Program Teachers and Leaders in Your Community • Developing Technical Support Strategies • Evaluating Program Effectiveness

Featured Panelists (a partial list)

Marlene Archer, New Visions/South Middlesex Opportunities Council, Framingham, MA
• Alfred "Alf" Bawcombe, CTCNet Associate, Washington, DC • Sue Beckwith & Lodis Rhodes, Austin Free-Net, TX • Ella Bogard, Marietta Area Community Computing Center, OH • Amy Borgstrom, Eric Hutchinson, Heather Snedeker & Steve Schnell, Appalachian Center for Economic Networks, Athens, OH • Chad Bratschi, Volunteers of America, Columbus, OH • Nancy Bunt & Eric Stickney, Regional Math/Science Collaborative, Pittsburgh • Bob Carlitz, The Information Renaissance, Pittsburgh • Steve Cisler, Apple Computer, Inc., Cupertino, CA • Richard Civille, Center for Civic

Networking, Washington, DC • Susanne Conyers, North Bronx Family Service Center • Stina Cooke, The Clubhouse at the Computer Museum, Boston • Janet Cornebise & Vivian Guilfoy, EDC • Carl Davidson, Chicago Coalition for Information Access • Lauren-Glenn Davitian, Chittenden Community TV, Burlington, VT • Bart Decrem, Plugged In, East Palo Alto, CA • Dave Farley, Office of the Mayor, Pittsburgh • Rachel Flinner, Marcia Snowden & Roxanne Epperson, New Beginnings Learning Center, Pittsburgh • Debra Floyd & Patti Mallin, Institute for Global Communications • Barry Forbes, Alliance for Community Media, Washington, DC • Glen Gilbert, SeniorNet, San Francisco, CA • Anne Green, Open Studio / Benton Foundation, Washington, DC • Chris Hedrick, Microsoft Corporation, Bellevue, WA • Donald Holznagel, SouthEast Region Vision for Education (SERVE), Atlanta, GA • Sarah Horsley, Women's Economic Agenda Project, Oakland, CA • Dan Iddings, The Carnegie Library of Pittsburgh • Carl Kucharski, Alliance for Community Media, Somerville, MA • Ilese Levitt, Lynn Housing Authority/Computer Learning Center, MA • Mark Lloyd, CRPI, Civil Rights Telecommunications Forum, Washington, DC • Joseph Loeb, Breakaway Technologies, Los Angeles • Elizabeth Lynn, The McCune Foundation, Pittsburgh • Dan Martin, Carnegie Mellon University Center for Arts Management and Technology, Pittsburgh • Marsha McDevitt-Stredney, Ohio Community Computing Center Network, Kilbourne, OH • Shane McGregor, Technology-in-Learning, Denver • Stephanie McIntyre, TechnoTots, Highland Park, NJ • Joyce Miller, Cincinnati Community Video, OH • Patty Natti, Hard Disk Cafe, Gloucester, MA • Michael Palese, Strategic Alliances, NYNEX Corporation, New York City, NY • Richard Parkany, Latimer Education Program, Utica, NY • Stan Pokras, Nonprofit Technology Resources, Philadelphia • Carmen Porco, American Baptist Churches of Wisconsin, Madison • Carl Redwood & Chrishelle Thomas-Eugene, Hill House Association, Pittsburgh • Nancy Richard, Cape Cod Community Television, Yarmouth, MA • Madeleine Scammell, Loka Institute, Northampton, MA • Kathy Schroerlucke, CTCNet Associate, Pittsburgh, PA • Steven Segal, *Pittsburgh Tribune-Review* • Fred Silverman, Apple Computers, Inc., Worldwide Community Affairs, Cupertino, CA • Kate Snow, Somerville Community Computing Center, MA • Tony Streit, Street Level Youth Media, Chicago, IL • Candy Taaffe, Leadership, Education and Athletics in Partnership (LEAP), New Haven, CT • Armando Valdez, LatinoNet, Los Altos, CA • Corinn Williams, Greater New Bedford Community Computing Center, MA • Mario Zinga, Common Knowledge: Pittsburgh

communication. Reaching out, building collaborations and networking is not a familiar practice in the region, much less a pattern.

In nearly every meeting I've attended, I hear a common refrain: "Pittsburgh is fragmented." It's difficult to know what's happening in other areas or who is working on similar issues and concerns. There are so very many initiatives, many creative people and organizations taking on exciting and important work, but knowledge of and access to these activities and people is limited to those involved.

As community networking takes root, we are beginning to see organized web pages for organizations and communities that make finding information and potential collaborators easier. Through community listservs and bulletin boards, people working on common issues and concerns are able to find each other across community and geographic boundaries. With electronic communication mechanisms, people who have never met are able to work together on projects without having to traverse the difficult geography.

Just as roads and bridges attempt to tie boroughs and the city together, so community networking is developing a system of electronic

bridges, which will tie together the city's neighborhoods, schools, cultural resources, businesses and government. With community networking, the patterns of relationship and communication are changing, emerging into a new electronic landscape.

Pittsburgh is blessed by tremendous resources. It hosts a supercomputer, major universities, a strong and supportive philanthropic community, and incredibly innovative, highly motivated and talented individuals. One such individual is Marcia Snowden, Director of New Beginnings Learning Center (NBLC). NBLC was among the earliest members of CTCNet, back when it was known as the Playing To Win Network. NBLC is an outreach ministry of the Friendship Community Church located in the Hill District. This program offers an after-school program through which adult volunteers help children in the community with their school homework as well as with learning how to use computers. They now offer a few adult technology classes as well. Marcia was the first recipient of the CTCNet Innovative Initiative Award, and NBLC received a major equipment award from the 1996 Expanding Technology Access grant program spon-

sored by CTCNet and Apple Computer, Inc. During her time as director of NBLC, Marcia has developed partnerships and collaborations that not only expand the base of support for NBLC but that have also opened up a leadership role in expanding technology access to other communities.

One of these partnerships is coordinated by Dave Farley, Grants and Development Officer of the Mayor's Office of the City of Pittsburgh. Seeing computer technology and Internet connectivity as "seeds" for economic and community development, the Mayor's Office and the Operation Weed and Seed Steering Committee have awarded computer technology packages to communities targeted by this joint initiative with the U.S. Department of Justice and local community partners. Dave, Marcia and John Tokarski, Jr., Operation Weed and Seed Project Coordinator, worked to help 20 organizations add computer and telecommunications technology to their programs, and have provided them with support through CTCNet memberships.

Another collaborator is Robert Carlitz, Professor of Physics at the University of Pittsburgh and Executive Director of Information Renaissance. Bob and Mario Zinga

Inch by Inch, Row by Row...

20 Organizations Receiving Equipment and CTCNet Membership Through Pittsburgh's Weed and Seed Program

In the Hill District:

- Allequippa Terrace Recreation Center
- Calvary Baptist Church
- Grace Memorial Presbyterian Church
- Hill House Community Access Network
- Hill Community Development Corporation
- House of the Crossroads
- Macedonia Baptist Church
- New Beginnings Learning Center
- Warren United Methodist Church
- Youth Fair Chance

In Hazelwood/Homestead:

- Bishop Boyle Center Job Placement/Career Development Service
- Bulgarian Macedonian National Educational Cultural Center
- Carbarn Senior Citizens Center
- Club Alternative Recovery Center, Inc.
- Glen Hazel Recreation Center
- Hazelwood Branch, Carnegie Library of Pittsburgh
- Methodist Union of Social Agencies (MUSA)
- Second Baptist Church
- St. Stephen's School
- YMCA of Hazelwood Outreach Center

brought a National Science Foundation supported project named "Common Knowledge: Pittsburgh" (CK:P) to Pittsburgh. This project addresses "scalable networking infrastructure in support of curricular activities and school reform." Mario coordinates the efforts of the Pittsburgh Public Schools, the Pittsburgh Supercomputer staff, and the University of Pittsburgh in implementing this challenging networking project.

While in the throes of administering this grant, Bob Carlitz received another award, this time from the

Department of Commerce's Telecommunications Information Infrastructure Administration Program (TIIAP). "Bridging the Urban Landscape" expands the scalable networking infrastructure and migratory process as applied through CK:P to neighborhoods. This pilot project brought in two additional collaborators: Dan Iddings, Project Director of the Electronic Information Network (EIN) of the Carnegie Library of Pittsburgh, and Carl Redwood of Hill House Association, Inc. Dan brought the resources of the Three Rivers Freenet and the Carnegie Library to the project. Carl and Hill House Association agreed to be the testing ground for the pilot project. As a center activity in the Hill District, Hill House Association seemed the perfect community organization in which to locate a community networking hub.

At its public Internet access center, the Hill House Community Access Network (HHCAN) dedicates over 56% of the center's available time to open access. Hundreds of people come in during the week and on weekends to use the computers and the Internet. The rest of the time is dedicated to scheduled group use of the center's resources. A volunteer program designed by HHCAN Coordinator Chrishelle Thomas-Eugene expands technology expertise throughout the community, while also cultivating lab assistants to help HHCAN.

Currently, Hill House connects three other technology centers in the Hill District to the Internet and others are waiting for their connection. In turn, these organizations provide computer and Internet access to their constituents. Eventually, it is hoped that all the organizations in the Hill District will have Internet connectivity through HHCAN, which will pave the way to greater communication among community groups and residents as well as provide opportunities for more people to learn how to use this technology.

The effects of these efforts are already being felt. At a recent community meeting unrelated to technology, a man told me about a recent computer problem he had and how he solved the problem. I was so impressed with his resourcefulness and asked how he developed his knowledge of computers.

"I live in the Hill District and went to HHCAN. There I began to explore on my own, ask questions and learn. I learned enough to make a solid purchasing decision and set-up my own computer system at home. I'm even troubleshooting problems. Even though I have a computer at home now, I go back to HHCAN from time- to-time. It's a great way to learn. You can almost always find someone to help you think things through."

HHCAN promotes "learning" not "training." They offer few organized "classes." Rather, they provide a support structure that encourages individuals to explore and learn, based on their own learning goals. It is a self-directed process.

Recently, I heard of another Hill District resident who goes to HHCAN to e-mail the teacher of his child. Through electronic communication they discuss homework assignments and the child's progress. Without the community network and teachers being connected, this type of relationship could not be developed. During another day's visit to HHCAN, I found a young person researching colleges and college scholarships on the Internet, while another was trying to get information on a distant relative who was a famous boxer.

Through their strategy of involving people in the delivery of technology, HHCAN has provided a stage upon which technology stars have risen. We now see many individuals in the community with technical knowledge and experience. I know of at least two persons who have found new careers as a result of their involvement with HHCAN. One of them is coordinating another organization's technology program.

Dave, Marcia, Bob, Mario, Carl and Dan are working to expand the infrastructure throughout the region. They will present their experience and how they hope to go forward at the 1997 CTCNet All-Affiliates Conference June 13-15 in Pittsburgh. They represent a powerful collaboration that is strengthened by the resources and leadership provided by the Pittsburgh philanthropic community. Elizabeth Lynn, Program Officer of the McCune Foundation, will represent the many philan-

thropic organizations involved in this collaboration.

This important collaboration is changing the landscape of the Greater Pittsburgh Area. Indeed, it may change the entire Western Pennsylvania region. The fragmentation that is currently experienced will be transformed into a web of connections between people, organizations and communities. As people enter into new relationships and experience the power of technology and connectivity, the potential of Pittsburgh emerging as a national center for cultural and economic development is unlimited.

One day a historical book will be written and it might be titled: "Connecting Pittsburgh: The Defragmentation of the Pittsburgh Landscape." Among the pioneers mentioned in such a book will be the collaborators who first began working to "Connect Pittsburgh." If you are planning to attend the 1997 All Affiliates Conference, you will have a chance to engage with them. ❖

For more on community technology efforts, Carnegie Mellon and the city of Pittsburgh, check out these Web sites:

COMMUNITY TECHNOLOGY

Information Renaissance
http://info-ren.pitt.edu/

Common Knowledge: Pittsburgh
http://ckp.edu/

Hill House Association
http://www.hillhouse.ckp.edu/

Hill House Community Network
http://www.hillhouse.ckp.edu/hhcan/home.html

New Beginnings Learning Center
http://hillhouse.ckp.edu/nblc/

Three Rivers Freenet
http://trfn.clpgh.org/

Online Information Project
http://neighborlink.cc.duq.edu/

CARNEGIE MELLON

Carnegie Mellon University
http://www.cmu.edu/

Carnegie Library, Museums, and Resources
http://www.clpgh.org/

Location of CTCNet Conference
http://www.cmu.edu/university-center/

CMU's Computing Center Services
http://www.cmu.edu/acs/

Pittsburgh Supercomputer
http://www.psc.edu/

On Moving to Pittsburgh

One of the first things I noticed about the Pittsburgh area is that it is very green; there are lots of trees around communities and roads. Downtown is located right at the point where the Allegheny and Monongahela rivers merge into and create the Ohio River. Thus, Pittsburgh is frequently called the "Three Rivers City." The Pittsburgh sports complex is Three Rivers Stadium. The Pittsburgh freenet is named Three Rivers Freenet (http://trfn.clpgh.org).

It's easy to maneuver downtown. In fact, you can walk from one end of the downtown area to the other in a matter of minutes, but it doesn't feel small. Downtown is spectacular at night, especially when seen from the top of Mount Washington. A ride up the "incline," a cable car that moves up and down the side of the mountain, is a great way to take in the architecture, the bridges, the lights. At night, the city reflects like a mirror in the surrounding rivers.

Public gathering places are marked with a perimeter of interesting buildings, creating a pleasant environment in which to meet, have lunch, or rest from shopping . Andrew Carnegie made his money on the backs of laborers, but he was also a philanthropist and left behind amazing public resources, including libraries and museums. Carnegie Mellon University, site of the 1997 CTCNet conference, is located in Oakland where you'll also find the Carnegie Library, Museum of Fine Art, Museum of Natural History, University of Pittsburgh, and the Cathedral of Learning.

The cultural district is always alive with drama, music, dance and art. The historic "Strip District" is a vital place for trade and shopping during the day. At night, it hosts exciting and popular night spots for music, dancing and eating. And of course, let's not forget the professional sports: the Pirates, the Steelers, and the Penguins. There are many sights, many cultural opportunities and much to do.

I've met people who have lived here all of their lives and have never ventured beyond their own communities. One woman told me she has never driven on the highway. Another man told me that he's never been downtown. When I asked a businessman why folks don't seem to get together more or attend meetings, he said the conventional wisdom is: "If you have to cross a river, people won't go." Now, that's an exaggeration of course, but it points to a general feeling that is part of the Pittsburgh state-of-mind.

Since coming to Pittsburgh, I've recognized patterns of relationships that I experienced in the mountain communities of Eastern Kentucky, communities that burrowed into the mountains and developed close-knit relationships among themselves. They tended to be suspect of outsiders and tended not to venture beyond the familiar. Yet, in a crisis or when threatened, communities who had never interacted would band together in solidarity. Recently, over 3,000 people from the Greater Pittsburgh Area joined in an anti-KKK unity rally downtown. I was amazed and encouraged.

I was recently told that Pittsburgh is considered by many as the "biggest town in Appalachia." That was said with the greatest affection and respect for the importance of community to mountain folk. Raised in Kentucky myself, I'm finally beginning to understand why I feel at home here and why people love it so. —KS

PITTSBURGH

Pittsburgh Sites
http://www.pittsburgh.net/

Visiting Pittsburgh Information
http://www.pittsburgh.net/Visiting

Black Pittsburgh: Black Business Directory, etc.
http://www.blackpgh.com/

Pittsburgh weather forecast
http://www.wunderground.com/forecasts/PIT.html

Newspaper
http://tribune-review.com/

Great photos of Pittsburgh life & sites
http://www.dp.net./~sam/everyday.html

More Pittsburgh info
http://www.isp.pitt.edu/~carenini/storage/pittsburgh.html

Excellent info about Pittsburgh from local TV station
http://www.wtaetv.com

Mission Statement

Community Technology Centers' Network (CTCNet) envisions a society in which all people are equitably empowered by technology skills and usage. CTCNet is committed to achieving this end.

CTCNet like its founding organization, Playing To Win, recognizes that, in an increasingly technologically dominated society, people who are socially and/or economically disadvantaged will become further disadvantaged if they lack access to computers and computer-related technologies.

CTCNet brings together agencies and programs that provide opportunities whereby people of all ages who typically lack access to computers and related technologies can learn to use these technologies in an environment that encourages exploration and discovery and, through this experience, develop personal skills and self-confidence.

CTCNet offers resources to enhance each affiliated agency's/ program's capacity to provide technology access and education to its constituency and to help and nurture other like-minded programs in its area. CTCNet will facilitate telecommunications, print, and in-person linkages enabling members to benefit from shared experience and expertise.

CTCNet will be a leading advocate of equitable access to computers and related technologies; it will invite, initiate, and actively encourage partnerships and collaborations with other individuals and organizations that offer resources in support of its mission; and it will strive, in every arena, to bring about universal technological enfranchisement. ◆

Moving Towards Self-Governance

An integral part of the grant from the National Science Foundation to Education Development Center, Inc. (EDC) to expand the Community Technology Centers' Network on a national basis is the commitment to developing the project into an independent organization governed by its affiliate members after a five year period.

The grant section on "Steps to Establishing Self-Governance" begins: "While the final form of governance cannot be predicted at this time, the program design for this Network Expansion Project suggests a model in which semi-autonomous regional chapters are represented under a national umbrella. (Note: The National Urban League, the Girl Scouts of America, Computer Professionals for Social Responsibility, the Alliance for Community Media, and others provide this kind of model.)" An outline of steps to be taken over the NSF grant period suggests the stages for developing this national governance board.

In implementing this plan with some support and participation by central staff, the CTCNet Steering Committee has held regular telephone conferences since the fall of '96 and a two-day in-person gathering in Boston in January. Plans and possibilities have been discussed at length, various different plans have been considered along with the possibility of presenting different ones for affiliates to choose between. In the end, there was substantially unanimous agreement on the following proposal which (1) expands upon the notion of regional representation and development with provisions for affiliate organizations to represent themselves in a variety of ways in addition to geographical ones and (2) outlines the number, make-up and procedures for the selection of Steering Committee members.

"Center-Up Representation" is intended to encourage interaction among affiliate centers and embody the bottom-up spirit so central to the CTCNet philosophy. Those priorities may reflect a diversity of values as well as geographic identity. With time, rural centers may seek each other out to form a national cluster; perhaps youth-oriented centers may find more in common with each other than the job training center down the street; or maybe video-oriented computing centers will bond into one voting bloc. Cultural, ethnic, or gender factors may become so important that only a voice at the table satisfies the need for representation at that time.

The process and procedures outlined below will be further refined and clarified and presented to the affiliates up through the All-Affiliates Conference in Pittsburgh, June 13-15, during which time the plan will be officially voted upon by the affiliates and implementation will begin. —PM

The CTCNet Steering Committee: A Proposal for Elections and Membership

ELLA BOGARD, CHAD BRATSCHI, SUSANNE CONYERS, BART DECREM, ILESE LEVITT, RICK PARKANY, KATE SNOW, MARCIA SNOWDEN

CTCNet's grant from the National Science Foundation includes plans to develop a structure for self-governance, plans driven by CTCNet philosophy and by the need for members to take financial as well as programmatic responsibility for their association. For affiliates to pick up a substantially less subsidized cost of membership, there must be an authentic sense of ownership. "Center-Up Representation" provides that sense of ownership and self-determination critical to the mandate of the NSF grant and the philosophical underpinnings of our independent involvement and association with each other.

Over the past several months, Steering Committee members have worked to advance a set of guidelines which will move the affiliate centers toward establishing a self-governing body. Vital interaction among affiliated individual community technology centers represents the best future for CTCNet self-governance.

It is the intention of the Steering Committee that individual centers will freely align themselves with other centers that share similar priorities. When those priorities achieve critical mass, they are percolated into the CTCNet agenda through Steering Committee representation. Those priorities may

reflect individual or combinations of community, economic, political, cultural, ethnic, technological, geographic or as yet unforeseen values. Initially, most centers will continue to align in the regional geographic configuration that is familiar to them. With each center prioritizing and forming strategic alliances around its own best interests, the Steering Committee will accurately reflect the pulse of the network.

Procedures presented herein strive to meet the development of a soundly representative Steering Committee which will be transformed into a national governance board whose chief responsibilities will be to:
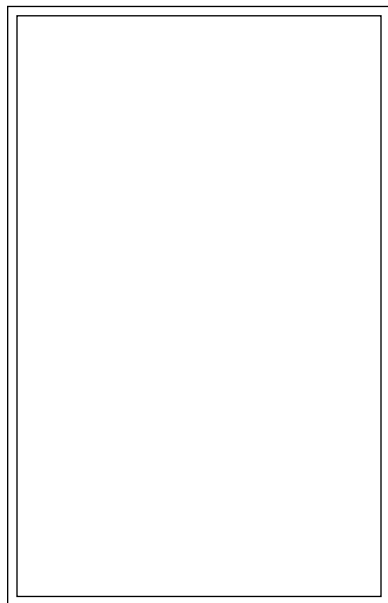
Susanne Conyers, Steering Committee Member, at the 1996 CTCNet All-Affiliates Meeting

a) determine national organizational policy and program strategy,

b) empower and hold accountable a national director to execute that policy, and

c) oversee the development of ongoing financial support.

The proposed procedures are being delivered in this interim report to the membership at the 1997 All-Affiliates Meeting, June 13-15.

The Steering Committee has worked to develop a set of procedures that will delineate an on-going rotation for perpetuating offices, committees, and membership representation; to propose a Steering Committee schedule for meetings (membership, Board,

committees); to develop a self-governance system; and to solicit participation from affiliates.

The Steering Committee has spent many long hours working on procedures which give definition to the following:

* Network membership and types of representation needed (e.g., by region, by focus, by level)

* Role of officers and board and hierarchy of accountability

* Methodology of invitation, selection, and election of individuals for specific posts on the Steering Committee

* Implementation schedule for instituting the recommended Steering Committee structure.

Steering Committee Composition & Elections

Purpose

The purpose of the CTCNet Steering Committee shall be to build on the current regional affiliations but be flexible enough to incorporate new constituencies as they form; to ensure that the Steering Committee be truly representative of the affiliates and elected by the affiliates; to ensure the continuity and stability that will be needed to stabilize the organization and to recognize the Steering Committee as the eventual governing body of the Network.

Composition, Selection and Terms of the Steering Committee

1. The Steering Committee shall consist of 15 members for the 1997-1998 year.

   a. The current Steering Committee shall determine how many members the next Steering Committee will have.

   b. The size of the Steering Committee shall be set between 7 and 21.

   c. The current Steering Committee may or may not choose to elect a CTCNet staff person to be on the Steering Committee. This determination shall be made by July 1, 1997. There are no other provisions for staff representation on the Steering Committee.

2. Members of the Steering Committee shall serve two-year terms.

   a. At a time prior to re-election, the Steering Committee shall elect

CREDO
(from Playing to Win)

Purpose is:
   universal technological enfranchisement.
   to broaden the scope of personal capability and interest.
   to enable learning and functioning through technology.

Technology is:
   a tool.
   an information resource.
   a vehicle for communication.

Students can:
   learn to operate machines and programs.
   learn how to create programs.
   learn how to use programs as tools.
   learn from programs.
   learn with programs.

Students are:
   participants in the learning process.
   working collaboratively.
   in control.
   tinkerers.
   actively engaged.

Results are:
   empowerment: skill in tool use, success in learning.
   increased self-esteem.
   ability to use resources.
   ability to articulate process and need.
   recognition of personal contribution.
   respect for contributions of others.
   habits of self-assessment.

Teachers are:
   facilitators, guides, coaches, gardeners.
   resources.
   participants in the learning process.
   role models.

Activities:
   are project based.
   reference real-world activity.
   respect and use background, culture, skills of participants.
   provide for team work.

Assessment is:
   the joint task of participant and teacher.
   based on personal accomplishment.
   substantiated by personal portfolio.

three of its members to serve another two-year term. One of its members shall also be elected as a non-voting chairperson for the next term. The three re-elected Steering Committee members will be representative of the affiliates at-large.

3. Steering Committee members shall be selected by each regional group during the 1997 All-Affiliates Meeting in keeping with the current geographic regional representation.

During the 1997 All-Affiliates Conference there shall be the opportunity for affiliates to align themselves strategically according to similar priorities and interests as well as regional geographic configurations.

  a. Affiliates who desire to launch constituency groups shall announce their ideas during an open forum at the meeting.

  b. One affiliate may be associated with two different constituency groups of any kind.

  c. To be on the ballot, a minimum number of signatures from other affiliates will be required. For 1997, that minimum number for a constituency group to be recognized and listed on the ballot is five signatures.

4. Elections shall be held annually for 1997 and 1998. Beginning in 1999, elections shall be held every other year.

  a. All affiliates shall vote for two different representatives.

  b. Balloting will occur by a combination of mail and electronic ballot system specified before and at the June Conference. ❖

Steering Committee Implementation Schedule

Early May 1997— The Proposal for Elections and Membership announced to all affiliates.

At the All-Affiliates Conference

Saturday, June 14 —Affiliates discuss and vote on the proposed Steering Committee model.

Saturday or Sunday, June 14, 15 — During the regional meetings, each cluster selects a representative.

Saturday or Sunday, June 14, 15 — A "one-hour Open Microphone" forum will be held for any affiliate to propose the formation of a new constituency group. This will be limited to 5 minute presentations.

June 15 - August 15 —Affiliates gather support and signatures for constituency groups.

July 1 — CTCNet mails out a list of regional groups, other proposed constituency groups, and their representatives to all affiliates.

July 1 — Current Steering Committee elects 3 members and one chair (non-voting) for the next term, and sets the number of members for the next term.

August 15 — Constituency groups submit nominee for representative to Steering Committee, list of at least 5 signatures and a short description of the group's focus and plans.

August 15-October 1 — Constituency groups and their representatives establish listservs and communicate with affiliates.

October 1 — Ballots distributed to all.

October 15 — Due date for official ballot return. Each affiliate can vote for two different candidates.

November 3 — Election results announced. New Steering Committee members to take office.

April 1998 — Next Steering Committee election cycle begins.

June 1998 — At All-Affiliates Conference, Steering Committee Elections.

Current Steering Committee Members

Ella Bogard, Marietta Area (OH) Community Computing Center. 614/374-6548, ma_ebogard@seovec.ohio.gov

Chad Bratschi, Volunteers of America, Columbus, OH. 614/224-4322, cbratsch@freenet.columbus.oh.us

Susanne Conyers, North Bronx Family Services, NY. 718/365-7755 x111, sconyers@ctcnet.org

Bart Decrem, Plugged In, East Palo Alto, CA. 415/322-1134, bartd@pluggedin.org

C. Ilese Levitt, Lynn (MA) Housing Authority. 617/868-8337, cilevitt@ix.netcom.com

Rick Parkany, Latimer Education Program, Schenectady, NY. 315/733-2016, rparkany@borg.com

Kate Snow, Somerville (MA) Community Computing Center. 617/629-2933, ksnow@igc.org

Marcia Snowden, New Beginnings Learning Center, Pittsburgh, PA. 412/683-2140, Snowden@hillhouse.ckp.edu

While the Affiliate Steering Committee was busy laying the foundations for self-governance, an expanded Advisory Committee (p. 2) gathered on April 23rd and 24th to help clarify the issues that are critical for future CTCNet development directions. Here at one of the sessions are (l to r) Michael Durney, Director, Lotus Philanthropy Program; Don Holznagel, Executive Director, SouthEastern Regional Vision for Education; Egils Milburgs and Don Samuelson, DSSA; and Vivian Guilfoy, Director of EDC's Center for Education, Employment, and Community.

CTCNet "Start-Up" Manual

ANTONIA STONE

The *CTCNet Start-Up Manual* is finally in press. Copies will be distributed at no cost to all CTCNet affiliates at the All-Affiliate Conference in Pittsburgh. Thereafter, affiliates may request a copy, paying only handling charges. The *Manual* will be available to non-affiliates at a cost of $25 plus handling charges.

Evolution of the Manual

CTCNet is an expansion of the Playing To Win Network which itself was an outgrowth of Playing To Win's Harlem Community Computing Center, established in 1983 as the first public access computer facility in the country to be located in a low-income neighborhood. Thus CTCNet brings to the creation of this manual almost 15 years' experience in starting, operating, supporting, and sustaining neighborhood technology access programs.

CTCNet affiliate members are independent community service, social action, and/or alternative education agencies or programs. All share a commitment to providing technology tools for those who otherwise might lack access to them along with a willingness to be active in the CTCNet community, open to sharing expertise, success, failure, and resources. The *Manual* is a distillation of our collective experience.

Early in 1996, CTCNet was asked to assist Georgetown University in preparing a manual for the US Department of Housing and Urban Development's Neighborhood Networks initiative. In agreeing to work with Georgetown, and recognizing that much of the content would be coming directly from its affiliate members, CTCNet retained the right to amend or extract text and information that could contribute to its own manual. Georgetown was extremely cooperative and even provided CTCNet with copies of the disks containing the text of the HUD

Antonia Stone is the founder of CTCNet and principle author of the CTCNet "Start-Up" Manual, and can be reached at tonistone@ctcnet.org

publication with full permission to use as it saw fit. Accordingly, a first draft of this manual was made and distributed to all CTCNet affiliates at the June '96 All-Affiliates Conference.

Affiliates were asked specifically to critique the content and the sequence, and to identify missing or slighted areas as well as those that could be shortened or omitted. Most importantly, they were encouraged to offer anecdotal support from their own experiences so that this final version can reflect the broadest expertise possible.

CTCNet would like to recognize and thank the many affiliates, potential affiliates, and members of CTCNet staff who contributed to the original HUD manual, to the CTCNet draft, and to this final product.

How to Use It

Read It. Regardless of the needs you have to address, the state of your plans or your operation, you'll want to have an idea of what this manual addresses and where you can go for the information you need when you need it. So, browse through the entire manual.

You'll see that each chapter separator contains a detailed guide to that specific chapter. In general, you'll see that each chapter addresses specific issues, that there is a section reporting experience of affiliates relevant to these issues, and, in many cases, an appendix of potentially useful materials and/or resources.

In browsing through the manual, you'll also note that there is lots of white space. The manual has been formatted to provide ample room for your notes and comments.

Finally, you'll note that the manual is in looseleaf form. CTCNet anticipates periodic updates offering newly acquired materials and resources. The looseleaf format also allows you to insert notebook pages of your own, amplifying the content with your own experience for the benefit of colleagues at your center and also for noting potential contributions to future CTCNet updates. Finally, this format

"Start Up" Manual Table of Contents

permits you to extract a page or set of pages for duplication (permission is granted for non-commercial use, though we'd appreciate attribution and your sending us a copy).

Use the sections as they become applicable to your needs. Not everyone is in the same place at the same time. While the sequence of the manual is designed for start-up centers, there is plenty of material that is applicable to centers already in some stage of operation. If you are in a funding crunch, Chapters 8 & 9 (Budgeting and Funding, and How to Prepare a Business Plan) may be helpful. If you're thinking of expanding your software library, Chapter 5 may give you some insights. If you need to replace or take on additional staff, you might want to look carefully at Chapter 4, and so on. It is our hope that this manual may outlive your start-up phase, producing guidelines for addressing operational issues as they arise.

Please do tell CTCNet about your experience using the manual. The success of this manual in addressing the multiplicity of issues confronting the vast variety of CTCs depends overwhelmingly on its ability to represent the actual experiences of centers. Enlarging on the experience already contained can only enrich the content and substantially assist centers that may be using this manual in the future. Communication is key. So let CTCNet know what is useful, what is not, what you'd like to see in future editions, and most importantly, what your own experience has been. ❖

At the "Opportunity Through Technology" conference tour of Break Away Technologies in Los Angeles last December (p. 35) — Toni Stone sits with Max Gail, conference keynoter, founder of LAP, and widely known as Detective Wojohowicz on "Barney Miller." The mission of the Local Access Place (LAP) is "to create a network of computer-empowered, community-oriented, creativity-inspiring, consensus-building communications centers." For more info, check out http://www.lap.org.

Community Technology Comes To Seattle

PETER MILLER

The 6th biannual "Directions and Implications of Advanced Computing (DIAC)" Conference put on by Computer Professionals for Social Responsibility (CPSR), an organization formed in the early 80's to provide scientific opposition to the Star Wars craze, was also unofficially the 4th annual national community networking conference, harking back to the 1994 and '95 "Ties That Bind" Conferences in Cupertino, California, cosponsored by the Morino Institute and Apple Computer, and the 1996 gathering in Taos, New Mexico, hosted by the La Plaza Telecommunity.

Yet, although forces converged in Seattle from all across the country and beyond at the beginning of March, it's not quite fair to talk about community technology *coming* to Seattle. That's because so much of it is already there.

A City Vibrant with Citizens Online

As much as Silicon Valley, Boston's 128 belt, the North Carolina research triangle, Texas technology in the Austin area, or anywhere else in the country, Seattle has a major national community technology presence. It's the home of not one but two community networking projects, PAN, the Public Access Network, the City-run website providing government and community information, AND, the Seattle Community Network, SCN, an all-volunteer community network with over 13,000 registered users and free web space for nonprofits and small businesses. An independent project, SCN was affiliated with the National Public Telecommunications Network, the national association of FreeNets™, and is one of twelve national Corporation for Public Broadcasting-supported Community Wide Education and Information Service (CWEIS) projects. The conference was coordinated by Doug Schuler, former CPSR chair, active in the CPSR Seattle chapter, and author of a major defining work *New Community Networks: Wired for*
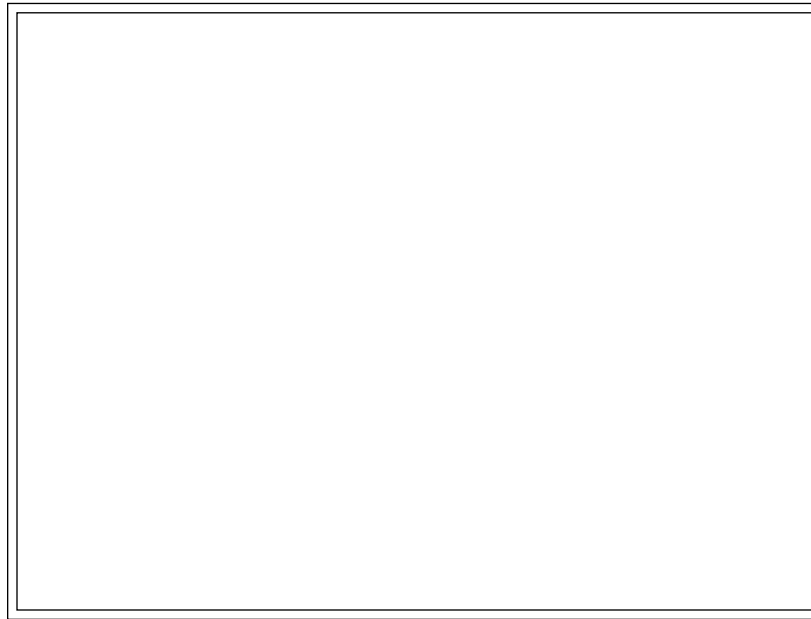
Seattle Urban League Community Technology Leaders: Technology Coordinator Bill Moore (left) and Vice President Willair St. Vil.

Change (Addison-Wesley; see also Doug's "Community Networking Movement" web page at www.scn.org/ip/commnet). According to Doug, "We know that computer technology offers us lots of new opportunities. At the same time, however, there is a vast, almost impenetrable haze of cyberhype, which we're trying to see through and beyond. We want to be able to identify both the opportunities and challenges that we should expect in the future. We also want people to be aware of great programs like CTCNet and others so that they can go back to their own communities and get involved."

As the title of the conference suggests, this was a gathering for and about community networks AND community space and institutions, and Seattle is rich in the latter, too. I arrived a day early and had an opportunity to visit some of them.

The technology program at the Seattle Urban League, CTCNet's first official affiliate in the area, is under the joint purview of Willair St. Vil, Vice President of Programs and Administration, and Bill Moore, the Technology Coordinator. Willair comes recently from NYC/United Way. He and Bill have a great rapport with one another. Touching upon all sorts of

matters, we soon got to the recent HUD Neighborhood Networks meeting which took place in Seattle and the potential for a collaborative technology program with the HUD-supported development two blocks east and another five blocks west. The Seattle Urban League is well-positioned to help with this, having been the 1995 recipient of a $180K+ grant from the Department of Commerce National Telecommunications and Information Administration (NTIA).

This led to a tour upstairs to the lab where one of the teachers was working on a project web page, getting it ready for central office approval, with some passing notice
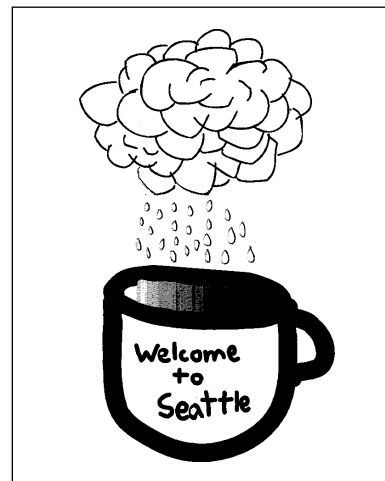
Conference logo by Reed Schuler.

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Conference Proceedings Now Available

http://www.scn.org/tech/diac-97/resources.html
or hard copy (see below)

Computers and Education: A CPSR Outlook

Winter 1997 newsletter — Guest Editor: Netiva Caftori

Technology has invaded our schools in more than one way. Whether schools and teachers are ready to embrace it is a different issue. Those who have chosen to integrate it into their curriculum of study are not always doing so with much prior planning. It seems as if many children do more learning about technology outside of the school's boundary or at least the school's physical walls. Many students are now able to access educational centers through distance learning and on-line facilities. Virtual communities are thus able to be formed. Is the US leading the way in educational technology? All these issues and many more are raised in this Winter '97 issue of the CPSR newsletter. Read the following authors' articles:

> Steven E. Miller, Education Technology
> Ginny Little, The world at our finger tips
> Dave Cornell, "Edutainment" and girls
> John Graves, Where will computers be used for learning?
> Netiva Caftori, Give up your pedestal, but not your lesson plans
> Marsha Woodbury, LEEPing into Distance Education
> Ralf Streibl, The sense and nonsense of wired schools
> Chris Bigum, Antipodean dreaming
> Elizabeth Buchanan, The social microcosm of the classroom

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To purchase a copy of the conference proceedings for $18.00 or the newsletter for $5.00, send check, VISA, or MasterCard to
CPSR, PO Box 717, Palo Alto, CA 94302
415-322-3778, 415-322-4748 (fax); cpsr@cpsr.org; http://www.cpsr.org

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The mission of Computer Professionals for Social Responsibility (CPSR) is to provide the public and policymakers with realistic assessments of the power, promise, and problems of information technology. As concerned citizens, CPSR members work to direct public attention to critical choices concerning the applications of information technology and how those choices affect society. Founded in 1981 by a group of computer scientists concerned about the use of computers in nuclear weapons systems, CPSR has grown into a national public-interest alliance of information technology professionals and other people.

Currently, CPSR has 22 chapters in the U.S. and contacts with similar groups worldwide.

> • Acadiana, LA • Austin • Berkeley • Boston
> • Chicago • Denver/Boulder • Los Angeles
> • Loyola/New Orleans • Madison • Maine • Milwaukee
> • Minnesota • New Haven • New York • Palo Alto
> • Philadelphia • Pittsburgh • Portland • San Diego
> • Santa Cruz • Seattle • Washington, DC

CPSR's main electronic mailing list is CPSR-ANNOUNCE. To subscribe, send email to: <listserv@cpsr.org> with the message: SUBSCRIBE CPSR-ANNOUNCE <your first and last name>
To find out what other email lists are available and how to join them, send email to the listserv address with the message: LIST

CPSR Membership Categories: $75 Regular; $50 Basic; $200 Supporting; $20 Student/low income; $50 Library/institutional subscriber.

from David Wong, their webmaster. They work with high school students, targeting sopho-mores for skills training with a job mentoring component. It's quite likely that they will take a leader-ship role and high profile in the development of the Urban League's new national technology initiative in which CTCNet has a major role, thanks to a grant from NYNEX, which also just awarded substantial support for Urban League technol-ogy centers in Boston and Birming-ham, NY. Urban League affiliates in Akron and Columbus, Ohio, are part of the Ohio Community Computing Center Network— Akron was one of the recipients of last year's CTCNet/Apple partner-ship lab equipment awards (see p. 43), and this year's announcement has brought new Urban League affiliates from New York City, Sacramento, Knoxville and Nashville, Tennessee. The Urban League experiment ought to grow (www.nul.org).

There was a side trip to the Microsoft campus on the east side of the water in Bellevue before returning to the nearby Rainier Community Center which houses Project Compute. Microsoft has provided support to numerous CTCNet affiliates across the country in a pick-and-choose targeted fashion: 100 educational CD's via the Children's Defense Fund in Washington, DC; a grant to the Roxbury Boys and Girls Club and, also in metroBoston, support for a number of CTCs officially part of the City of Boston. Libraries are the major arena in which Microsoft provides community technology support. The Brooklyn public library is a CTCNet affiliate enjoying major Microsoft support, and there are currently promising negotiations going on with the Martin Luther King library in Washington, DC. Microsoft supports some school-community partnerships as well as library technology programs in Seattle which I did not have the opportu-nity to visit, but we are now exploring a major software partnership through the Microsoft Community Affairs Program, via their special technology leadership grants with Gifts In Kind/United Way. Chris Hedrick, Senior Program Manager for Community Affairs, offered to do a workshop

on how CTCNet affiliates can become Microsoft certified training centers at the annual conference in Pittsburgh in June.

The brand new Rainier Community Center facility, one of twenty-some which are funded/supported through the City of Seattle, is the home of Project Compute, an impressive pilot and leadership technology access center.

Two large, sparkling-clean rooms, save for two friendly notices, hold wall-to-wall state-of-the-art equipment. Project Compute was actually established at the old Rainier center, and it's unique not only for its longevity, but also for its status as a model volunteer program and for its liveliness. Unlike most programs without paid staff which are often thrown together and hang on by a thread, Project Compute is rich in re-sources, technological, human, and otherwise, and the volunteer orientation goes hand in hand with the leadership and enthusiasm that Anthony Williams brings to it. From seniors to kids, it's an integrated part of the life of the center along with other activities rooms where art, dance, martial arts and other programs take place, two multi-basket gyms, and a well-furnished equipment room. Anthony and other volunteers provide support for the staff to use the computer center themselves, then they themselves run open access and structured programs in math, science, art, Internet tools, programming, Family Night on Friday, and a much in-demand late night skills training, 9:30-11:00 pm, on Friday and Saturday.

The final site of note is the Speak-easy Cafe.

The night before the conference, I just missed a film showing by Trent Harris but did get to meet him and a number of Salt Lake City ex-patriots living in Seattle, caught a bit of the jazz being played in the corner, got to choose from a menu of coffee, beer, and good noshes, and was helped in checking out the various workstations and platforms by friendly staff. The antithesis of yuppie consumerism, the Seattle Speakeasy has taken the aesthetic of modern technological society in its most wired, liberating and satisfy-ing dimensions and brought it right into a new kind of community
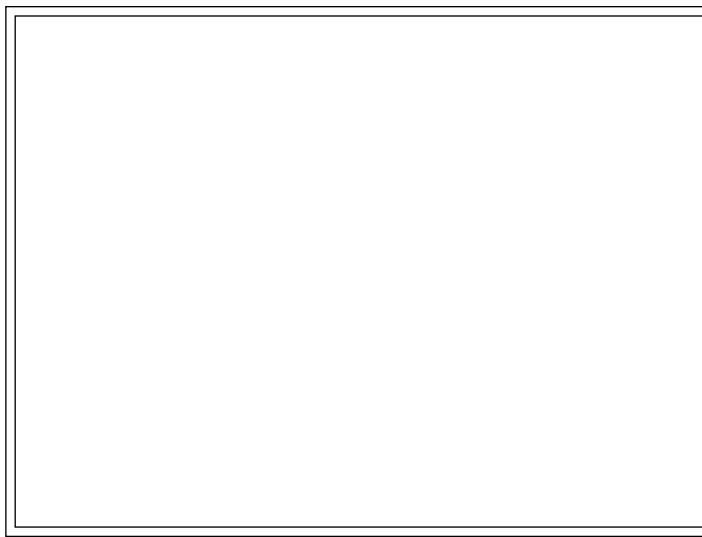
Coffee, brewski, ascii — You can get anything you want at Seattle's Speakeasy Cafe.

center. In this, the Speakeasy is a genuinely new phenomenon. It's reported that anywhere from 50-70% of its full Internet access subscribers (at $10/month, $50 for six months) do not have computers and modems of their own. The Speakeasy houses projects such as the Alliance for Education, the American Women's Roundtable, the Seattle Area Teen Community Service Homepage, the Northwest Environment Watch, Seattle Peace Concerts, and the Washington Free Press. It was a major presence at the conference and on Saturday night hosted a benefit for CPSR ($25) as the evening's event.

A Conference Hooked Into Seattle & The World

At Community Space and Cyberspace, the Conference, there was lots of community networking in the keynote and plenary sessions on the first day—from the opening address by Howard Rheingold, author of *The Virtual Community*, editor of *The Millennium Whole Earth Catalog*, and founder and Chief Aha! Officer of Electric Minds. The first plenary on "Building a Civic Web" continued the networking theme that went on into the second day of workshops with offerings such as "Accessible Web Design," "Avoiding Information Overload," and "Civil Liberties in Cyberspace." In the Auditorium on Saturday in the "Culture and Diversity in Community Space and Cyberspace" session, Madeline Gonzalez gave a report on the development of the Association for Community Networking (AFCN),

established at the Taos conference the previous year (see p. 17).

From a CTCNet vantage point, it was quite striking how, given an emphasis and focus on cyberspace, there are so many center-based access points that keep coming into the picture. This was the substance of my first day closing panel presentation on the connection between cyberspace and commu-nity space. Sunday featured over 30 workshops, and I got to intro-duce a session on how to build these connections practically with Sue Beckwith, from the Austin FreeNet; Bruce McComb, from the Reca Foundation and TriCities FreeNet in Southern Washington State, both of which have multiple access center sites; and Anthony Williams. But it wasn't just this workshop, the center-based access connection to cyberspace was everywhere.

A session run by Tina Podlodowski, formerly with Microsoft and currently a Seattle City Councilor, on "Creating Technology Literate Neighborhoods," asked, "What does it means for a neighborhood to be technology literate? Where are appropriate 'access points' within neighborhoods?" A session on City Government Programs On-line with the City of Seattle's Public Access Network looked at "lessons learned in working directly with non-technical neighborhood organizations/ individuals and organizing coalitions around technology... Garfield and Rainier Community Centers, Central Area Motivational Project Family & Youth Services Center, and the

"...offers free and equal access to services and resources to help the people of Montgomery County find the ideas and information they need to sustain and enrich their lives." — Montgomery County Public Library

"... linking people and organizations in a free exchange of information and ideas. It will be an important resource to the Michiana community to benefit its people with links as broad as national and international information services...and as narrow as their local friends and neighbors." — Michiana Free-Net

"...is a clearinghouse for current information on community organizations, issues, and services. [It] maintains a high profile as a source of information about community services...[It] maintains and publicizes a master calendar of community events...Users have a one-stop center to obtain current information about community organizations, issues, and services. Access to this information helps individuals to become self sufficient, control their lives, and better understand community issues..." —Information and Referral System, taken from the Public Library Association's "Guidelines for Establishing Community Information and Referral Services in Public Libraries," 1989

"Our purpose is to ensure the ability of Manhattan's residents to exercise their First Amendment rights...and to create opportunities for mutual communication, education, artistic expression and other non-commercial uses of [our] facilities on an open, uncensored, and equitable basis. In providing services, we seek to involve the diverse racial, ethnic and geographic communities of Manhattan in the electronic communication of their varied interests, needs, concerns and identities." —Manhattan Neighborhood Network

Libraries for the Future
http://www.inch.com/~lff

0100110001001001010000100101001001000001010100100101011001

Jamie McClelland, jamiem@inch.com, (212) 682-7446

Department of Neighborhoods neighborhood services centers." An "Equity in Access" workshop featured Mike Apgar, owner and founder of the Speakeasy, and reps from two of the projects it houses, Madeline Lewis from the Homeless Women's Network, and Anitra Freeman and Dr. Wes Browning from *Real Change*, the area's homeless newspaper (founded by Tim Harris, who has started similar projects in Boston and New York). Chuck Leo and Diana Goodwin Shavey presented HUD Neighborhood Networks as established centers at the junction of cyberspace and welfare reform. Bart Decrem and four youth from East Palo Alto's Plugged In highlighted a youth and education plenary. There were lots of library activists, and Jamie McClelland from Libraries for the Future read the mission statements from four groups, all substantially in agreement (sidebar), and went on to talk about the importance of coalitions. His comments were echoed during the rest of the conference.

Community public, education and governmental (PEG) cable access centers sent reps from all over the country including Michael Seitz from Multnomah Community TV outside Portland, who co-founded the acm-ctcnet@igc.org discussion list and SIG at the Alliance for Community Media (ACM) conference in DC last July; Don Senzig from Milwaukee, which is hosting the ACM national conference this July; Richard Turner from Honolulu; and ACM Executive Director Barry Forbes, from the national office in Washington, DC.

It's not accidental that, when community networking gets seriously discussed, center-based access is an integral part of the discussion. Lodis Rhodes called for us to have a new radical common sense—and centers are clearly part of it. They provide a place for those otherwise without access, and the training and support to make use of it. Centers provide a realistic approach to the visionary ideal of universal access—and they provide for the establishment of those very community institutions which are the mark of and vehicle for empowerment. According to Karen Michaelson, even in rural, isolated eastern Washington State where the Inland Northwest Community

Access Network (TINCAN) has been established to serve Spokane and five other counties in the state and Kootenai country in Idaho, they are very interested in establishing some such centers and working with CTCNet.

As the conference wound down with the final set of workshops, there were only three of us at the "Technology and Welfare: A Tragic Love Story" session given by Ken Zeff, AmeriCorps*VISTA Coordinator at Seattle's MLKing HUD Neighborhood Network center. The discussion turned into a general session about all the potential resources MLKing has at the tips of its fingers because it is in Seattle, with all its resources for community technology and because it is the local model program for the HUD Neighborhood Networks effort whose national leadership is Seattle-based. One of the other two workshop attendees, the one who was most active in providing impressive advice, was Tim Chuang. We chatted afterwards, and he gave me two cards, one as Consultant in Consulting & Education Services with Versant, the Database for Objects, in Chicago; the other as Deputy Secretary General, Taiwanese Association of America, in Havre De Grace, Maryland. With a PrairieNet email address, Tim is

At the conference workshop with Ken Zeff, VISTA Coordinator for the Martin Luther King Apartments HUD Neighborhood Networks Center in Seattle. By the end of April, Ken had initiated a job training and placement program with SeaFirst Bank.

actually working out of Kansas City for the immediate future, is looking to volunteer with some helpful community technology program, and will be checking out some opportunities there. He's a good example of the kind of exciting acquaintance one makes at these sort of community networking gatherings.

There's lots of community networking interest in getting better organized, a sentiment which actually culminated in an earlier workshop by Barry Forbes, an outrageous though very informative "Building A National Grass-roots Organization" session. "Oxymoron, isn't it?" Barry began to the roomful of those who had re-

sponded to his invitation, including many of the steering committee members of the Association for Community Networking (AFCN).

This hardly touches the surface. Much of the Community Space and Cyberspace, the conference, is still around, including the proceedings. Check it out at http://www.scn.org/tech/diac-97. ❖

The Austin Free-Net and the East Austin Media Lab

SUE BECKWITH

The Austin Free-Net (AFN), a 501(c)3 nonprofit corporation, provides computers, high-speed connection to the Internet, and

learning/teaching opportunities at many places open to the public. Our work addresses the needs of children and youth in low income

families. By using the Internet, young people can explore the possibilities for their lives while learning more about critical education, career, and health services needed by their families. AFN is a cooperative effort. Partners include major corporations, small businesses, many non-profit organizations, community groups, the City of Austin, the Austin Learning Academy, the University of Texas, and the Austin Independent School District.

At the core, AFN provides Internet-connected computers and training in public spaces. Primary financial support for the Austin Free-Net comes from partners in the private sector, public agencies, and individuals.

AFN has administered $1 million in capital projects during the last 24 months including a $247,000 grant from the State of Texas for access in libraries and a current grant of $240,000 from the federal government's Telecommunications and Information Infrastructure Assistance Program (TIIAP).

Austin Free-Net is working with corporate partners, Digital VooDoo

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The Association for Community Networking (AFCN)

"We have been talking about the need for a Community Networking Association since the first 'Ties that Bind' Community Networking Conference in 1994. However it wasn't till the Taos Community Networking Conference in May 1996 that a group was formed to lead the effort towards making this real," according to Madeline Gonzalez. Initially begun as an International Association, the group came to focus its energies in the national arena. The draft AFCN mission statement reads:

"The Association for Community Networking's purpose is to improve the visibility, viability and vitality of community networking by assisting and connecting people and organizations, building public awareness, identifying best practices, encouraging research, influencing policy and developing products and services. We value community economic development and civic participation, diversity, collaboration, esprit, creativity, learning, and individual empowerment."

The AFCN Ad Hoc Advisory Committee currently includes:

• Amy Borgstrom, Appalachian Center for Economic Networks (ACEnet)
• Laura Breeden, former Director, NTIA TIIAP Program
• Caroline Carpenter, W.K. Kellogg Foundation
• Steve Cisler, Apple Computer, Inc.
• Richard Civille, Center for Civic Networking
• Joan Durrance, University of Michigan
• Patrick Finn, Taos LaPlaza Community Network
• Madeline Gonzalez, Boulder Community Network
• Frank Odasz, Big Sky Telegraph
• Doug Schuler, Seattle Community Network
• Steve Snow, Charlotte's Web
• Lisa Kimball, Metasystems Design Group, Inc.

David Wilcox from Great Britain (dwilcox@pavilion.co.uk) is the primary International liaison. Madeline Gonzalez (madeline@rmii.com) was chosen consultant to lead the effort. There is a placeholder web page at http://bcn.boulder.co.us/community/resources/ACN.html.

Virtual CivicNet

May 22 - June 30, 1997

Organized by the Center for Civic Networking and others cosponsored by AFCN

For more information, see http://www.civicnet.org

Sue Beckwith, Executive Director of Austin Free-Net, has been a manager of technology projects since 1985. She was previously the Information Systems Manager for the City of Austin Environmental Department. The team of 10 staff which she led was responsible for serving 450 end users with technology-based services including local and wide area networking, enterprise database development, geographic information systems, and all related support and maintenance. Sue is the designated project manager of the East Austin Media Lab and can be reached at sue@austinfree.net.
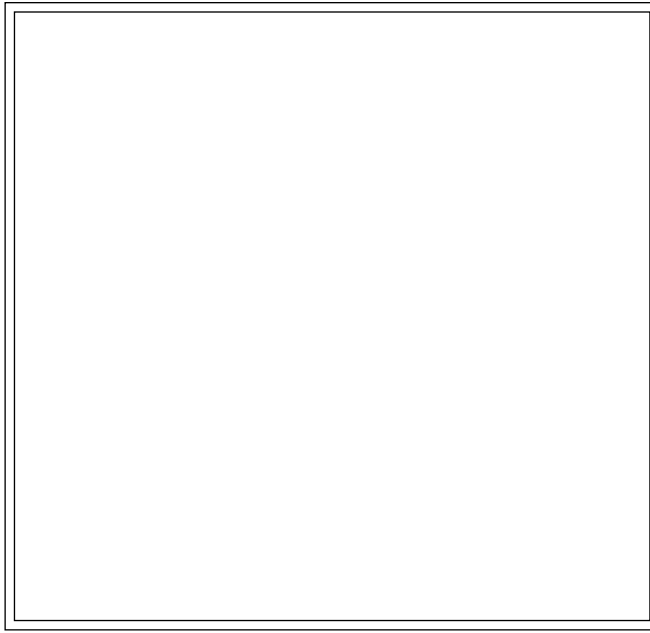
At the Seattle Conference CPSR benefit with some of the Austin community technology black leather jacket gang: Lodis Rhodes, LBJ School of Public Affairs, UT/Austin, and Sue Beckwith, Executive Director, Austin FreeNet.

(www.digital-voodoo.com) and Impact Online (www.impactonline.org), and our current volunteers to develop Web-based ways to recruit and coordinate volunteers. We currently rely on flyers, Internet lists, and traditional print media to drive attendance at bi-monthly volunteer orientations. Our civic network is also growing and now includes over 300 Free-Net volunteers.

AFN's technical network includes 70 Free-Net computer stations with high speed (ISDN) connectivity. Free-Net stations are located in 21 branches of the Austin and Cedar Park public libraries; 8,000 people used AFN machines in February. There are also AFN stations in four community centers (including a community policing center), four schools, and the Oak Creek Village subsidized housing development. AFN partners with SER Jobs for Progress at workforce development centers. See www.serjobs.org for their 1997 Summer Youth Employment program application.

AFN works with the Austin Learning Academy (ALA) in two locations with residents of public housing to use technology/Internet to supplement existing family learning activities including life skills development, GED prep, and ESL. ALA and AFN do summer camps for 64 youth, this summer with 15 systems with full ISDN net connections. In 1997, AFN is adding sites at two recreation

centers, a church, two more schools, two more community policing centers, and the Connelley-Guerro Senior Center.

AFN's first priority is to use technology to link people. Corporate sponsors, including a number of small business partners like Digital Arts, Inc. are actively involved in Free-Net projects. Public sector partners contribute in-kind support; and not-for-profit organizations provide the direct links to community residents and essential skills in direct service delivery.

Three multimedia training sites for youth are key parts of AFN's expanding network of public access sites. Each AFN public access site offers high-speed (ISDN) connections to the Internet, specializes in a facet of technology, and focuses on specific development tools which all fit together to form a framework for community-based access and content development in lower income Austin neighborhoods.

The East Austin Multimedia Lab focuses on multimedia on the Net.

The DeWitty Web Development Lab focuses on Web development through the Teen Web Guild, a project of the Austin Learning Academy.

The Audio Development Lab focuses on broadcast quality audio production for radio and the net.

The multimedia project offers youth of East Austin leading edge

technology and training for them to develop and present their own content to the world. The DeWitty Lab and the Audio Development Lab are being set up this spring through the TIIAP. Each Lab uses Apple Macintosh technology. The East Austin Media Lab (EAML) completes Austin Free-Net's plan for 1997 multimedia development efforts.

The strategy behind EAML is to expose East Austin youth to the world of multimedia and computer technology. The design elements of the project include: open access periods at each lab; basic training on Internet/Web, Web page development; intensive training and mentor/protégé relationships for small groups of teens; monthly seminars conducted by Digital Arts, Inc.; internships available from Digital Arts and other companies; creation of an Internet website, AFN-Neighbor (www.austinfree.net/ala/AFN-Neighbor), for demonstrations and information about jobs, housing, crime, and other issues of importance to six targeted low-income neighborhoods, with special focus on the 11th/12th Street Corridor project.

The multimedia project involves three groups of teens, each drawn from a different ethnic neighborhood (and involves, in part, in its later stages, crossing "turf" boundaries while engaged in cooperative work). The combined project group of Mexican-American, African-American, and Anglo teens will participate in a range of activities, designed to develop knowledge about and competence in using communication technologies. The activities are also designed to foster an ethic of community service.

The multimedia project is a key part of a strategy to create content for the AFN-Neighbor website. And teens participating in the multimedia project will become the technical support team for the "intranets" serving their respective neighborhoods.

AFN-Neighbor uses the empowerment-driven authoring approach found in the City of Austin Publish System (APS). APS is the system developed and used by city staff to provide current city services and information for the Austin City

Austin Free-Net

Mission

Use the Internet and other emerging technologies to connect people with information, services and people.

Purpose

To provide every member of the Austin community with access to emerging technologies and the Internet/National Information Infrastructure by the year 2000.

Goals

To foster universal access to advanced technologies;

To provide a means and the tools for people to empower themselves;

To create community computing resources in the Austin region;

To provide free educational information, using the community computing resources;

To enhance the effectiveness of government by fostering greater public access and involvement in community decision-making;

To create a model system which other communities can apply;

To have fun.

Connection, the city's award-winning web site. The city is donating its APS technology.

The basic training follows AFN's Surfing 101 curriculum, developed to interest and engage teens, with activities to find information about colleges, hobbies, recreation, and entertainment. Structured multimedia programs in web design, media production, and audio editing use mentors to develop a "project" of personal interest. Later on, participants begin visiting companion access centers in other neighborhoods to learn those centers' specialties and to teach more about their own center's specialty. Finally, teens in the structured multimedia program will receive and complete internships with small firms in Austin, assist neighborhood groups and non-profits in developing content for AFN-Neighbor, become AFN volunteers and, perhaps, paid staff offering basic training and/or technical support at AFN public access sites.

The East Austin Media Lab involves four major components implemented in conjunction with partner organizations:

1. Public access to the Internet is in place with six varied machines connected to the Internet via ISDN (64kb), staffed three days each week by SER Jobs for Progress.

2. Homework center activities are in place with volunteers from the office of Texas Supreme Court Justice Raul Gonzales. Youth come to the Lab twice a week in the early evenings; they use some minimal technology (286's).

3. Employment information is provided during the day by SER staff, who assist youth in finding information on the Net about job openings, workforce development training opportunities, and educational enrichment programs. SER is also responsible for the City's summer youth employment program in 1997 and has implemented the first-in-Texas summer youth program application on the Web (www.serjobs.org).

4. The multimedia development portion of the lab has the Internet connectivity in place, the kids excited, and volunteers ready to go. AFN hopes to receive additional equipment through its CTCNet Apple Partnership proposal. During the day, when the regularly scheduled workshops aren't being held, the Lab will be available for schools and local community groups. These groups will be expected to provide their own instructors; this enables the SER staff who are there to continue with their workforce development duties while being available for answering basic questions.

AFN has had informal conversations with other CTCNet affiliates, Plugged In in East Palo Alto (www.pluggedin.org) about participating in their video project with Street Level Video in Chicago.

Austin Free-Net is quickly becoming a national model for community-based access to technology. We combine a city-wide infrastructure of Internet access in libraries and public places with a focused, center-based approach in areas where residents have little or no access in their homes.

We have the plan, the partners, the kids, and the volunteers, and we're ready to move. ❖

1997 CTCNET/ Apple Partnership Awards

Ability Center of Greater Toledo, OH

Austin Free-Net, TX

AVTEC (Alaska Vocational Technical Education Center), Seward, AK

Barrio Action Youth and Family Center, Los Angeles, CA

Boston Photo Collaborative, MA

Calvary Bilingual Multicultural Learning Center, Washington, DC

Chavis Lifelong Learning Branch, Greensboro Public Library, NC

Community TV of Santa Cruz, CA

East End Community Organization, Xenia, OH

El Centrito De La Colonia/After-School and Early Literacy, Oxnard, CA

Falmouth Community Television, MA

J. Bennett Johnston Learning Center at My House, Inc., New Orleans, LA

Jewish Community Center, St. Paul, MN

Latimer Education Program, Schenectady, NY

Marietta Area Community Computing Center (MACCC), OH

Neighborhood House of Milwaukee, WI

North Light Community Center, Philadelphia, PA

Philadelphia Parent Child Center, PA

Plugged In, East Palo Alto, CA

Portland Museum, Louisville, KY

Prologue Alternative High School Inc., Chicago, IL

RECA Foundation, Kennewick, WA

Street-Level Youth Media, Chicago, IL

TechnoTots, Highland Park, NJ

Virtually Wired Educational Foundation, Boston, MA

YWCA Boston/Youth Voice Collaborative, MA

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The Impact of Technology on Youth in the 21st Century

MARIO MORINO

The technology that is shaping our future and our children's is not, as many assume, the computer. I am speaking about the new and emerging forms of interactive communications, such as the Internet, that allow us to capitalize on our greatest learning resource — the minds of people all over the globe. We are just beginning to experience the impact of this connection of people to people, and can only guess how transforming its effects will be in the coming years. I also contend, however, that if we make the right choices now, we can substantially change for the better how we and our children learn, and more importantly, how the young people of today and generations to come are taught to learn. To succeed at that task requires a concerted and coordinated effort — a partnership if you will — among our families, schools, youth organizations, and communities.

I say that because I am mindful that technology itself is never the reason things change. The real power of interactive communications is people as the ultimate source of knowledge. It is not the computers, the physical mass of wires, the complex of networks or the vast databases of information. Rather, it is people and their knowledge, relationships, insights, and spirit freely passed from one to another that engender the "magic" of this interconnected world that the Internet is making possible.

Today, the fundamental question is whether we will share this "magic" with everyone, or only a privileged few. We must come to understand that access to the Internet needs to be a reality for all our citizens, that the free and unrestricted flow of information and the ready availability of computers for everyone are

This is an edited version of an address given to The Children's Defense Fund, March 14. The full text can be found at http://www.morino.org. © Morino Institute, 1997, edited and reprinted with permission.

not simply matters of "technology." They are, in fact, one of the vital keys that will either open or lock the doors of opportunity for our children and ourselves.

If we fail, however, we will encounter a more devastating illiteracy than any we have known in the past, one that will create a gap in society deeper and more differentiating than any we have experienced.

Most of all, we must realize that this change is not about one more technological advance, as the typewriter was in its day, but about how we relate to each other, establishing ties to people we may never, in fact, meet; how we make ourselves heard without going through the usual channels; how we champion a cause; how we come together once more as communities; how we empower our youth to lead the way.

Across this country I see growing evidence of a grassroots movement dedicated to preparing our young people for this very different future. These organizations are planting seeds of opportunity in the fertile ground they are tilling, not in lots staked out for them by others. The movement is made up of individuals and groups devoted to enabling young people, especially those who might otherwise be neglected, to take part in and benefit from the new technologies. They're doing so right where the kids live, restoring the human bonds that were my salvation. What makes these efforts succeed is the mission they share with effective youth groups of all kinds. Their formula is simple yet powerful: provide young people with places to go, things to do, and people who care.

Let me give you an example. There's a community-based organization I'm particularly fond of called LEAP — Leadership, Education, and Athletics in Partnership — that has eight sites for children in low-income neighborhoods in three Connecticut

cities. If you were to walk through the organization's brightly decorated Computer Learning Center in New Haven, you might witness a scene like this one, which took place some months ago: A third-grader was cheerfully composing a letter on a Mac. When she finished, the girl was given the opportunity to place her story on her own LEAP World Wide Web page. During the next several weeks, she received e-mail from users elsewhere in the United States and also from foreign countries. Imagine her pride as she read the compliments — and the self-esteem she gained from the experience.

Suddenly, young people have the opportunities to connect with an even larger circle of people who share their interests or to gain access to information about things that concern them. In the Williamsburg section of New York, for instance, youths at the El Puente community center (see next story) use the Internet to research projects on local issues ranging from the pollution emitted from an incinerator overhead on the Brooklyn Bridge to the asthma that afflicts many of them.

These examples give us an effective model for education, a learning-by-doing process that depends on interactive communication and on collaboration. Our schools would
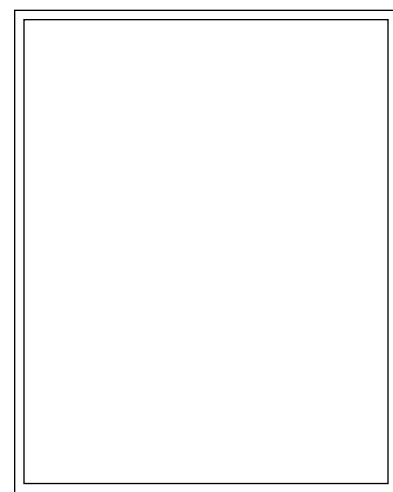
Mario Morino has been a friend of CTCNet since its inception and was a keynote panelist at the All-Affiliates Conference in '95. The Morino Institute is a major sponsor of the Conference each year. As his full address indicates, Mario Morino is well-acquainted with many CTCNet affiliate youth programs; answers to the challenges he offers here are an integral part of their expansion and development.

do well to pay close attention. Some already have.

But the reality is that many of our young people will not have such a chance in their entire lifetime. Especially those living in the inner cities, where poverty cuts the deepest, the supports are the fewest, opportunities the rarest. The fate of these children is the fate of us all. As a teacher, as a parent, as a community worker, you have a huge stake in their future. And you can make a difference — a big one. Here are ten things you can do:

1. Focus on Human Outcomes, not Technology.

Technology can only mirror the society it serves. While computers and the Internet can facilitate great strides in learning, they can't reinvent education. Don't be swayed by promises that they will. And don't confuse the means with the end. What is our priority, wiring schools or giving kids the skills and opportunity to learn?

2. Get Involved with the New Technologies.

Because once you have experienced what I'm talking about — instant access to information you can use and people with shared interests — you'll begin to understand the power of this communications revolution.

3. Adopt a Learning-to-Learn Approach.

As we move from an economy based on industry to one based on knowledge, excelling — even surviving — will depend on what management analyst Peter Drucker calls "a habit of continuous learning." It will cut across ages as well as classes. In fact, it already is.

4. Understand the Issues.

Unless we provide all of our young people with access to interactive technologies and the training to use them, we stand in danger of creating another, even greater divide, this one separating the can-do's from the can-not's. Basic communications skills will soon include computer and multimedia competency as well as knowing how to read.

As much as we wish that our public schools could disseminate these skills to all those who need them, the task is too great. Fortunately, this void is being filled in part by community centers like the one in East Palo Alto, California, called Plugged In. By providing computer training and Internet access via EPAnet to those already at a disadvantage because of income and race, Plugged In, and other programs like it, are making preventive strikes against an even greater disenfranchisement in the future.

5. Ensure Low-Cost Access for All.

Access to networks must be available to everyone, for it will become the defining gate to opportunity next to one's own heart and drive. The Telecommunications Act of 1996 promised that deregulation would not only bring lower prices but so stimulate the market that the information superhighway would reach all of our doors. A year later, cable prices are nearly eight percent higher, competition is shrinking as telephone and media companies rush to combine, and the electronic bridge to the future may collapse before it is even built.

Nevertheless, it is possible, as we enter the new millennium, for every one of our citizens to have public access — in our churches, our libraries, our schools and government buildings. We need to have centers big and small, from YMCAs to churches and senior centers, where those in our neighborhoods can enjoy access in a safe and nurturing environment — places that encourage learning.

6. Claim Your "Citizen's Right" to Information.

Data collected by our governments, by our educational institutions, and especially by the non-profit sector, are vital to our long-term future. If you need convincing, just take a look at what's available right now.

Now imagine that at each look you had to pay a fee. How many of us could stay online?

We must not allow opportunity and learning to become a toll-booth process in which each new level of inquiry requires another half-buck. If we do not resist the impulse to privatize what is now basically a publicly supported service, ultimately, information monopolies will build up around our most valuable intellectual resources and will vest in a few the ultimate power of an open society — the free flow of ideas.

7. Investigate New Economic Opportunities.

The emerging technologies that have created new careers and jobs for skilled professionals can also support those of different social and economic levels, people who have ideas that can be turned into potentially profitable businesses with relatively low investments.

8. Maintain an Informed, Balanced View.

While the digital world beckons with opportunities, it presents risks as well, especially to our youth. Dangers range from banal to serious. Rather than legislate, we must educate, teaching our young people to think critically, to evaluate information, to discriminate among offers made in cyberspace, just as they would in real life, and to choose their virtual companions as carefully as they pick their real-time friends.

9. Support Community Learning Centers.

They're called by different names and are housed in a whole range of settings, but in all such places you'll find mutually supportive efforts aimed squarely at helping a child develop the skills he or she will need to function as a competent adult. Some of the most effective efforts in this movement have been organizations collaborating with neighborhood schools.

Youth want to go to "places of hope," where they are treated not as problems to be handled, but as resources to be encouraged. More than that, the youth organizations that have the most success in changing lives are the ones that act like families and communities. As one adolescent commented, "Kids can walk around the trouble if there is some place to walk to, and someone to walk with."

10. Give Youth the Power They Need.

Teenagers today have a lot of time on their hands — about forty percent of their waking hours, if they live in the inner city. Contrary to what many believe, getting in trouble is not a goal for most kids. It's a substitute for meaningful activity. When asked what equipment they considered most important for a youth center, the San Francisco teens gave the highest priority to computers —

ahead of pool tables, swimming pools, even video games.

Young people sometimes see the future more clearly than adults. And often they know what they'll need to get there.

Those are my thoughts, my suggested actions. By no means is it a complete list, but it's a place to start.

I'm here today...to urge you to become part of a movement made up of those who recognize that we have a once-in-a-lifetime chance to offer new hope for our youth and ourselves as we enter the 21st century. I'm ready for that challenge. What about you? ◆

From Pliers to Wires at El Puente in Brooklyn

JOSH MERROW, MIRIAM GREENBERG, RICARDO CARDONA

El Puente's community technology center has grown this year. Three new programs have begun, increasing the community's access to the center:

• Computer literacy classes in Spanish for adults — week night classes introducing computers — starting from how to turn them on, on into word processing, playing with Photoshop. Some very excited adults — some of whom had never used a keyboard. Instructors: Josh Merrow (staff) and Jos Rojas (after-school member).

• Computer classes for ESL after-school kids — using ESL software and typing programs in weekly after-school classes for kids from around the neighborhood. The idea is to work on English and become familiar with computers at the same time. Instructor: Joanne Nokland

• Increased access for students and after-school kids — Students in the Academy (the Board of Education high school part of El Puente) are now getting assignments in their classes that require they use the Internet and CD-ROMS; many of their reports now have to be typed. Some programs, like the Community Environmental Action class, are using CD-based mapping tools to identify toxic emitters in the neighborhood. The students then learn about the chemicals being emitted and their known effects. The next step: get this to stop. They also use the Internet extensively for research and email. All in all, more young people are taking advantage of our lab.

Josh Merrow, Technology Coordinator; Miriam Greenberg, Media Coordinator; and Ricardo Cardona, technology volunteer can be reached at elpuente@escape.com.

Pliers to Wires: An Alternative Technology Curriculum

There is a whole new curriculum being developed, Pliers to Wires, that introduces young people to computer technology by way of older technologies. Students start with hand tools (like hacksaws and pliers), move to power tools, then to machine tools, and finally to computers. By the end of the program students will be using Macintosh Computer Aided Design (CAD) workstations to design their own projects.

Pliers to Wires provides an innovative approach to technology education, where technology is seen as a tool like any other, and as such, can be used creatively to shape one's world. It also responds to community needs: these students will emerge with hi-tech and mechanical trade skills, opportunities to start their own businesses, and hopefully, the desire to pass on their experience. Pliers to Wires does not intend to replace the current technology program at El Puente, but to complement it, while fulfilling our Access By Design grant requirements.

Building The Metal Shop

Last September Ricardo and Josh set about turning the backyard storage shed into a metal shop. Predicting we'd be done in a month or two, we submitted a plan to after-school director Rossy Matos for an after-school metal sculpture class. As we had access to a bicycle junkyard, we billed the class as a chance to make your own bicycles. Working on weekends and into late weekday evenings, we soon discovered what we'd gotten

ourselves into: the building's roof had to be torn off and replaced; interior brick walls had to be demolished; we would have to put in an electrical system from scratch. We spent three weeks ripping out bricks, beams, and shingles and as much time clearing and hauling them to the dump. When the first day of class rolled around we had four brick walls and a nice view of the sky.

We apologized to our eight students, age 12-16, and explained that the first semester of the class was going to be about building a metal shop. We laid out our rough plans for the building and promised that we'd get to bicycles by winter. To our surprise, they seemed game.

In the ensuing months, as the class worked eight and ten hour Sundays in addition to the weekly three hour class time, it became clear that these kids would accept almost any challenge for a chance to create something that was theirs. We framed the roof, sheathed it with heavy plywood, and sealed it with a watertight covering. The kids designed and built workbenches out of lumber from an old stage stored in the school's basement. When we realized we would have to sledgehammer through the concrete and dig a four-foot deep trench to lay an underground electrical line, the kids all wanted to help.

As the work progressed, we ran into some surprises: three of the kids couldn't read and five of them had trouble with basic math. One wanted to build a tool cabinet but couldn't read a tape measure. He asked for help with fractions. We worked with inches, pieces of pizza, and blocks over several weekends. Finally, he built the cabinet.

Another student, who couldn't read the directions on a can of paint, asked Josh for help with his reading. They began to meet weekly (the student preferred to work out in the shop, with coats on) and it turned out he had never

grasped the basic vowel sounds or diphthongs. He's made a lot of headway since then. Last week he read part of the safety manual out loud in class. Since then, we decided that all students would need to be able to read the manual to work in the shop.

We finished the metal shop this year on March 6, nearly six months after we started. The shop is insulated, heated and has a roof that doesn't leak. It has skylights, doors, windows, and security gates. Inside are 110 and 220 volt outlets, furniture, and basic tools. The students are proud of their work.

Educational Tools

It has long been understood by education theorists like John Dewey and Paolo Freire that for learning to be "authentic," it must be based in and applied to real life needs. These concerns, as well as our own desire to make them a reality at El Puente, formed the foundation for the creation of this class.

Having taught computers in high school, we are all too familiar with students (and many adults) who poke tentatively at a keyboard, see a machine designed to complicate their lives, and decide to resist it at all costs. As computer technology continues to permeate our lives in tangible and transparent ways, the costs of such resistance rise.

Pliers to Wires is an introduction to high technology that puts it in its place: computers are tools, much like the wrenches and hacksaws we've been using in the shop. Once one experiences a computer in this way, it is no longer intimidating. Students can get down to the business of harnessing technology to further meet their own needs and the needs of their communities.

The students are excited about building their own bikes: one wants to make a cycle that folds up into a backpack, so he can take it on the subway. Another wants to design a "snowcycle" that he can bicycle up a snow-covered hill, then retract the wheels and sled down.

Besides the basic reading and math skills required for such endeavors, the curricular territory these kids will have to cover is vast. They will have to learn to do research, principles of physics, engineering, mechanical drawing, and design—and if our work so far is any indication, they will want to. They will also be learning that, through disciplined work, they can learn to create anything they can imagine.

Designing a bicycle (or a chair, or a ferris wheel) by hand is difficult and leaves room for a wide margin of error. For the student whose bike collapses when he lets his teacher ride it, the jump to designing on a CAD workstation is not a big one. Here is a way to know in advance how strong a joint will be, how much more weight the machine would support if you put, say, an extra brace under the seat.

Being able to use a CAD workstation is a bit like being a professional race car driver. Once you can do this, driving around town is no problem. Typical computer applications like word processing, communications and spreadsheets will seem easy.

Why Pliers to Wires and the Southside?

Common sense dictates that community development programs here in the Southside should create tangible economic development: jobs, training, and resources. We have been looking at different ways of meeting our community's requirements. Our ideas have included teaching a group of kids to design community-oriented software, setting up internet kiosks around the neighborhood, a community mapping project, starting a local barter economy, and wiring the new building. We went to the CTCNet conference in Boston last June to explore entrepreneurial technology programs, and Miriam has visited schools to explore network wiring configurations.

While many of these ideas may have increased access to technology, few (aside from the entrepreneurial angle, which we think is vital) seemed realistic in terms of

economic development: teaching kids to create their own software is out of our league; a survey we conducted found that people weren't that interested in public internet kiosks; and wiring a seven-story building with a high-speed ethernet network will cost $60,000 today and likely be obsolete by the time the building opens. Indeed, networks may be wireless by then. We needed a project that did a better job of meeting the community's needs.

In acquiring or reinforcing basic reading and math skills, and learning metalworking and

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Shop Rules — Reglas del Taller

- To work, you need your gloves, goggles, and whistle; you should be wearing your apron.
- Wear gloves and goggles to use tools.
- Wear goggles when someone's using a tool nearby.

- Para trabajar, necesitas tus guantes, anteojos, y pitos; debes utilizar tu delantal.
- Pon tus guantes y anteojos para usar las herramientas ó máquinas.
- Pon tus anteojos sí alguien está usando una herramienta ó máquina cerca de tí.

- If you see anything unsafe, blow your whistle. If you hear a whistle, stop what you're doing.
- Si ves algo arriesgado, pita. Sí oyes el pito, para automaticamente.

- Report injuries immediately.
- Informa el maestro de alguna herida inmediatamente.

- No eating — we don't want rats. Se prohibe comer—no queremos ratónes.

Joey in the El Puente Metal Shop.

computer technology, students will be qualified for a number of jobs. They will also be ready to make their own: Williamsburg doesn't have a bicycle shop; neither does Greenpoint. Signs around the neighborhood for low-cost bike repair could create several summer jobs and give the students a chance to learn how to run a business. They can also sell cycles they make or recycle out of junk. A metal fabrication and repair business could also be profitable.

In addition, we would like to connect Pliers to Wires with metalworking unions (Machinists, Iron Workers) and try to set up an apprenticeship program much like John Fleming's New York City Pre-Apprenticeship Environmental Worker Training Consortium. These unions offer a way into high-paying jobs in fields known for being hard to break into. ❖

February Conference: TEACHarlem

ANDREA KIMMICH-KEYSER

On February 20 and 21, CTCNet joined a coalition of community projects to organize Technology Education Awareness Conference for Harlem: TEACHarlem. Led by the Harlem Partnership Center, a joint project of the City College of New York and the Barnard-Columbia Center for Urban Policy, CTCNet and New York affiliates Civic Association Serving Harlems (CASH), Playing To Win (PTW), and the NYC Urban League joined with the New York Public Interest Research Group (NYPIRG) and the NYNEX Technology Education Center (NTEC) to present the program. The purpose of the conference was to assess opportunities for empowering Harlem by strategically combining our social and business networks with local technological resources.

Developed for the leadership of Harlem's community-based organizations, TEACHarlem became a forum to answer questions about technology and to demystify the hype. Day one provided a thematic overview and discussion of community technology issues with a lively opening session led by William Rogers from City College, which included a powerful address by Congressman Charles Rangel, a Lifetime Achievement Award recognizing the work of Florence Rice, and a keynote address by Dennis Walcott, President of the New York City Urban League. The remainder of the day featured two panel discussions on community access and institutional resources with CTCNet playing an active role in each.

Andrea Kimmich-Keyser is CTCNet NY Regional Coordinator and can be reached at andreakk@ctcnet.org

The first panel was composed of representatives of grassroots organizations which, after some struggle, have usefully integrated technology into their work environments and featured CTCNet Affiliate reps Joseph Kelly and Brenda Peart (CASH) and Joanne Gray (Union Settlement).

I moderated the second panel on institutional resources, featuring representatives from larger institutions that have resources invested in the community. Vernon Ballard from the CCNY Multimedia Learning Center and NYPIRG; Jamie McClelland, Libraries for the Future; CTCNet Associate Alfie Wade with Odyssey 21st Century, former PTW staffer Bruce Lincoln, with the Institute for Learning Technologies; Gale Brewer, Office of the Public Advocate; Charles Dunlap, AT&T; and Alonzo Coombs, NYNEX, provided broad perspectives on trends, applications, and implications of emerging technologies.

Day two of the conference included a recap of day one's events emphasizing economic development, followed by special interest workgroups with hands-on laboratory workshops, demonstrations of community-wide applications of technology, and resource acquisition presentations.

With over 200 individuals participating in TEACHarlem, conference organizers were pleased with the results and anticipate useful follow-up.

Joseph Kelly (CASH), who conceived of such an event last autumn, following a visit to the newly opened NYNEX Technology Education Center on 125th Street, reflected: "The conference has fostered a couple of good things —

we know who's out there...and we're talking...to bring all of Harlem's well-kept secrets under one roof in order to explore common goals, share resources and experiences, and move ahead together."

Alfie Wade, Jr. (Odyssey 21st Century Communications) writes: "It was evident to all who took part in this event that this conference was in effect an interesting think tank and should occur with some regularity — at least two or three times a year. The chance to share a progress report of efforts that were brought to life while continuing to move forward gives strength to collective commitment and completion. In Odyssey Communications' "Harlem 2000" report issued in 1994, we spoke of a think tank structure that resembled what took place at TEACHarlem. We called it the Harlem National Community Laboratory. It would be made up of the universities, the community, and the private sector to work together on what we defined as Science for Community Success. And by the look of what took place at TEACHarlem, it was like seeing a dream really starting to take shape. Now it is up to all of us who participated to continue to work and continue to make it real."

CCNY's William Rogers, active in developing the Harlem Partnership Center, writes: "The stage is now set to use not-for-profits as vehicles for introducing information technology to inner-city residents. The conference accomplished the following: Transforming the Harlem Partnership Center concept into the Harlem Partnership Project...Over 38 speakers and workshop leaders representing the private and public sector, institutions of higher learning and

community-based organizations and institutions provided one focused message: there is an urgent need to equip not-for-profit organizations with the resources necessary to take advantage of the empowering benefits of information technology for their productivity and the productivity of their constituencies."

The Harlem Partnership Project, developed as a result of the coalitions and networks established at the conference, extended the CCNY and Barnard-Columbia Harlem Partnership Center to include Columbia's Teachers College, the Institute of Learning Technology, Libraries for the Future, and the Strategic Alliances division of NYNEX, all of whom were brought together at this event.

Lori Minnite, Barnard-Columbia Center for Urban Policy, takes pride in being involved in both the planning process and the event's sponsorship. She's pleased to see that interns from their mentoring program at the Minisink Town House, located at 142nd Street and Malcolm X Boulevard, have become particularly interested in the computer repair and reclamation projects presented at TEACHarlem, and their follow-up involvement with CASH, located on West 123rd Street, has resulted in the rebuilding of reclaimed old unused machines with salvaged parts at both sites.

Lori's program at Barnard-Columbia, the External Relations and Community Affairs Office William Rogers heads up, and NYPIRG, which Vernon Ballard represents, have since developed a proposal to produce and distribute a "Community Resource Guide to Computers and Telecommunications." It's expected that the guide will be produced this summer, be distributed to all of TEACHarlem's participants, and be available to others via the Harlem Partnership Center's web site. And NYC Urban League's Adrian Lewis has been orchestrating conference follow-up sessions exploring the use of technology in organizational capacity-building efforts.

A prominent feature of the conference was the widespread participation by all voices, both those formally on the program and the audience joining in. Other CTCNet Affiliates participating included Balarman Konkoth from Covenant House, Stephanie McIntyre and Flore Dorcely from TechnoTots, Susanne Conyers from North Bronx Family Service Center, Arnold Wechsler from the Artists Development Center and ProArts, Ellen Meier from the White Plains Community Network, and Richard Parkany from the Latimer Education Program in Schenectady.

I've since been encouraged by many of those who participated to assist in the planning of similar events in Eastern New Jersey, Brooklyn, and the Bronx. ✦

CTCNet as Bridge, Bullhorn and Buddy: Public Policy for the Rest of Us

"I run a computer center. I teach. I manage volunteers. I write grants. When and *how* do you expect me to even figure out a way to influence the people and organizations making policy decisions that affect all of us down here on the ground running our centers?"

"I'm too busy making sure people get access to computers to have time to change public policy."

Public policy around telecommunications isn't easy to begin with. On the federal level, hearings before the FCC involve rules which give special resources to schools, libraries, and rural health centers, not other kinds of community centers. So that's murky. Where to go with the federal legislative and judiciary processes isn't clear either. There's the states. Lots to do. But what?

Given all this unclarity, CTCNet has tried to do a number of things. As Audrie Krause shows, we've been involved with some specific modest efforts to encourage good directions with universal access and Internet fees. CTCNet has a cadre of folks with a special interest in public policy; there's an electronic discussion list for members especially interested, ctcpubpol; a small group held a number of teleconferences in the last year. We've done some outreach efforts among our affiliates, and it's been a very useful experience all the way around. We've got a special Public Policy fellow, Rainikka Corprew, joining us this summer.

One of the issues before us all is simply getting a sense of the stakes for the public interest community; this is where where the other articles here are especially relevant. First, Armando Valdez, founder of LatinoNet, helped put together a white paper to spur public interest organizing and advocacy around the merger between Pacific Telesis and Southwest Bell. Reprinted here is the Executive Summary of that paper—we encourage you to check out the full analysis, including the analysis of how the figure of $1 billion for public interest programs was reached. Lest that seem a preposterous sum, consider the recent Benton Foundation posting reprinted here which shows no less than $70 billion of potential public revenue at stake with the spectrum giveaway. None of these efforts are winning yet. Armando reports, "The PUC approved the merger (big surprise) and the deal is very industry friendly and low balls the benefits required for the consumer." The work of Boston Mayor Tom Menino, who provided the welcome to CTCNet's All-Affiliates Conference in Boston last summer, to introduce a $850,000 budget item for telecommunications for community centers into the Massachusetts legislature also failed. But these efforts are pointing us in the right directions. — *Peter Miller, Kate Snow*

CTCNet Joins Coalition on Universal Service, Internet Access Fees

AUDRIE KRAUSE

Community Technology Center's Network (CTCNet) recently joined several other public interest organizations in submitting comments to the Federal Communications Commission (FCC) on two important Internet policy issues, Universal Service and Internet Service Provider Access Fees. CTCNet participated at the invitation of NetAction, a San Francisco-based organization whose mission includes creating coalitions of public interest organizations in support of technology-based social and political issues.

In March, CTCNet was part of a coalition that advised the FCC against imposing regulatory fees on Internet Service Providers (ISPs). The FCC had asked for comments on this issue because local telephone companies claimed Internet use was burdening the telecommunications network and ISPs should be required to pay them access fees so they could build additional facilities.

In addition to CTCNet and NetAction, other groups participating in the coalition included the United Consumers' Action Network (UCAN), and Computer Professionals for Social Responsibility (CPSR).

The groups pointed out that the claims made by local telephone companies were unsubstantiated and "somewhat hypocritical" since many of the phone companies calling for the regulatory fees were themselves offering Internet service in direct competition with ISPs.

In addition, they argued that the flat-rate pricing of Internet service is important to ensuring that technology is affordable to low-income consumers.

"Any fees that are imposed would be passed on to consumers, making Internet service less affordable," said Audrie Krause, Executive Director of NetAction.

"These added costs would make it more difficult for CTCNet to provide computer access in low-income communities," said CTCNet Director Peter Miller.

Comments on the Universal Service issue, filed in December, challenged industry and government decision makers to come up with innovative ways of expanding access to the Internet.

"We think the FCC's decision on the issue of universal service should be a wake-up call to industry and other government decision makers," said NetAction's Krause. "This decision should be a catalyst to expand access to the Internet and other electronic communications technologies to a broad spectrum of society."

In addition to CTCNet and NetAction, the coalition commenting on Universal Service issues included UCAN, CPSR, and CHALK (Communities in Harmony Advocating for Learning and Kids).

The FCC's decision on Universal Service issues will broaden the customer base of many technology products, they noted. But many of the new users will not have the ability to hire experts to help them install and learn new software and hardware products. Furthermore, cash-strapped public schools and libraries may find it difficult to make effective use of the discounted communications services that they will be eligible for because they won't have the necessary hardware, software, and technical support.

"The growing number of non-profit community centers with technology programs — many of them working to provide schools and libraries in their neighborhoods with telecommunications resources — need to be supported as effective

institutions, too," said CTCNet's Miller.

The groups also recommended that the Commission challenge the computer industry to transform the current "Net Day" program into an ongoing industry practice to supplement the FCC's new policies. "Net Day" brings volunteers into public schools to wire them for Internet access.

"'Net Day' won't be truly effective without access to equipment and technical support," said Krause. "We'd like to see the Commission challenge other government agencies to come up with incentive plans that encourage the industry to work voluntarily toward achieving universal service goals."

Federal policy makers seldom hear directly from community-based organizations, and Krause said CTCNet's participation in the policy debate was particularly important since the organization is directly involved in making technology accessible to more people.

"CTCNet can speak from experience on these issues, and policy makers need to hear what's really happening in our communities," she said.

NetAction is a non-profit organization dedicated to promoting effective grassroots citizen action campaigns by creating coalitions that link online activists with grassroots organizations, providing training to online activists in effective organizing strategies, and educating the public, policy makers and the media about technology-based social and political issues. NetAction publishes an electronic newsletter, *NetAction Notes*, which addresses technology policy issues and provides advice to activists on how to use technology as a tool for community organizing and advocacy. ❖

Audrie Krause is Executive Director of NetAction. Further information about NetAction on the Web is at: http://www.netaction.org. Audrie can be contacted at akrause@igc.org, or at 415/775-8674.

Staking Out the Public Interest in the Merger Between Pacific Telesis and Southwestern Bell Corporation

ARMANDO VALDEZ

The passage of the Telecommunications Act of 1996 dramatically changed the rules that have governed telecommunication policy in the United States for the last 60 years. Now, competition, rather than regulation, is considered the primary means by which consumers will be guaranteed affordable access not only to phone service but to the information superhighway. However, competition has yet to be realized on the scale necessary to affect rates. In fact, since the bill's passage, telecommunication companies have been merging and consolidating at an unprecedented rate. For example, four of the seven Baby Bells created by the break-up of AT&T in 1984 have sought to merge, including Pacific Telesis and Southwestern Bell Corporation (SBC). A preliminary decision by the CPUC on this application is imminent.

If SBC's $16.52 billion bid to buy Pacific Telesis is approved, it will constitute the fourth largest corporate merger in the history of the US, assuming the price is adjusted for inflation. The new company would control more than 20 percent of the nation's access lines, with approximately 50 million customers nationwide and more than $20 billion in operating revenues.

Pacific Telesis and SBC have argued that the benefits of consolidation—greater efficiency, lower prices, and one-stop shopping for consumers—outweigh any risks of lessened competition. But the market dominance of the merged companies will be felt most acutely in "economically unattractive" sectors of the market that are least likely to see competition—rural, low-income, language and ethnic minority and communities of color,

Armando Valdez (avaldez@aol.com) is founder and chair of LatinoNet and author of the White Paper from which this Executive Summary is taken. The full text is at http://www.comsumernet.org.

and seniors and disabled persons. Consequently, those who are least able to pay may be forced to pay higher rates to subsidize Pacific Telesis-SBC's rates in more lucrative, and therefore competitive, sectors of the market. Or, these economically vulnerable consumers may be forced out of the telecommunications market entirely, at the same time that access is becoming more critical to political, economic and social participation in society.

Section 854 of California's Public Utilities Code requires that the CPUC determine if the proposed merger is in the public interest. Conditions may be imposed on the corporations to protect that interest. If the merger is approved, this law requires that the public receive half of the long- and short-term benefits that would result from the merger. The law does not say how that calculation should be made, or how the money should be returned.

We feel the merger, as proposed, is not in the public interest. The corporations have made numerous promises ostensibly to safeguard the public interest, but in most cases their assurances are vague or unsubstantiated and therefore are impossible to enforce. For example, the companies have promised to invest in California's economy, but they declined to attach a dollar figure or a time period to their commitment.

The corporations have estimated that the benefits of the merger would range between $184 million and $273 million. We believe those estimates vastly understate the value of the merger. An expert from the CPUC's Office of Ratepayer Advocacy—an objective source—calculated the value between $2.1 billion and $8 billion. An expert hired by The Utility Reform Network (TURN), a consumer advocacy organization, estimated the value at $3 billion. Assuming that the calculation might include some services that are not regulated by the Commis-
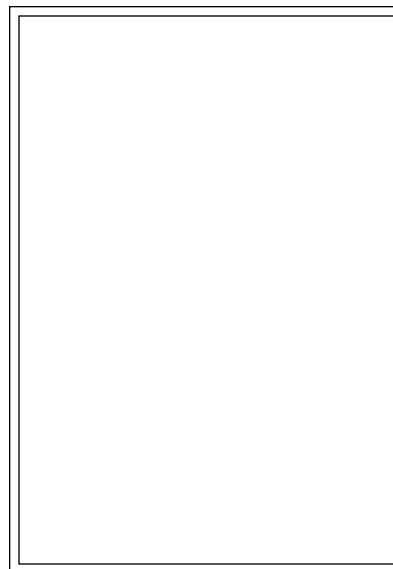
Armando Valdez at a Liberty Hill community technology forum, just before the "Opportunity Through Technology" Conference last December in Los Angeles .

sion, they also reasoned that $2 billion would be a fair estimate.

We believe that $2 billion is a fair and conservative estimate of the merger's value. Half of that amount, $1 billion, should be returned to consumers. Pacific Telesis and SBC have argued that ratepayers will benefit from the merger as competition forces the company to lower its rates. However, the companies have offered no guarantees when and if consumers will ever see those reductions. Thus far, California ratepayers have yet to see any savings as a result of the new incentive-based regulatory framework.

The corporations have signed an agreement with 11 California community groups in which they promise to provide up to $50 million over ten years for a community technology fund. However, their attorneys have withdrawn the Community Partnership Agreement from their merger application so the CPUC cannot impose guarantees or penalties to ensure enforcement.

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We propose that half of the $1 billion obligated to the public, or $500 million, be refunded to the ratepayers immediately after the merger is approved. The other half should be used to support community and consumer technology programs that would provide long-term benefits to the public. We are urging the CPUC to require the corporations to fulfill their promises under the Community Partnership Agreement as a condition of the merger. In addition, we propose that, as a condition of approval, the CPUC require the corporations to invest:

Using Public Property in the Public's Interest: Digital TV, Free Time, and Spectrum Giveaway

At a press conference April 2nd, Common Cause released its latest report "Channeling Influence: The Broadcast Lobby & The $70 Billion Free Ride." The report examines the political history of the provisions in the Telecommunications Act of 1996 that allow broadcasters to double their allocations of valuable, publicly-owned spectrum to make the transition to digital television.

At the morning press conference, Common Cause was joined by Paul Taylor, Director of the Free TV for Straight Talk Coalition; Gigi Sohn, Executive Director of the Media Access Project; Joan Claybrook, President of Public Citizen; and Andrew Blau, Director of Communications Policy and Practice at the Benton Foundation. The participants are united in a call to the Federal Communications Commission to attach increased public interest obligations on broadcasters' licenses to provide digital television.

The greatest single cost in most campaigns is the purchase of TV ad time. Candidates are continually raising money to buy exposure time. Free time proponents aim to free candidates from fund raising pressures by offering them inexpensive time to address voters.

Common Cause is a citizens' grassroots lobby with 250,000 members throughout the country. Common Cause is dedicated to making government more open, honest, and accountable at the national, state, and local levels. "Channeling Influence: The Broadcast Lobby & The $70 Billion Free Ride" is the latest in a series of papers by Common Cause on corporate welfare. [For more information, see URL http://www.commoncause.org/]

Mr. Taylor, a former reporter for the *Washington Post*, told journalists that they have missed this story. The giveaway of a public resource valued at up to $70 billion should be a major story for every news outlet. Coverage, however, has been scarce.

Ms. Sohn noted that the Media Access Project (MAP) is a public interest telecommunications law firm that represents the public's First Amendment rights before the FCC and the courts [see http://www.essential.org/map/]. In addition to free time provisions, MAP is seeking requirements for more children's educational programming and noncommercial uses of spectrum capacity.

Ms. Claybrook of Public Citizen urged viewers (the event was televised on C-SPAN) to call FCC Chairman Reed Hundt at 202.418.1000 and let him know that they are concerned that public property should be used in the public interest.

Speaking to reporters after the program, Mr. Blau noted the growing interest in this issue. In October 1995, Benton convened a press briefing when it released "Pretty Pictures of Pretty Profits: Issues and Options for the Public Interest and Nonprofit Communities in the Digital Broadcasting Debate." "We're seeing a ground swell," Blau said. "Americans are tired of being fleeced."

Benton's Debate on the Future of Television page (http://www.benton.org/Policy/TV/) follows the continuing conversation on how television can serve the public interest.

* $25 million over five years to create and support an independent consumer education program to help consumers, particularly low-income and language-minority communities, become well informed about their telecommunication choices and to help guard them against unfair marketing practices and aggressive advertising campaigns. The money may also be used to ensure that the public's interests are represented in regulatory and legislative matters.

* $150 million over five years to create and support sixty community technology centers in communities with the lowest socio-economic indicators for income, education, employment and telephone penetration in order to ensure that emerging technologies do not by-pass low-income communities. The centers will be equipped with state-of-the-art technology and provide training and support to community members, including job training for the community's youth focused on telecommunications and information technologies.

* $60 million over five years to wire schools and public libraries in California's lowest-income neighborhoods with high-speed, high-capacity fiber optic lines and an additional $20 million for the necessary hardware and software, and training, and technical support needed to ensure that the infrastructure is used effectively.

* $10 million over five years to fund college scholarships for low-income students majoring in telecommunications and computer science.

Due to the state's size and influence, the CPUC's decision on the SBC-Pacific Telesis merger will influence the shape of local competition in telecommunication services throughout the country. But more immediately, it is likely to determine the direction and character of California's telecommunication market for the foreseeable future. In order to ensure that the public's interests are protected, we urge community leaders and consumer advocates to join the public debate on this matter and endorse the recommendations outlined in this paper. There is only a short window of time for public comment before the Commission makes its final decision in mid- or late March, 1997. ❖

The Telecommunications Access Act of 2001

BARRY FORBES

From Town Meeting to Sound Byte

The days of strolling down to a town meeting for a spirited debate on public issues is long past. Today, we get soundbytes on entertainment television, thirty-second commercials on complex issues, call-in talk show harangues, flashy commercial web pages, and flaming e-mail attachments.

No one can deny that the world of communications is swiftly changing around us. Yet not everyone agrees on the impact that these changes will make on our culture, our form of democracy, and on our everyday lives.

What cannot be disputed are a few basic observations:

* The media and telecommunications industries in the United States are the best in the world: they are the most diverse, the most advanced, the most accessible, the most dependable, and the most inexpensive. This has generally been the result of a combination of free market enterprise and regu-

Barry Forbes has served as Executive Director for the Alliance for Community Media since July 1994. After work at public TV and radio station WGBH in Boston, WMFE-TV/FM in Orlando, and WAMU-FM in Washington, DC, Barry served as a fundraising and management consultant for over 150 public radio stations at The Development Exchange. Before joining the Alliance, he served with the Pacifica Foundation radio network as General Manager of Houston station KPFT, and director of the Pacifica Interconnection Project which resulted in satellite distribution of alternative radio programming. A "certified fund raising executive (CFRE)" from 1987 to 1993, Barry has been active on the boards of local chapters of the National Society of Fund Raising Executives; served as district finance chair for the Fairfax County Democratic Committee; was founder, executive producer and host of the weekly public access TV show "Gay Fairfax," which won a national Hometown Video Festival award; was elected to the Board of the National Federation of Community Broadcasters; and served on the board of the Fairfax Cable Access Corporation. Barry is at bforbes@alliancecm.org and ends his electronic signature: "Do what's right. Do it right. Do it right now."

lated monopolies. While these industries have exerted a powerful influence on their own legislation and regulation, they have been built on Americans voting with their dollars on products and services.

* The media and telecommunications industries use public property for their distribution networks: television, radio, direct broadcast satellite (DBS) television, cellular telephones, and pagers use the broadcast spectrum; and telephones, cable television, and computer networks use public rights-of-way. This public property is managed and regulated by various levels of government.

* Companies within the media and telecommunications industries are merging at a faster rate than ever before. Deregulation within these industries is creating fewer and larger corporations which cross several fields of telecommunications. For example: entertainment-based Walt Disney Co. bought out broadcast giant Capital Cities-ABC; computer software developer Microsoft Corp. launched the on-line Internet service MSN, developed cable television co-venture MSNBC with General Electric/NBC, and has purchased WebTV Networks, Inc., which provides television set-top boxes to access the Internet; Rupert Murdoch's media conglomerate News Corp. is attempting to add American Sky Broadcasting satellite company (parent of Direct Broadcast Satellite service EchoStar) to his current newspaper, publishing, film, broadcast network, and television production subsidiaries; and long distance telephone service provider AT&T is not only attempting to get into the local telephone service business but in one year has signed up 800,000 subscribers to its new Internet service.

* These merging entertainment-based media industries are being used more today by candidates seeking public office at all levels, by advocacy and special interest groups attempting to influence legislation and regulation, and by the general public to receive basic

information for decisions at the ballot box. However, public discourse on issues is being reduced to briefer news updates, more carefully orchestrated "debates," and more political commercials at the expense of dialogue.

The Oxymoron of "Free" Speech

Therefore, those who believe that open public discourse continues to be the basis of the American democracy face a dilemma: how to advance the theory and practice of "free speech" from the town meeting of the past to the commercially-driven and technologically-advanced telecommunications networks of the present.

In order to make this cultural leap, three basic problems must be solved:

* Access: People must be connected to whatever forum provides open public discourse to allow people to participate in a dialogue rather than be passive recipients of information and entertainment.

* Economics: A cost-free stroll to the public street corner or public library has been replaced by buying expensive electronic equipment and telecommunications services. Although inexpensive to some people, the cost of participating in the new electronic marketplace of ideas is prohibitive to most people.

* Knowledge: People need to know how to use the equipment and telecommunications services, as well as to understand how to get the most benefit from the "electronic street corner."

Community media organizations strive to overcome these three problems. However, while community involvement in telecommunications is generally seen as a public good, over the past few years ongoing public funding has been threatened:

* Public broadcasting has seen its funding cut dramatically — and may experience the eventual elimination of Congressional funding altogether.

* Public, educational, and governmental (PEG) access television organizations have been relatively successful in securing funding through local cable television franchise fees; however, the cash crunch from local municipalities and competition from direct broadcast satellite (DBS) television service is beginning to squeeze both franchise payments and the amount of funds passed on to community media organizations.

* Community computer networks have never had sustainable public funding — and the one federal source for major grants (the National Telecommunications Information Administration's Telecommunications Information Infrastructure Assistance Program) has been cut and may not survive future Congressional funding cycles.

Community Media Platform Politics and Practice

In order to bolster support for community media at the national level, the Alliance for Community Media has created and advanced this public policy platform:

* <u>Protect Fair Competition.</u> Competition promotes efficiency and produces more varied choices for consumers. Moreover, converging communications technologies have blurred many of the distinctions which once existed between types of telecommunications services, and between the entities that provide them. Data, voice, and video are now all being transmitted over telephone lines, through the airwaves, via coaxial cable, and on fiber-optic networks. Therefore, telecommunications reform legislation should recognize that all like services must be regulated in a consistent manner, regardless of actual or constructive ownership. Specifically, all providers of telecommunications-by-wire should obtain franchises from the states and/or cities in which they do business, regardless of whether the service provider calls itself a cable operator, a telephone company, an electric company, an electronic publisher, or some other entity.

* <u>Require Fair Compensation For Use Of Public Rights Of Way.</u> The Alliance believes that the streets, highways and roads of the nation are the property of the residents of local communities. As trustees of

these public assets, local authorities should have the authority to offer leases or easements for fair market value. Therefore, telecommunications legislation should recognize the right of local and state franchising authorities, including state Public Utilities Commissions, to impose fees, taxes, or rents for use of public rights of way, clarifying that in-kind payments for PEG access are an appropriate payment for such rights. The equipment, services and facilities necessary to utilize PEG access effectively should also be considered an appropriate part of a service-provider's compensation to the local government.

* <u>Permit Local Determination Of How Communities Are To Be Served.</u> PEG access provides an exemplary model of how services essential to the public welfare can be provided without any taxpayer expense or taxpayer involvement. Decisions about PEG access are made entirely at the local level, as a private matter between a local franchising authority and the cable system operator. The Alliance believes that this simple and effective regulatory model should be applied to all entities providing direct video services, regardless of federal regulatory status. This will ensure that programming reflects local interests and meets local needs. Therefore, telecommunications reform language should expressly state that all video providers are subject to the jurisdiction of local franchising authorities, and that these authorities are authorized to impose such fees, rents, taxes, or other conditions as may be appropriate for "public necessity and convenience."

* <u>Provide True Universal Service.</u> Universal service which guarantees every American the ability to connect to a telecommunications line is extremely important. But physical connection to a network by itself is not enough. True "universal service" recognizes that, in an age of increasing interactivity, Americans have the right to create and transmit information, not just passively receive programming. Our telecommunications policy must recognize that local groups — churches, charities, YMCAs, Little Leagues, secondary schools, and civic organizations — have a right to be heard. Therefore, telecommu-

nications reform must create a mechanism which will provide, not only channel capacity, but the equipment, services and facilities which permit individuals and community groups to use that capacity. Although the Alliance prefers a mandate, it will support the concept of allowing local or state franchise authorities to make the decision to request PEG access capacity, equipment, services and facilities from franchises.

* <u>Promote Community Support And Democratic Discourse.</u> PEG access programming supporting adult education promotes a better trained work force and higher levels of economic productivity. PEG access can turn all Americans into information "haves." Therefore, the Alliance supports legislation which ensures that educational and community institutions are physically and financially able to regularly make video contacts with their members, their students, and their larger communities.

In order to advance this platform across all telecommunications networks, the Alliance National Board at their October 1995 meeting passed the following resolution:

To pass, by 2001, the Telecommunications Access Act, which would guarantee every person free or low-cost access to producing and receiving multi-media information over any public network which uses public rights of way, by providing community-based organizations with the needed funding mechanisms, capacity, interoperability, technical information and accessibility.

The reasons that the Alliance chose the year 2001 for passage are: (1) a specific target date is preferable in order to set a goal for the long-term workplan; (2) at least five years would be required to develop the national, state, and grassroots support of such a bill; and (3) Congress would not consider a new telecommunications bill so soon after the current bills which became the Telecommunications Act of 1996. (This is longer than the last period between telecom bills — four years from the Cable Act of 1992 to the Telecommunications Act of 1996.)

While Alliance members and allies were successful in preserving cable television franchise fees in the

Telecommunications Act of 1996, much work lies ahead in advancing the proposed "Telecommunications Access Act."

Telecommunications Access Act

As envisioned by the Alliance, the Telecommunications Access Act (TAA) would:

* require potential licensees of advanced broadcast television services to submit competitive bids which set aside a portion of the capacity for public, educational, and government (PEG) use;

* require licensees of terrestrial and satellite broadcast spectrum to pay annual franchise fees to the federal government, a portion to be transferred to a National Telecommunications Endowment Fund;

* require telecommunications entities using public rights of way and easements for their cabled or wired networks which cross municipal lines to pay annual franchise fees to the state government, a portion of which would be transferred to the appropriate state's Telecommunications Endowment Fund;

* require telecommunications entities using public rights of way and easements for their cabled or wired networks within municipalities to pay annual franchise fees to the local government, a portion of which would be transferred to the appropriate municipality's Telecommunications Endowment Fund;

* except for a small percentage for administration, the funds from the state and National Telecommunications Endowment Funds would be granted on a matching basis to local communities to create and sustain non-commercial community media facilities, equipment, networks, and training;

* eliminate all other public interest requirements for those telecommunications entities which provide this franchise fee, capacity, and connectivity;

* eliminate all rate regulations for those portions of the telecommunications entities' business in which true competition exists;

Obviously, the "Telecommunications Access Act" will get nowhere fast without strong support from the grassroots, from the telecommunications industry, and from

ACM/PEG access centers are among the fastest growing sector of CTCNet membership. CTCNet provides a range of resources to help community cable access expand into becoming "New Media Centers"; ACM affiliates provide CTCNet with some of its most sophisticated political leadership as well as experience and resources in video. Here John Donovan, Access Coordinator for Cambridge Community Television and New England ACM Chair, hosts the quarterly New England CTCNet January meeting at CCTV.

Congress. The Alliance has developed strategies to involve all three in pushing for the passage of the TAA.

Strategies for Building Grassroots Support

* Promote public awareness through frequent press releases, media interviews, opinion pieces placed in the national and local press, targeted advertising and mass media coverage of a series of "telecommunications in the public interest" seminars;

* Create a database of community media advocates by requesting affiliate organizations to share their mailing lists and/or distributing sign-up cards during training sessions and at their facilities;

* Assist local organizing of new access organizations in key states and cities as part of the Community Coalition Initiative project;

* Build coalitions with other national organizations through mailings, fax broadcasts, orientation meetings, and participation in each others' conferences.

Strategies for Building Telecommunications Industry Support

* Promote industry awareness through trade publication press releases, involvement in a series of "telecommunications in the public interest" seminars, and private meetings with industry representatives;

* Emphasize the advantages of rate deregulation and elimination of public interest requirements, "level playing field" for all telecommunications industries, and "loss leader" effect for advanced telecommunications services;

* Work with industry representatives in developing legislation and regulation.

Strategies for Building Congressional Support

* Provide regulatory history through Federal Communications Commission (FCC) comments on related issues, such as on establishing an administrative organization to oversee the educational and

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informational programming discount rates on direct broadcast satellite (DBS) television services and on the giveaway of digital television spectrum;

* Promote public and industry awareness through frequent press releases, media interviews, opinion pieces placed in the national and local press, targeted advertising, and mass media coverage of a series of "telecommunications in the public interest" seminars;

* Meet with members of Congress and their staff and provide them with legislative, regulatory, and judicial support materials on major issues of the TAA;

* Organize each state to pass a state version of the TAA by recruiting state coordinators, research how each state legislation would be affected by a state TAA, organize citizen lobbyists, mail support materials to each state legislator and key staff members, and organize state lobby days;

* Recruit co-sponsors of the TAA through personal meetings and provide evidence of support from their constituents.

United We Access

Just as the regulatory agencies are divided into departments that reflect outmoded telecommunications divisions, so are non-profit organizations categorized by technologies: community radio, public television, community internet networks, libraries, PEG access television, and more. We've seen how commercial telecommunications conglomerates solidify their impact by merging and creating co-ventures — non-profit public interest groups must follow their lead or remain ineffectual.

The "Telecommunications Access Act" can unite us all by providing a "big idea" that can unite us the way that our individual technologies are already converging. Of course, the odds are against us, just as the odds were against a ragtag group of rebels in one English colony in the late 1770's. But with a bit of moxy and savvy, we may be able to establish a new digital culture with a successful telecommunications industry, a spirited public forum, and a thriving and participative democracy.

Here's to the new United States of Access! ❖

"Building Community Through Media"

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"Ensuring everyone's access to electronic media."

The ACM 1997
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Available from ACM:

State and Local Advocacy Handbook

and

The Community Media Review

(published bimonthly)

*** Upcoming Issue ***

Training for Citizen Empowerment and Community Development
edited by jesikah maria ross & Kelly Aiken

(see page 51)

acm-ctcnet@igc.org —

The SIG and discussion group

At the 1996 ACM Conference in Washington, DC, CTCNet members of the alliance and interested PEG access center activist established the CTCNet SIG. An electronic discussion list was subsequently established for the 50 members and any other interested parties. To join, send an email message to majordomo@igc.org with the message: subscribe acm-ctcnet.

At the Seattle Community Networking Conference, Barry Forbes (left), with Peter Miller, CTCNet, and Sue Beckwith, Austin FreeNet.

Computer Learning Centers, Housing, and Urban Development

DON S. SAMUELSON

The federal Department of Housing and Urban Development (HUD) is withdrawing from the subsidy of spaces. It is proposing to substitute short term housing vouchers to residents for multi-year Section-8 contracts to projects. This may well result in the failure of many of its subsidized and insured properties, and an S&L-like liquidation of its inventory. 1996 will be remembered as the year in which the federal government substantially abandoned its commitment to housing as a basic human need. It was, as Jason DeParle wrote for the cover story for the *New York Times Magazine* last October, "The Year That Housing Died." Unfortunately, many of the residents in HUD properties already need employment and training assistance, day care and other social services, as well as subsidized rent. These needs will increase dramatically when welfare reform initiatives begin to be implemented by the States.

At the same time that this historic abandonment is taking place, HUD is aggressively promoting the development of on-site enhanced resident services, primarily through the creation of computer technology learning centers, an initiative it calls "Neighborhood Networks," begun in September of 1995. It's in the tradition of the most far-reaching and progressive federal vision of housing and urban development.

HUD has recognized, for a number of years and in a variety of ways, that the individuals and families living in its housing need more than low cost rent. Over the years, HUD programs have absorbed the costs of resident services coordinators into annual budgets. Public housing programs, in particular HOPE VI, have included day care and work preparation services as well. Drug Elimination Grants

have funded, in addition to surveillance equipment and fences, educational training programs to promote work and self sufficiency as an alternative to drugs. These programs, together with a new corps of Social Services Coordinators, have gone far in promoting self-sufficiency in housing. The need for comprehensive and holistic approaches to resident improvement programs is now accepted as gospel.

HUD has also come to appreciate that rehabilitating apartment projects without simultaneous efforts at neighborhood, community, and regional economic building is an unpromising exercise. This was the assumption underlying Model Cities, Enterprise Zones, Comprehensive Planning, Community Development Block Grants, and, more recently, Empowerment Zones. The problems of deteriorated neighborhoods are the interrelated problems of housing, education, drugs, health care, crime, lack of jobs, and the family and initiative-destroying incentives imbedded in the current welfare system. As the Committee for Economic Development concluded in its book *Rebuilding Inner City Communities,* the problem of distressed communities is the absence of "social capital" and the solution can be found in its recreation. Alleviating the social strains on our stock of affordable housing needs to be part of a comprehensive, holistic, and sustainable community rebuilding of community and social capital.

HUD has also concluded that these efforts need to involve residents in meaningful ways in the design and implementation of these programs. Programs need to be "resident driven." There needs to be more "buy in" from the people. There is importance to "bottom up" planning and recognition that "one size fits all" type solutions seldom work. Simply put, there need to be mechanisms that involve residents with meaningful efforts in making these programs work. And because large numbers of HUD residents

The Year That Housing Died

"There probably aren't more than a dozen people who have read this year's housing appropriations bill, but its eye-straining type breaks new ground in the revision of the social contract. With one obscure sentence, the Federal Government has essentially conceded defeat in its decades-long drive to make housing affordable to low-income Americans. Even in an era of government retreats this one stands out, both for its importance and its odd election-year invisibility. No one seems to have noticed, least of all the candidates. But two decades of rising rents and falling wages have created record numbers of people, including working people, who can't afford to pay the rent.

"The government's response is noted on page 29 of the housing bill's accompanying report. There, Congress specifies the number of "incremental certificates and vouchers"—in English, the number of additional families that can expect rent subsidies from the government this year. Housing analysts monitor this number the way pitchers study batting averages; it is the best single summary of what they need to know. Protesters hit the streets during the early years of Ronald Reagan's Presidency when the Government 'slashed' the number of new families getting help to 40,000 a year, from previous highs of about 400,000. Oh, for the good old Reagan days; the bill that President Clinton signed last month drops the number to *zero...*"

—Jason DeParle, "Slamming the Door," cover story, *New York Times Magazine*, October 20, 1996, p. 52.

will need a variety of services, an efficiency might be achieved by introducing and connecting residents to these services from the housing site. If housing were to be looked at as a solution to the problem, rather than as a liability to its residents, then several exciting possibilities begin to emerge.

Using Technology Planning to Pull Resident Services
Together in Waukegan, Illinois

Niles Terrace Apartments

In the largely Hispanic community in the post-industrial town of Waukegan, Illinois, 40 miles north of Chicago, Niles Terrace Apartments is a moderate-income government-assisted project which is currently undergoing a HUD-funded rehabilitation of both the physical site and its social services. From the beginning, Niles Terrace was envisioned to be a showcase to illustrate how a government-assisted housing project could be transformed from a warehouse for poor people into a "village" that assists residents in achieving their self-sufficiency goals. Planning for its computer learning center represents a practical case study in developing and integrating programs in a holistic approach through Neighborhood Networks.

The process began by reaching out into the community to create collaborations and alliances, and the first stop was at the neighboring Clearview School. Over 20% of the students at Clearview came from Niles Terrace. The principal of the school has an interest in developing closer relations with its residents. Some residents had already formed a study group to support English as a Second Language. Some parents had begun an informal pre-school program. The School offered to help in both of these programs with materials, space, and instruction. At present, there is a 20 student pre-school program — Kids Kampus — operating out of Niles Terrace. It will expand to 40 students when the rehabilitation program provides for the expanded space. The operators of Kids Kampus are working to connect their efforts with the basic K-5 program at the Clearview School, and with the pre-school efforts of the Waukegan School District's Whittier School, and with the evaluation program of the acclaimed Erickson Institute. The hope is that the quality of the on-site pre-school program will be of sufficiently high quality that it will qualify for funding under the State welfare reform block grant funding.

The next stop was at the Lake County United Way. They are familiar with all of the social service and income support programs in Lake County as well as sources of corporate and individual financial support. This led to the Waukegan Federation for Employment Training, led by Executive Director Tom Sullivan, a Casey Foundation-funded demonstration in the State of Illinois to help reorganization in the delivery of social services. The program has organized information on service providers, their programs and requirements and developed a one-stop point of entry so that users of social services can fill out one application form and have a single case manager as they work their way into and through various service providers and programs. The Federation is interested in developing a demonstration site to show how users of social services could access service providers in an efficient manner. Niles Terrace is interested in helping its residents connect to needed services. There is a natural marriage of interest.

In exploring work preparation and placement resources, there was a slight detour here to the State of Wisconsin's "best practices" one-stop program at the Kenosha Jobs Center. Everyone in the county interested in welfare assistance has to enroll to start a program of skills assessment, career planning, job search and placement. Applicants don't get welfare assistance without developing and working on a personal self-sufficiency plan. At Niles Terrace, the on-site housing program has a head start by creating "job clubs" and various sorts of peer support programs that can connect these efforts to results.

The next stop was at HUD to create a computer learning center to be supported by Neighborhood Networks. Fortunately, Niles Terrace received $40K in HUD funds to support the on-site computer learning center. The general plan is to use the computer learning center to leverage the work of the resident services manager in implementing the resident services plan that had been developed for the rehab. Computers are to be used in the pre-school program. There will be a general introduction to computers and technology for adults, in addition to instruction in specific computer applications. The computers will be used for English as a Second Language and literacy programs, as well as the programs

By creating computer learning centers directly at housing sites, the Neighborhood Networks program leapfrogs over the notion of merely providing resident services on-site to developing an actual tool towards the realization of specific self-sufficiency objectives. Furthermore, the program has been introduced at a time when there is great concern over the continued viability of government housing due to the withdrawal of Section-8 assistance and welfare benefits, thus bringing attention back to the potential of housing as a vital aspect in the well-being of millions of Americans.

HUD is right in that an even greater efficiency might be achieved by using on-site Neighborhood Networks computer learning centers to promote the types of services necessary to implement welfare reform through such programs as "Success in School," "Success in the Workplace," the connection of residents to social services, and the building of resident skills in the use of computers and other technology work tools. The program, overall, has much potential in its ability to spring forward the notion of provision of resident services on-site in housing despite its current general lack of support on the federal level.

Recent developments in public policy can also aid in the redevelopment of housing as a catalyst for resident services. The Telecommunications Act of 1996 and the concurrent state public utility commission proceedings and legislative opportunities can provide support for establishing computer learning centers in low-income housing. Broad band cable access, a mix of old and very new equipment, and creative multi-media instruction in both traditional education and preparation for the world of work are just a few of the ways that telecommunications companies can become involved in aiding low-income housing. At a point where the federal government is withdrawing major support for most housing programs, we are yet at the threshold of the transformation of worn-out government housing from "projects" to "electronic villages" for assisting parents in providing high-quality pre-school education, for helping adults

develop realistic career plans and jobs, and in assisting families achieve self sufficiency. Converting housing projects into electronic villages and connecting them to community assets such as schools and libraries, creating social capital in the process, can even be a stimulant to the redevelopment of surrounding neighborhoods and inner city communities.

In visualizing these concepts of providing resident services, the reality should be separated from the rhetoric. The Neighborhood Networks program has no direct funding, and related to this lack of funding, it suffers from a chronically low pool of resources from which to draw. Yet there is the potential to catalyze the centers of current national activity which can facilitate the creation of social capital in housing sites. As such there exist five streams of activity that, if connected and pulled together, can become a mighty river of action to build human social capital.

The first is the computer learning center (CLC). CLCs exist in a variety of settings, both public and private: schools, libraries, government housing, community centers, parks, colleges and universities, family support centers, store fronts, etc. They serve pre-schoolers, K-12, teens, the unemployed, the underemployed, and the elderly. They support instruction programs related to literacy and success in school, workplace preparation and job search functions, and connections to all sorts of information, experiences, the Internet, and social services. They can be open-ended discovery centers. They can be used to support very specific program objectives and target specific populations. There is rich diversity out there at the moment which should be explored and duplicated where applicable.

The second relates to HUD. As of the beginning of April, according to Diana Goodwin Shavey, a leading HUD spokesperson for Neighborhood Networks, there are 136 centers in operation, 600 active plans, and a higher number continuing to flow in. With few exceptions, HUD is not putting new money into these programs. But, it is relaxing regulations so that rental increases, replacement reserves, and other project re-

related to skills assessment, career planning and job search. The computer learning center is to be used for: programs related to Success in School and Success in the Workplace, access to social service programs, and a general introduction to computers and technology.

The sixth stop was back at the Clearview School and the Waukegan School District to cement the earlier collaborations. Niles Terrace contributed $15K to the Clearview School so that it could purchase state-of-the-art computers to drive some of the creative software appropriate for K-5 education. Clearview, in turn, contributed its Spanish speaking computer learning center director, Angel Figueroa, to provide 320 hours of organizing, curriculum planning, and instructional services to the computer learning center at Niles Terrace. An effort was made to collect examples of instructional programs from other computer learning centers throughout the country. These examples were made available through CTCNet and HUD's Neighborhood Networks and Campuses of Learners programs.

Groundwork for additional steps has been laid, too. There are members of the Waukegan Library Board who are particularly interested in the potential of technology and computers in expanding the service coverage of the library, and the Library's Director attended the last planning meeting at the Clearview School and expressed his desire to keep this issue on the front burner. Last June, Jody Kretzman made a local presentation applying the principles in *Building Communities* sponsored by the United Way of Lake County, Clearview School, the Waukegan Federation, and Niles Terrace, and community mapping efforts have been restarted and updated. Finally, we should be adding to the industry advisory group and developing a much broader and more committed constituency interested in the success of these efforts. Laurie Glenn, public relations consultant with First National/NBD, is being supported by the corporation to publicize the self-sufficiency and community-building potentials of the program. DSSA, owner of Niles Terrace until this March, has been involved for the past two years in creating these relationships, and has just handed off this foundation for this ambitious future of "enriched services" and the computer learning center initiative to ACHT-Theta, the new owner, and the Residents' Association. The Resident Services Manager is the on-site "glue" to develop collaborations and partnerships in the community to design and organize the self-sufficiency initiative and assist residents in making full use of all the opportunities offered at the property. Michael Santullano has been serving this function since March of last year and appears interested in further defining and performing this role. Hopefully the seeds which have been planted and the waters of the various streams will bear fruit.

—DSS

Don Samuelson (left) at a residents' meeting last October, conferring with Joseph Johnson, Social Services Coordinator for Northwest Towers in Chicago. Don is on the CTCNet Board of Advisors.

sources can be spent on computer learning centers. It does have the public presence to establish major governmental and private partnerships. Through workshops and other marketing efforts, HUD is encouraging its housing owners to forge partnerships and collaborations with the local community as another source of sustaining the centers. Despite its slow withdrawal, HUD is still a strongly supportive force in today's housing.

The third stream relates to educational reform and early childhood education. Preschool efforts ought to reflect the insights articulated by Irving Harris in his recent book *Children in Jeopardy*. Beyond this, the federal government has made clear its commitment to education. And what better environment to integrate very early, preschool, K-12, and higher education than through housing?

The fourth involves welfare reform where the needs of low-income residents are particularly acute. The Welfare Reform Act of 1996 basically ends assistance to a great number of recipients within three years of its enactment. Reaching out to these people before support ends is a major dilemma currently facing many service providers. To the extent that on-site computer learning centers support high quality work preparation programs as well as pre-school/day care programs, placing work readiness, pre-school, and child care programs in government housing may be a cost effective way for states to

optimize their "block grant" dollars. The use of government housing as the location of these services — particularly where large numbers of residents will be affected by welfare reform — could result in significant savings over alternative methods of delivering such service.

It should be possible to include the ideas of "infrastructure improvements," advanced by William Julius Wilson in his book *When Work Disappears*, towards the current stock of government assisted housing. Unlike traditional infrastructure, such as roads, bridges, schools, hospitals, and airports, which are currently dominated by high technology and highly skilled workers, government housing stock can be maintained on a workable level by less skilled manual workers. Furthermore, this definition of housing infrastructure could be qualified in terms of improving the living of preschool aged children. As a result, computer learning centers, child care centers, and children's amenities can be included along with normal building rehabilitation and repairs. These projects can provide for a host of public works entry level jobs, requiring minimal training, and the possibility for long-term careers and self-sufficiency. With 25,000 to 50,000 assisted housing projects in need of this assistance, large numbers of welfare recipients could be put usefully to work.

The fifth contributing stream relates to the regulatory processes

involving telecommunications. The 1996 Act reconfirmed the historic concepts of basic service and universal access, providing meaningful access to the opportunities in communication to everyone and an affordable package of services that gives meaningful access to the information superhighway. HUD housing is filled with residents facing the near term loss of housing and welfare assistance. They need help quickly. Some marriage of telecommunications technology and quality/interesting program content could make a big difference in their lives. The 1996 Telecommunications Act gives special "preferences" for public entities such as libraries and schools which require telecommunications companies to aid in the upgrading, wiring, and support of technology in these places. Because of the number of people affected, the urgent needs they have, and the logic of providing social services on-site, government-assisted housing projects make good intermediaries for such connections. They are in an ideal position to make collaborations with community institutions. Building social capital in the places people live is the best way to improve their outlook and enhance their neighborhoods. Furthermore, housing projects have to be run like businesses and their results and successes can be easily measured in human and financial terms. All factors taken together, they are the logical choice. ❖
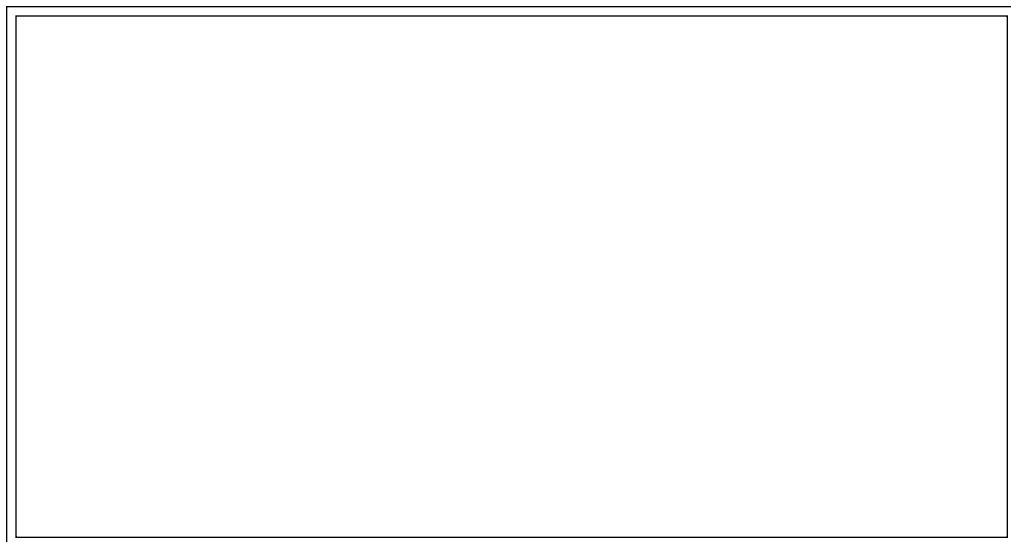
At the "Opportunity Through Technology" conference in Los Angeles last December, Bart Decrem (third from left) is flanked by Benjamin Carson and Deborah Kim, as the three of them presented Plugged In's program of youth services. Alan Shaw (far left), originator of Multi-User Systems in Communities (MUSIC, p. 38) looks on.

A Conference on December 12-14, 1996

Los Angeles, California

Cosponsored by The National Housing Enterprise Corporation, The Center for Governmental Studies, DSSA, and CTCNet

Opportunity Through Technology

Excerpted with permission from the conference report prepared by THE CENTER FOR GOVERNMENTAL STUDIES and JESSICA SIEGEL, Rapporteur

Today, controversy over how to ensure universal access to technology rages in the halls of Congress as the government hammers out the details of the Telecommunications Act of 1996. With a $2.25 billion dollar fund created to connect schools, libraries and communities to the information superhighway, the national debate is only just beginning over how and why to connect the disadvantaged struggling in inner city neighborhoods to the cyber frontier flourishing all around them.

I. The Conference

To address such basic questions, the Opportunity Through Technology conference convened in Los Angeles in December 1996 to discuss how low-income communities can best take part in the great shift changing the face of how America works, learns and plays and to address how best to adapt new technologies to the needs of lower-income families.

Over the three days, Dec. 12, 13 and 14, tenant leaders representing over 5,000 families living in subsidized low and moderate income apartment complexes in 20 rural and urban communities across the nation sat down with U.S. industry and policy leaders specializing in the development and study of advanced communication and information systems to engage in mutually informative dialogue. In a conference highlight, U.S. Rep. Maxine Waters (D-Los Angeles) addressed the gathering, reiterating her commitment to expanding minority access to advanced technology.

Jeanne Ballot of the Center for Governmental Studies, one of the major partners in the conference, can be reached at jballot@aol.com.

The Technology Gap

The conference aimed at finding solutions to bridging the gap between the technology haves and have nots. Indeed, of the 20 tenant participants only one third came from housing complexes fitted with computer centers, according to informal polling. Two thirds of the tenant leaders did not have access to modern computers and had never logged on to the Internet.

According to the 1500 responding housing residents to a preconference survey, only 16% own a computer or even have a close relative who does. Their potential access was slightly higher. Thirty-two percent of respondents knew of a computer center in their apartment complex or in a nearby community learning center.

An extensive computer lab was set up by Doug Rosen of National Homes Trust, Inc. (previously founder of the Electronic Crayon) to simulate real life computer training experiences for the housing leaders. By the end of the meeting, most of them had at least briefly explored the Internet through hook-ups in the conference computer laboratory and gained general understanding of the basic hardware and software recommended to set up a community computer center. The policy experts and industry leaders, for their part, deepened their understanding of the reality that adapting technology to the inner city largely depends on complex social, cultural and economic factors.

II. New Models For Community Computing

Conference presentations described new products and services that can bring some of the benefits Schrauger discovered to more assisted housing residents.

Colleen Schrauger— One Woman's Story

The story of one remarkable woman, Colleen Schrauger, shows the potential that technology holds to open worlds to the poor. Homebound and living on disability, Schrauger is a community leader from the Birchwood Village subsidized housing complex in rural Batavia, NY. Living 45 minutes from the nearest big city in a remote area with limited access to transportation, Birchwood Village residents feel keenly the limits of their isolated community — but not Schrauger, who has traveled the world, fought for her daughter's health rights, searched for jobs, and laid the groundwork for her own paralegal business all over the Internet, all without leaving home.

It was over the Internet that Schrauger learned that her daughter, who suffers from Crohn's disease, had been prescribed a drug that had proven negative side effects. In searching for a job, Schrauger saves time, a difficult walk up three flights of stairs, and her dignity by searching the postings at the local state employment office from her home computer. "If you go in person, you have hours of waiting around," Schrauger says. "You go through a degrading interview each time. They ask you your income and what you've been doing. They ask you in a down tone, do you know what I'm saying?"

Still, Schrauger has had difficulty finding a job as a legal assistant because, she says, employers do not want to hire people with disabilities. So Schrauger, who is crippled by a ruptured disc and spinal arthritis, hopes to create her own business by combining her Internet know-how with her paralegal degree. As a home-based paralegal, she could conceivably earn $30 an hour researching cases for law firms through electronic databases anywhere in the country. "My goal is to be self-sufficient within a year." ❖

A. On-line services: Connect LA

An innovative community-centered system of on-line video, audio, and textual information, designed by the Center for Governmental Studies, provides diverse information on job listings from local employers, local medical facilities, nearby school offerings, and distance learning programs. By clicking on simple icons, users can look at job postings, hear interviews with current employees at a location, post their own resumes, and receive email into their own personal files.

As an interactive medium, Connect LA also allows users to talk to each other, providing the means for new virtual communities to form. In terms of employment, health, and education, the entire system unites in one network a panoply of information traditionally found in separate agencies. Connect LA's wide-ranging link-ups hold the potential to transform the community computing center into a life resource for low-income residents.

B. Telecottage Industry: e.villages

President Clinton's call for private business to create jobs to employ welfare recipients finds no better example than e.villages, a for-profit data processing company that has changed lives, attitudes, and morale in a northeast Washington, DC subsidized housing complex. The e.villages model program trains and employs building residents to create databases and spreadsheets and to provide other data services on a competitive basis. Located on the premises of the housing complex, the e.villages data servicing company is partially owned by its employees. One e.villages employee, quoted in a June 17, 1996 *Washington Post* story, described the importance of the company's profit-making mission to his personal and professional growth. "I have proven something to myself," said Jacque Johnson, 23. "What we're doing is real — a real business. It's not a game."

C. The Global-Local Village: Making Healthy M.U.S.I.C.

Developed by Alan Shaw, an African-American computer scientist at MIT, Multi-User Systems in Communities, or M.U.S.I.C., creates for a large public housing project in Newark, NJ, a cyber neighborhood connecting parts of the physical one surrounding the residents: an elementary school, the housing complex, a local medical school, public library, Baptist church, and social service agency. Users communicate in "rooms" organized around issues, activities, and places. All users have their own log-on password, name, and visual icon. In the Newark pilot, 30 of the 40 computers used are placed in homes of participating residents. Families selected to receive a computer act as team captains for groups of five residents assigned to use that computer, thus fostering the kind of neighborly interaction that was commonplace before fear of crime and disappearing public space turned residents inward behind locked doors and barred windows. Recreating the old-time community newspaper, the MUSIC bulletin boards and chat rooms have helped residents plan parties, pot luck dinners, bake sales, a food co-op, a boy scout troop, and meetings with the local police precinct. In MUSIC, the computers are secondary to Shaw's goal of fostering relationships, "Computers are tools for information," said Shaw. "What you do with information is critical."

III. Community Computing in Action

Visionary leadership, personal relationships, community coalitions, and business involvement are common factors in successful computer center programs.

A. People, not Technology: CTCNet

With seventeen years' experience helping under-served communities create and sustain computing programs around the country the leaders of the pioneering Community Technology Centers' Network reiterated that bringing low-income populations onto the Information Highway depends on an old-fashioned concept: "It's the people. Not the technology," was the message from agency founder Antonia Stone. The most important aspect of any computer center is not the fastest high-powered equipment, but the relationship between the teaching staff, the community, and the center. Friendly personnel, a welcoming environment, and a sense of community pride and ownership sustain a center beyond the initial stage. "There's a lot of money going into hardware and software to the exclusion of the hard part, which is training and support," said CTCNet director Peter Miller. "With under-served populations, the issue is beyond getting wire to people, its training them how to use it."

B. Grassroots Organizing: Break Away Technologies

A tour of the 15,000 square-foot Break Away computer center in South Central Los Angeles was an inspirational highlight of the two-day conference, showing how one man's vision spurred local residents, private businesses, and community leaders to action. The "bottom-up" principle that computers must serve people rather than vice versa lies at the heart of this center founded by local minister Joseph Loeb after the 1992 riots. "When I saw my community up in flames, I said something has got to be done," says Loeb, who sold his car to raise the money to convert his garage into a learning center with 10 computers.

Beginning with only volunteer teachers, Loeb pieced together enough funding from private donations, foundation grants and class fees to open his 100-computer facility, located in an airy, spacious former emergency construction building. With Microsoft as a partner providing cutting-edge software, the center offers the full gamut of computing classes to more than 1000 children and adults a week. "Computer technology isn't an end in itself. That's erroneous," Loeb said. "Technology is a tool. Our goal is to teach leadership and moral excellence."

C. Basketball and Computers: Blazers Youth Center

Parent and local volunteers along with college students teaching for credit are the driving force behind the Blazers Youth Center, an afterschool youth program in Los Angeles that instills "life survival skills" by combining recreation and homework support with science and technology education. From 3 to 6 p.m. each day, students take turns learning word processing or researching their homework on the Internet, and more down-to-earth pursuits like planting food in the backyard garden for the snakes, rabbits and iguanas that bring the natural world into the center. The

program began in 1969 as after-school basketball recreation, but founder Bennie Davenport realized he would have to add a tutoring component. With the academic offerings expanding, computers were introduced in 1985 as one component of the overall learning environment. The center now contains 35 computers, including six which students can borrow to take home. The very process of students checking out the computers is treated as an opportunity to teach responsibility, caring for resources, and proper bookkeeping. The philosophy also extends to the way students learn to think about computers as an aid, rather than as a replacement for creativity. "You don't want to make kids dependent on computers. You don't want to rob them of their critical thinking skills and innate ability to create," Davenport said.

D. Storefront Computer Access: Plugged In

Though located in the heart of Silicon Valley next to one of the wealthiest communities in America, East Palo Alto sits on the other side of the tracks, where liquor stores are plentiful, but residents must drive five miles to the nearest super-market. In the early 1990s, it would seem nothing short of crazy for Stanford Law School graduate Bart Decrem to open Plugged In in a glass storefront. From the street, the center's expensive computers would seem to invite break-ins, but there has never been one robbery of the equipment. Indeed, Decrem believes the very sight of "disadvantaged" children huddled at the computers in the storefront window is a message in itself. "We want the image of the kids at the computers to be in the community," says Decrem.

One of the most riveting conference presentations was given by a 14-year-old Plugged In student, Benjamin Carson, describing how he translated his computer skills into an after-school business offering desktop publishing, multimedia and web design services. Carson said Plugged In has opened future vistas he never before thought possible, while imparting tough lessons about the business world. "The tricky part is satisfying your customer. Basically, your customer is going to try and take

advantage of you," he told the conference, demonstrating better than any textbook how applying his computer knowledge has taught him about life.

IV. Practical Issues In Community Computing

The computer centers highlighted at the conference mainly consisted of freestanding organizations founded by grassroots technology visionaries to educate youngsters, though adults also have access to the facilities in most cases. Tenant leaders struggling to establish and run computer centers in low-income housing projects discussed specific concerns, problems and hopes in serving adult populations.

A. Basic needs versus technology: Glenarden Community-Based Family Learning Center

Located in a Prince George County, MD, subsidized housing complex, this center offers the full gamut of social services and training in one facility. According to the program director, Celia Foster, of the twenty public assistance residents currently enrolled in computers, six have obtained their GEDs, and four have gone on to community college, but so far none have found computer-related jobs. Foster reiterated the importance of intensive skills and educational training required to prepare people with no work history to enter the job market. In other words, computer training must be seen as just one part of a larger skills program for those housing residents with little work experience and low educational levels.

B. The parent-child divide: Shelter Hill

Directors of community computer centers that serve both youth and adults report that the age gap plays out in many ways, from direct skirmishes over using the computer to parents fearful that their children will know more than they do. For example, at the Shelter Hill subsidized housing complex in Mill Valley, CA, the children actually signed a petition to kick the adults out of the center so the youngsters could have more time on the 12 available computers. The kids, it seems, felt that the computers were theirs by right, since the adults are so much slower to adapt. The parents, for their part, made no
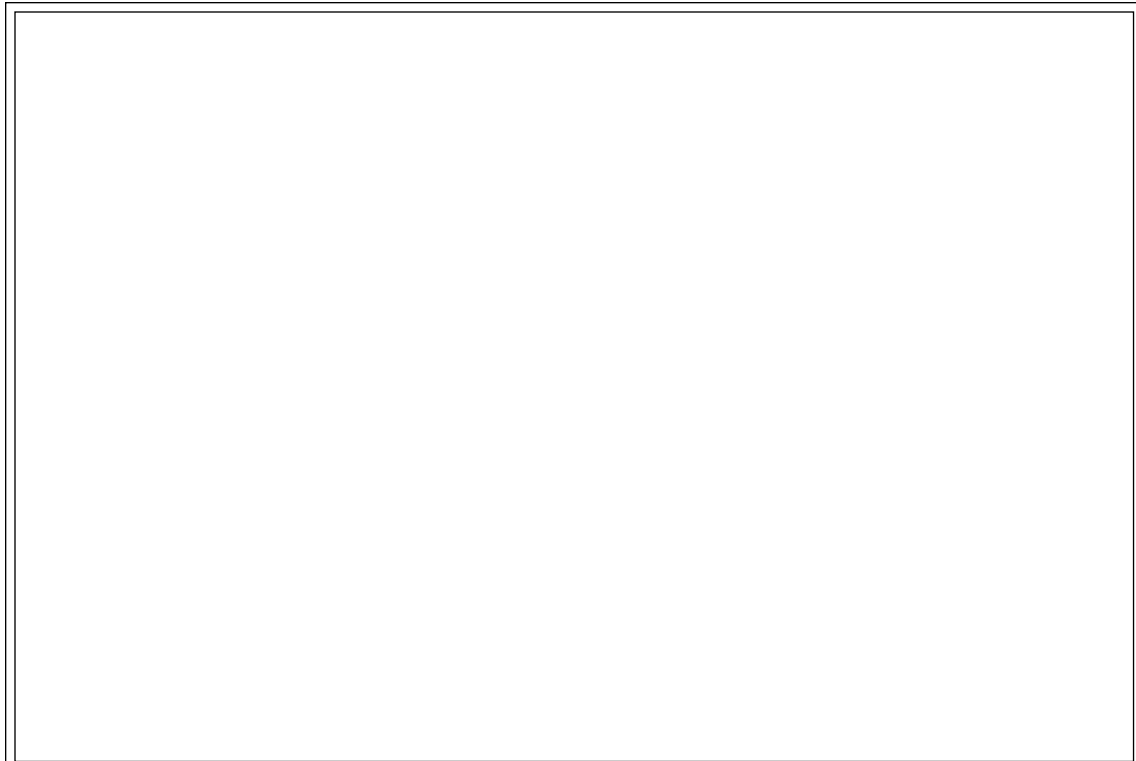
bones about feeling intimidated. Center director Kerry Peirson resolved the dispute by creating separate nights for adults, though children would be allowed on the adult night if they brought their parents. Through this schedule, the children have been encouraged to teach their parents, creating family togetherness out of a previously divisive situation.

C. Technology Is Only a Tool

Though self-evident in theory, the message that human needs must set the agenda for computer applications, instead of vice versa, was by no means self-evident, as seen in the mini drama that unfolded as the conference progressed. The computer world's widespread preoccupation with ever more advanced, speedier technology constantly influenced the tone, content and direction of conference discussion, creating an underlying tension that fueled emotional, illuminating dialogue.

The momentary culture clash between the housing leaders and the technological experts only underlined the importance of organizations like CTCNet helping communities take their first spin on the Information Highway. Throughout the formal presentations, the directors of successful community computer centers such as Breakaway Technologies, Blazers Youth Center and Plugged In warned of the pitfalls of computer worship, but the full extent of the tension between human needs and technological idealization only erupted during open forum in the final hours of the conference, emerging as a kind of microcosm of national debates over technology, society, the rich, and the poor. One Los Angeles tenant leader, voicing the concerns of many, spoke of the overwhelming deprivation affecting her south central housing complex. "I think our real problem is psychological and social," she told the gathering. "We have babies raising babies and you're worried about computers. Let's be real."

Another tenant leader, Abimael Loria of Waukegan, IL told the story of how he helped mediate a late-night domestic dispute in his Niles Terrace housing complex by sitting down with the distraught husband, then the wife. Relation-

At the Chandler Village Neighborhood Network grand opening and ribbon-cutting ceremony, Monday, April 7th. (l to r) Jack Murray, Sr. Vice-President, Insignia Residential Group; Terry Goddard, Arizona State Coordinator-HUD; Deane Ross, President, Associated Financial Corporation; cutting the ribbon, Tapioca Doban, 13 year-old resident; Bruce Rozet, Chairman, National Housing Enterprise Corporation; Diana Goodwin Shavey, National HUD Neighborhood Network Coordinator. Chandler Village is a CTCNet affiliate just outside Phoenix, Arizona, and was planned as the 100th HUD Neighborhood Network Center to open.

ships, he concluded in an impassioned public speech, must come first. "We have to foster trust. After people gather together, then technology can help. How many people believe in technology," he rhetorically asked conference members. "How many people believe in a creator?" A chorus of amens and applause followed.

D. Implementing the message

In discussions of the meaning of "people, not technology," practical suggestions emerged at the conference on how to create, operate and sustain successful community computer centers.

1-Sustainability: A one-time purchase of equipment is just one step in planning a successful computer center, which requires full-time staffing and dedicated full-time leadership.

2- Coalitions: Establishing coalitions with local businesses and community groups is crucial to the ongoing political, economic, and social support.

3-Location and Set Up: The ambiance and physical layout of a computer center is as important as the equipment. The audacity of

Plugged In leaders, who located their computer center in a glass storefront, seemed to go against logic, but the program's success in attracting community support (without any break-ins) seemed to justify the open access policy.

V. Future Needs And Areas For Further Study

The dramatic nature of the closing moments of the conference demonstrated the emotions roiling under the surface when it comes to the relationship between under-served communities (not to mention the rest of society) and technology. To bridge this gap, a few concrete suggestions emerged from program participants, particularly in discussions of how computer centers might be integrated into low-income housing:

A. Jobs Development

On the national scene, computer centers are just now moving from providing basic technology education to creating actual jobs. At Plugged In, high school freshman Benjamin Carson turned his computer skills into after-school work. On a larger scale, e.villages converted a community computer

center in Washington D.C. into a business employing 11 housing residents. Looking to these examples, conference participants hoped that future experiments with grassroots telecottage businesses will provide workable models for creating employment. "Our talent pool is much deeper and more profound than they think," says Kerry Peirson, project director and founder of a state-of-the-art computer center in Shelter Hill Apartments.

B. Further Training

Housing leaders say they need practical hands-on training in the nuts and bolts of starting and running community computer centers, including guidance on writing grant and business proposals to secure funding.

C. Areas for Future Study

1- A national guide to on-line employment listings and employment agencies could help low-income job seekers.

2- A survey of services offered by community computing agencies and institutes would be a good step in coordinating and delivering assistance to start-up centers. ❖

VISTA Opens New Horizons For OCCCN

CARY WILLIAMS

For many community technology programs, the biggest challenge is finding enough money to pay staff members. Funders are reluctant to award grants for operating costs and staff. But often it is staff that make a successful program. Neighborhood technology programs around Ohio received a shot of support last summer when the Ohio Community Computing Center Network became an AmeriCorps*VISTA sponsor and was able to place five VISTA volunteers in community computing centers.

AmeriCorps*VISTA is sometimes described as the domestic Peace Corps. A national service program, VISTA places volunteers in low-income communities to help residents become more self-sufficient. AmeriCorps*VISTA is dedicated to strengthening communities by helping people improve the conditions in their own lives through employment training, literacy programs, housing assistance, health education and neighborhood revitalization. VISTA volunteers, who typically do not provide any direct service, aim to work themselves out of a job.

What did becoming part of AmeriCorps* VISTA mean for the community computing centers? It meant valuable staff time for organizations with limited resources. It meant having people to concentrate on

volunteer recruitment, neighborhood outreach, and grant-writing. It has been an important form of support in establishing these technology programs, all of which are brand new.

Ohio centers have been lucky to enjoy the unique talents and interests its VISTA volunteers have to offer. Jennie Sethna, a VISTA volunteer with the Edgemont Neighborhood Coalition computer program in Dayton, started off as the computer center coordinator, charged with getting the program up and running. As she has accomplished these tasks, Jennie has found time to combine her love of gardens with the computer center by starting a computer/gardening project with women in the Edgemont neighborhood. This spring, women will learn computer basics, including how to use gardening CD-ROMs and how to track income and expenses on a spreadsheet. As spring moves in, the women will go to the Edgemont garden plots and plant. With some luck and good weather, the harvest will provide bounty so that profits can be tracked on the spreadsheets later in the summer.

VISTA volunteers often reflect on getting more out of the experience than they gave. Jill Weidner, VISTA volunteer coordinator at the Marietta Area Community Computing Center is a good example. She has found her VISTA experience to be a tremendous learning experience. Fresh out of college, being a VISTA volunteer provides Jill the opportunity to learn the many aspects of running a program. In addition to her responsibilities in the area of volunteer recruitment and training, Jill also has done some grant writing, learned a lot about computers, and has enjoyed being a part of the MACCC after-school program.

VISTA volunteers really do volunteer. They sign on for a one year commitment, work full-time, and are paid a living allowance of about $650 per month. At the end of their year of service, they are awarded either a cash grant of about $1,000 or college tuition vouchers of about $4,500.

AmeriCorps*VISTA has quickly become an important component of the community computing centers in Ohio. It is a program neighborhood technology projects around the country ought to consider. ❖

Cary Williams is Coordinator of the Ohio Community Computing Center Network and Ohio Regional Coordinator for CTCNet. She can be reached at carwilli@ctcnet.org after mid-July.

Columbus North staff Dottie Merriman and VISTAs Heidi Lorash and Cristy Lorente.
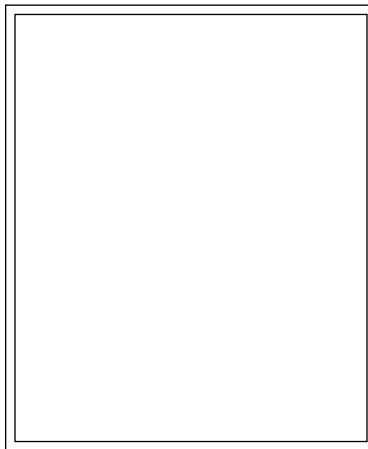
OCCCN 2nd Annual Conference — April 2, 1997

MARSHA MCDEVITT-STREDNEY

The Ohio Community Computing Center Network (OCCCN) held its second annual state-wide conference entitled, Empowerment thru Technology: Working Together for Equal Access on April 2, 1997. Ninety participants attended the conference held at the Columbus Public School's North Education Community Computing Center. The attendees represented twenty community computing centers and social service organizations throughout Ohio. It was a beautiful spring day in Columbus, but Peter Miller was unable to join us because he was snowed in by the April blizzard in Boston.

The keynote address was given by Jamie McClelland. Jamie is the Technology and Policy Specialist for Libraries for the Future, a national non-profit organization of public library advocates. His presentation, "Who owns the Internet? Staking a Claim for Schools, Libraries, and Community Networks," highlighted the actual outcomes of the telecommunications act. He stressed the importance of maintaining public institutions in an age of corporate conglomerations and narrowing fields of information resources. His talk cited statistics identifying a handful of major corporate empires controlling the majority of media and information we have access to today. Jamie called for increased advocacy to support public libraries, schools, and community networks in order to preserve the right to freedom of information and expression.

The morning conference sessions included an introduction to the Internet with Leonard Rivers of Nationwide Insurance. AmeriCorps VISTA's Heidi Lorash, Cristy Lorente, and Jill Weidner presented recruiting, training, and maintaining a solid volunteer corp. Janice Mayes from the Akron Urban Minority

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Edna Pincham, Deputy Mayor, City of Youngstown, and member of the Ohio Community Computing Center Network (OCCCN) Board, speaking at the conference opening.

Alcoholism and Drug Abuse Outreach Program (UMADAOP) led a discussion on setting up outreach programs at community computing centers.

Other morning discussion sessions included information on selecting software, establishing an effective advisory board, and strategic planning. Hands-on workshops included building home pages, working with Powerpoint, and a demonstration by Dr. Leslie
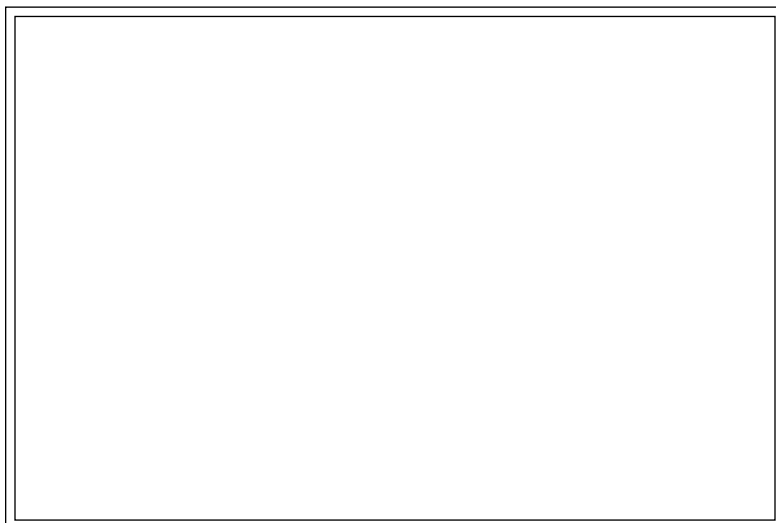
Marietta Area Community Computing Center staff and VISTAs at the OCCCN quarterly meeting at Columbus Volunteers of America Westside Neighborhood Community Computing Center, January 22: (l to r) Jill Weidner, VISTA; and staff Dawn Starr and Benji Krause.

Steinau on the distance learning facilities at the North Education Center, and its potential for community computing centers. Jesse Gamble gave an insightful presentation on successfully linking and maintaining a network in computer centers.

The conference attendees were also busy networking with each other and sharing their experiences and knowledge throughout the day's sessions and breaks. Although the OCCCN is rapidly growing beyond its original fourteen Ameritech funded community computing centers, the network has maintained a grassroots informality that encourages collaboration, support, and enthusiasm. Many new friendships developed and valuable links were established throughout Ohio.

During the afternoon sessions Ellis Jacobs from the Legal Aid Society of Dayton headed a public policy panel with Dr. Tim Best from the Ohio Department of Education's SchoolNet, and Jamie McClelland. Discussion focused on the telecommunications regulations and implications for future funding and accessibility.

There were also sessions addressing programmatic issues such as adult learners and after-school children. Ella Bogard from the Marietta Area Community Computing Center, and Janice Pardy with the North Education Center, shared information on the role of the Adult Based Literacy Education (ABLE) program in their community comput-

Patty Bisker, Bright Ideas Consultant, leading workshop, "Building a Software Library," at the OCCCN Annual Conference.

ing centers. Chad Bratschi, of the Volunteers of America in Columbus, and Israel Najera from the Columbus Urban League provided information about their after-school programs. These community computing centers offer valuable after-school tutoring and mentoring for their neighborhood and shelter children.

The day ended with a general session led by Cary Williams, the OCCCN coordinator and CTCNet regional coordinator. Linda Broadus of Dayton's Edgemont Neighborhood Coalition began the session by sharing her experiences with Ellis Jacobs in the early stages of the development of OCCCN. Cary presented the process many members of the OCCCN steering committee and center representatives followed in developing the OCCCN strategic plan. The plan was developed at a spring strategic planning retreat led by Dr. Donna Varner. I reviewed the vision, mission, and goals and objectives of the OCCCN that were developed during the retreat. The participants then broke into groups and are busy refining the objectives and establishing plans and deadlines for achieving the strategic plan.

The day wrapped up with Mick Knisley of Ameritech drawing names for door prizes. Tom Hanlon, from the Digital Media Access Project in Athens won the grand prize — a cordless phone donated by Ameritech-Ohio. Another highlight of the day's end was a presentation to Cary Williams from Ella Bogard of baby shower gifts from all the centers. Cary has since given birth to a boy and returns to OCCCN and CTCNet July 7th. ❖

The Akron Community Service and Urban League Technology Center

VONCILE MILLENDER

The Akron Community Service Center and Urban League operates Computer Learning Centers at two sites: 250 East Market Street (9:00am to 8:00pm weekdays and some Saturdays 9:00-2:00) and at United Services For All, 470 Wooster Avenue (9:00am to 4:00pm weekdays). Technology programs emphasize education, employment and community, as do Urban League programs in general. Activities at the centers include quarterly workshops designed for individuals who lack computer skills and knowledge concerning the function and use of computers. Both centers experience a flurry of activity during scheduled open access hours, including Internet access and limited on-line services through the World Wide Web.

Once clients register at one location, they are given a photo identification card which gives them the option of using either center. Other programs offered include access time for the after-school latchkey students, two daily hours of access time for senior citizens, and scheduled access time for GED and business technology students.

The Akron Urban League was one of last year's CTCNet/Apple award winners and the equipment been used with all of these programs for a wider range of users, from the five year old to the eighty year old. The most requested software by first through fifth grade children is *First Grade* and *My First Incredible Amazing Dictionary*. The Seniors and Adults especially enjoy Smithsonian's *America*. We service a wide diversity of nationalities, and the *American Heritage* sparks a lot of interest. Marilyn Woods, one of our seniors, is of American Indian descent and was very excited about the history she was able to read and view. *The Family Doctor* is another application that has provided a multitude of resources and information for us all.

Some of our software applications are not accessible because of the limited amount of memory we have. One of our most popular peripherals is the Apple Mac Color OneScanner 600/27—we hope to see the full effects once a color printer is in place. We are currently negotiating with Time Warner Cable to have Roadrunner installed for Internet access. As of now we have Internet capabilities on only three of our terminals, and hopefully, on all terminals in the very near future to satisfy an ever-growing request among our users for Internet access.

We at the Akron Community Service Center and Urban League are proud and grateful to have received the grant from Apple and CTCNet. It has helped with our vision: to provide education and computer literacy to our community, computer access to low-income individuals who otherwise would have limited or no access to computer technology as well as the opportunity to experience the information superhighway. ❖

Voncile Millender is the Computer Lab Specialist for the Akron Community Service and Urban League Technology Center and can be reached at bunchie@newreach.net.

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At the OCCCN Conference, Dawn Starr, Head Technical Aide, Marietta Area CCC, and Ella Bogard, MACCC Coordinator.

OCCCN Software Review

CRISTY LORENTE

Community computer centers that are building or improving their software libraries can invest in the most useful programs by learning from already established centers. At the Ohio Community Computing Center Network Annual Conference on April 2, participants completed a software survey. Following is a list of the most popular software in several age categories, along with commentary of what users find most appealing, interesting or user-friendly.

For preschool children, *Living Books* is the most popular program mentioned. *Playroom, Peter Rabbit's Math* and *Bailey's Bookhouse* closely followed. One person noted that users of all ages can have fun with *Playroom*. The appeal of *Bailey's Bookhouse* seems to be the visual stimulation and amusing pictures that can be printed. *Peter Rabbit's Math* is "good for basic math."

Responses for elementary school children included all of those

Cristy Lorente works with the Columbus North Computer Center and is at clorente@freenet.columbus.oh.us.

recommended for preschool children; one person added that these programs are useful through the age of 7 or 8. Also popular in this category are *Oregon Trail* and *Carmen Sandiego*. *Mario Teaches Typing* is also popular and one person saw the widely-recognized character Mario as the big draw for kids. Ruff's *Bone Tortoise and the Hare* and other CD-ROMs are listed here, with the comments "good graphics" and "easy to control the reading."

Popular software for teenage users had *Oregon Trail* and *Carmen Sandiego* at the top of the list once again. One person says the popularity of *Oregon Trail* is due to the "shooting and hunting" involved. *Sim City* and *Sim Tower* are found here also. *Sim Tower* is proclaimed popular because teenagers are able to attain business success. *Grolier Encyclopedia, Encarta* and *Wrath of the Gods* CD-ROMs are also recommended.

Most community computer centers attract many adults with no computer experience. It is a challenge to make their first

experience with computers a positive one and the right software is a good first step. Several people say that what looks "neat" to the experienced user or center supervisor may be far different from what appeals to a beginner. Advice is given to keep software for beginners simple and practical because most new users come to learn practical skills and not for entertainment's sake. *Solitaire* was mentioned several times as an excellent tool to familiarize a new user with the mouse. The *Windows 95 Tutorial* was cited as a favorite for new users to work through at their own pace and to discover features of the computer. *Touch Typing for Beginners* was also listed here, with a note to center supervisors that new machines are not required for this program.

Four good, old-standby programs are recommended for adults with some computer experience: *ClarisWorks*, Microsoft *Word*, Microsoft *Works* and *Printshop*. *Perfect Résumé* was mentioned as somewhat popular among users, but not recommended if another résumé program is available. Complaints were "difficult and confusing to use" and "not compatible." ❖

Junk Mail Software

BY KEITH SCHLESINGER

Last time we focused on software bargains at travelling trade shows.

If you religiously register your software, you will soon find your mailbox clogged with offers for software direct-by-mail from the manufacturer or publisher. Before you toss all that paper away (and please remember to recycle if you possibly can!), take some time to evaluate the offers.

Typically, offers fall into one of two categories: pre-publication offers and clearance sales of slightly obsolete versions. The first tends to be used for new product introduction, and by very new companies trying to establish market presence.

Keith Schlesinger is a CTCNet Associate, works with EdgeNet in Dayton, OH, and can be reached at kirk@erinet.com.

Fortunately, the computer industry that makes use of direct mail seems almost completely free of dishonest operators. I have bought dozens of programs by mail from almost as many publishers and have never felt cheated. Lower quality material is priced accordingly, so even in the worst cases you still get what you pay for. Most of the time, you get remarkably high value for your dollar.

Some concrete recent examples:

Partition Magic is a program that allows you to re-partition your hard disk without destroying any data. I bought version 2.0 in an Egghead Software store for $45, and registered the product. I just received a mail offer for version 3.0 for $55. That seemed a bit steep, but I called in anyway to see what

might happen. Sure enough, when I gave the sales rep my serial number for version 2.0 from the disks and manual, the price dropped to $30 — a real bargain for such a valuable utility program! Now I can change over parts of my hard drive to the "FAT32" and "NTFS" file systems used by the Windows 95 update and Windows NT 4.0.

A similar train of events led to my upgrading *First Aid 95* to *First Aid 97 Deluxe*. I bought the original Windows error checking and management program through a mail offer for $40, when it was not widely available in stores. When it made it to the stores, the price stayed at $75 for quite some time. The Deluxe upgrade has been in the stores since the fall of 1996, and costs $80. I passed on that, and my patience was rewarded. A mail offer arrived in February for the product at $30, with six additional

free software utilities thrown in. Best of all, the product can be updated over the Web. So, I have two versions of the program and still have not spent as much as it would cost to buy one of them retail.

In the clearance bin at an Office Depot store I found a copy of *TurboCad Designer 2.0*, a limited 1995 edition designed for Windows 3.x, for $15. I sent in the registration card, and within a month had a direct-mail offer for the full edition of version 3.0 for $30. Checking the website for the publisher IMSI (www.imsisoft.com), I learned that version 4.0 was already out, but owners of version 3.0 could upgrade for $40. So, for under $100 I ended up owning three different versions of *TurboCad,* and could freely donate the earlier versions to a CTC while actually saving a little money on the deal!

Accepting free offers on the Web can produce some nice junk mail, too. I signed up for *Britannica Online*'s 7-day trial in the fall of 1996. By January, I had a pre-publication offer to get the Britannica 97 CD for $100, instead of the usual $300. The program had

originally been quoted at $900 when I first used *B-Online*. The CD came with a one-year introductory rate for B-Online for $50. This brought within the reach of many CTC centers the most thorough general reference CD-ROM tool currently available — it beats the heck out of *Encarta* in sheer informational content, although it would win no prizes in a multimedia beauty contest.

If you are on America Online, you know about the log-in junk mail screens making hardware and software offers through the service's "AOL Store." Most of these can be disposed of without a thought, but a few of them are really valuable. Connectix recently upgraded its Color QuickCam video camera unit to version 2, but they have lots of version 1 left. I am sure the upgraded hardware is wonderful, but there is nothing wrong with the original product. During March 1997 Connectix offered a $60 mail-in rebate, bringing the cost down to $140, which is not much more than you will pay for the gray-scale version. As with everything on AOL these days, things were a bit confusing

and my on-line order failed to go through a couple of times, but it finally worked. Also, AOL called back by phone to confirm an order over $100 in value — a very reassuring touch. My QuickCam was in my hands in less than a week.

One of the nicest by-products of taking advantage of junk mail offers is the left-over software they generate. There are major benefits to be gained from the high quality of the earlier versions, which are perfectly good for community users of all ages. The key for CTCs and computer users in general is to obtain capacity, even if it is slightly outmoded. Users and CTC managers alike are better situated financially and substantively to upgrade their skills and software.

The only dark cloud on the horizon is that junk mail offers are overwhelmingly aimed at Windows PC users. This merely reflects the dominance of the PC over the Macintosh in the general marketplace, although the imbalance is not as severe in many CTCs. Perhaps Mac users have some secrets they can impart to the faithful in these pages. ❖

Putting the Power of the Human Voice on the Web

PHIL SHAPIRO

Listen carefully. You can hear them. Voices speaking. Rising up in a whole new way. Explaining, telling, inspiring, preaching, persuading... A new channel of communications has opened up on the web, and the voices filling that channel are telling stories that need to be told, saying things that need to be said, speaking truths that for too long have gone unspoken.

The software that is making all this happen is called RealAudio, created by a Seattle-based company named Progressive Networks. First

unveiled in April 1995, RealAudio has taken the world by storm. Millions of copies of the free RealAudio Player program have been downloaded from the Progressive Networks web page. Everyone, from the church down the street to the major television networks, has been exploring ways that RealAudio can help broadcast their voices to the world.

What *is* RealAudio?

  RealAudio is a software compression program that takes digitized sound files and makes them much, much smaller in size. The process of compressing sound files is called "encoding," and encoded files are typically one tenth the size of the original sound files. Although some of the sound quality is lost during the encoding process, the

resulting RealAudio files are usually crisp enough to sound pleasing to the ear.

Once a sound file has been encoded, it can be uploaded to a web page and made available for all the world to hear. RealAudio files can also be distributed on floppy disks, Zip disks, CD-ROMs, and other kinds of file storage media.

There are two ways that RealAudio files can be made available to the public over the web: streaming RealAudio and downloadable RealAudio. Streaming RealAudio files are delivered to the person listening to files moments after the person clicks on the RealAudio file name on a web page. Downloadable RealAudio files can be listened to by first downloading them in their entirety, and then listening to the file using the free RealAudio Player.

The power of RealAudio came alive for me one day last November when I attended an award ceremony at which CTCNet member Corliss Grimes delivered a stirring

Phil Shapiro is the CTCNet Washington, DC Regional Coordinator and can be reached at pshapiro@his.com. This is an excerpt from a longer article on this subject which can be found on the web at http://www.his.com/pshapiro/ realaudio.html.

award acceptance speech. Knowing full well Corliss' exceptional oratorical skills, I brought along a tape recorder and microphone to help memorialize this occasion.

At this award ceremony, Corliss and six other persons were honored by the Delta Sigma Theta sorority for their exemplary community service work. While the other award winners all delivered interesting and inspiring speeches, Corliss' speech was the highlight of the day. Grateful was I to have that special occasion captured on tape.

Soon after the award ceremony I sought the assistance of CTCNet Associate Alfred (Alf) Bawcombe to digitize this award acceptance speech, and encode it into RealAudio format. We did the digitizing on Alf's PowerMac, taking the output from his cassette deck into the microphone jack of the computer.

The moment I heard the encoded version of this sound file, I knew then and there that the rest of the world would now have the opportunity to listen to the voice of Corliss Grimes, a voice that resonates with the depth of its conviction and the resoluteness of its owner.

No sooner had Alf and I created this RealAudio file than I sent it over to Steve Ronan, the CTCNet webmaster, who quickly responded with enthusiastic feedback. Steve confirmed that the file sounded real good on his IBM-compatible computer, even though the file was encoded on a PowerMac. (RealAudio files are "cross-platform," meaning that the same file can be accessed by Macs and IBMs.)

Upon reading Steve Ronan's email message, I was totally hooked on the idea that RealAudio is one of the most powerful tools for having the CTCNet point of view heard. Our voices can now be heard. Literally.

Given the exciting possibilities that RealAudio offers, it behooves us to develop an expertise at gathering the highest quality audio sounds for encoding into RealAudio files. The clearer the source of the original sound file, the clearer will be the encoded file.

All of this goes to say that every one of us within the network needs to become more knowledgeable

Web Publishing & CTCNet's Written Voice

GWEN SOLOMON

Anyone concerned with using technology in the classroom has a voice on The Well Connected Educator, a web site created by and for teachers, administrators, parents, and community members about the use of technology for teaching and learning.

Housed at The Global Schoolhouse, The Well Connected Educator (http://www.gsh.org/wce) provides an unprecedented opportunity for K-12 educators and others to write about their experiences, read about the experiences of others, and engage in moderated discussions.

Over the next few years, billions of dollars will be spent on educational technology but will schools and districts spend this money wisely? Who will help them know what to do and not do? The Well Connected Educator exists to answer these questions and more.

The Well Connected Educator, which is sponsored by the National Science Foundation and Microsoft, Inc., is unique not just in concept but in its operation. Writing coaches from the National Writing Project assist authors in expressing ideas. Guidelines and information files help authors take advantage of web attributes, and an editorial board provides quality control.

For information, contact:
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Articles include "The Great Penny Toss," a mathematical probability project and "Hyakutake and the North High Comet Kids," an astronomical adventure. On-line columns include information about research, surveys, grants, and more. A new column highlights CTCNet and community technology centers, and future columns will address library and district technology issues. Special Features include annotated lists of educational web sites about specific topics.

Each month there is a new topic for discussion in the on-line Forum. Topics include law and ethics on the Internet, online advertising and children, and what happens after the schools are wired. These forums provide an Internet-based platform to talk about key issues. Discussion moderators host thoughtful and purposeful on-line conversations about these key issues.

Teachers' Choice is the section to publish information on outstanding web sites for classroom use or for professional development. Participants tell what is on their favorite site and how they've used it in the classroom or for professional growth. Then others can search the database of teacher-tested sites.

K-12 teachers, administrators, parents and community members are encouraged to write for The Well Connected Educator. To do so, contact Project Director Gwen Solomon at gwen@gsn.org.

Visit The Well Connected Educator at http://www.gsh.org/wce to read an article or sign up to write one, join this month's forum, submit your favorite web site, and say hello in the guest book. ❖

about techniques of recording high quality audio. We can empower ourselves and the people we care about by notching up our sound engineering skills.

Here are a few things I've recently learned about recording high quality sound files:

1. Good quality microphones are more important than good quality tape recorders. A microphone that usually works very well for recording voice is the PZM (piezo electric microphone) mic, from Radio Shack. This $60 microphone has worked very well for me. In my experience, you can get the best recordings from this microphone if the microphone rests on a flat hard surface, such as a table. Resting the

microphone on a soft rug produces muffled recordings.

2. The built-in microphones on most camcorders are usually not very strong. To get crisp audio from a camcorder, it's strongly recommended that you use an external mic. External camcorder mics come in two main varieties: boom and clip-on (or lavalier). I've been very pleased with the clarity of the sound that is captured from lavalier mics. Booms work well when you are recording sound from several different people in a room and find it inconvenient to pass around a clip-on.

One of the best sources for microphones of any sort (and other audio equipment) is the mail-order company named Markertek Video Supply. (Free catalog available by calling: 1-800-522-2025.)

Your local cable access center is also an outstanding resource for learning more about audio. And don't overlook tapping into the skills of the undiscovered musicians you might know. (If you don't currently know any undiscovered musicians, this is a good time to find out who those folks are in your community.)

Working With Files In Digital Format

There are lots of different commercial and shareware programs that can be used to input and edit audio into your computer. One of the best commercial programs, for the Mac, is SoundEdit 16, published by MacroMedia. On the shareware side, SoundEffects is highly regarded. Your audio source can be either cassette tapes or videotapes. There are many good sound input/editing programs for Windows, too.

After inputting your sound into a sound program, you can save it in Audio Interchange File Format (AIFF). The free RealAudio Encoder program can then transform your AIFF files into RealAudio files. The RealAudio Encoder program requires a fast Mac (or IBM) and can be downloaded at no cost from http://www.realaudio.com

How Much Does All This Cost?

The good news is that there is a way that you can add RealAudio files to your web page at no cost

whatsoever. By using a file transfer protocol (ftp) program, you can upload your RealAudio files to the server space that your Internet Service Provider (ISP) gives you. You can then create a link from your web page to these RealAudio files so that anyone who clicks on the link can download and listen to the files. For an example of this kind of use of RealAudio, check out http://www.his.com/pshapiro/classes/ which has some audio excerpts from a free "Intro to Internet" class that I teach each week. Also, to listen to Corliss Grimes' award acceptance speech, check out http://www.his.com/pshapiro/ifa.astp.

How Does Progressive Networks Make Money?

A commonly-asked question about RealAudio is how does the company make money if both the RealAudio Player software and the RealAudio Encoder software are free. The answer is that Progressive Networks' revenue stream is derived from the "RealAudio Servers" that the company sells. This software lets your RealAudio files "stream" to people who visit your web page. Streaming means that the sound file is played while it is being transferred to you.

Distributing RealAudio Files On Tangible Media

One of the things I find most fascinating about RealAudio is how useful it can be for distributing sound files on floppy disks and other tangible media. How much RealAudio sound can fit on a floppy disk? You can fit up to 10 minutes of RealAudio 3.0 files on a single high density floppy disk. A Zip disk can hold 10 hours of RealAudio 3.0 files. And a CD-

ROM can hold 70 hours of RealAudio 3.0 files.

True, there are not many people who have enough time to listen to 10 hours of sound. But the fact that RealAudio lets us fit that much sound on a single Zip disk ought to stir CTCNet people into thinking of ways of digitizing the sounds that we know need to be heard.

Plan, Plan, Plan

If you think that you will be creating RealAudio files, start planning now for ways to get the best quality audio files from the events you have planned. And do bring redundant recording equipment to important events, so that if some of the equipment fails, you can always have a "back up" recording source.

Surprise the rest of us with the RealAudio files you create. And let the sound of our voices be heard as a quiet roar, growing louder month by month. ❖

Corliss Grimes (l), next to Literacy Tutor Anthony Berle, hosted the Fall Washington, DC area CTCNet regional gathering last November at the Institute for Academics lab and workroom.

CTCNet Evaluation Project Update

JUNE MARK AND JANET CORNEBISE

In the last issue of the *CTCNet Review*, the CTCNet research and evaluation team had just begun the initial phase of the project. This first phase focuses on a qualitative, intensive study at five CTCNet Affiliates to gather information about impacts on individual participants and the conditions that support these impacts.

With the assistance of the CTCNet staff, the team selected five CTCNet affiliates to be intensive study sites as part of this research. The sites were chosen to provide a wide range of participants, a variety of services and program offerings, different settings, and geographic diversity. These five sites are:

• The Brooklyn Public Library Literacy Program (BPL)

• The Somerville (MA) Community Computing Center (SCCC)

• The Old North End Community Technology Center (ONE CTC)/Chittenden Community Television (CCTV), Burlington, VT

• New Beginnings Learning Center, Pittsburgh, PA

• Plugged In, East Palo Alto, CA

During the past six months, we conducted site visits at these centers to gather information on program activities and impacts. We interviewed participants, staff and community members, observed center activities, and collected a wide range of artifacts and student work from each center. Analyzing the data we collected has enabled us to learn a great deal about the range of individual effects occuring at community technology centers, and to better understand the impact of technology access on individuals and the communities in which centers are located.

This research will provide CTCNet affiliates and the broader community with better outcome data on the effects of community technology access, and thus, some ideas and strategies for ways in which community technology centers can

best work to close the growing gap between those who have access to computer technology and those who do not, particularly traditionally underserved populations. This research will be a major complement to other completed and ongoing work in the field.

Well-documented differences in access to computer and communications technology exist by household income, educational attainment, race and ethnicity, age, and gender, with the greatest inequities occurring for those with the lowest income and the fewest educational opportunities (Anderson et al 1995). The gap in computer ownership between the rich and the poor is widening (Katz and Aspden 1997, Williams 1996). As computers become integral to business, education, and other areas of life, these inequities result in greater implications for individuals' access to employment, knowledge, learning, and participation in our society. In addition, this research is particularly important in light of the growth of community technology centers across the country - evidenced in CTCNet's increased membership as well as in the proliferation of similar and related efforts such as the HUD-supported Neighborhood Networks projects, the Telecommunications and Information Infrastructure Assistance Program (TIIAP) projects funded by the National Telecommunications and Informa-

tion Administration, and community networks (Schuler 1996).

This article summarizes the research results which are more fully documented in our April 1997 report submitted to the National Science Foundation for the CTCNet grant. The report identifies and categorizes the wide range of primarily positive individual and community impacts evident at our intensive study sites. In the report, specific findings are discussed and illustrated with vignettes from the research data. Documented individual impacts include: an increase in job skills and access to employment opportunities, an improved outlook on learning and new educational goals, technological literacy as a means to achieve individual goals, new skills and knowledge, personal efficacy and affective outcomes, new uses of time and resources, increased civic participation, and social and community connections.

For example, individuals reported conducting job searches using the Internet, rediscovering a "joy in learning," setting new educational goals such as pursuing a GED or college degree, overcoming shyness, coming to the center instead of watching television or writing letters to elected officials as a result of having access to technology. Many participants feel their lives have improved because of what they learned at the community technology center. Some found

June Mark (junem@edc.org) and Janet Cornebise (jcornebise@edc.org) are members of the EDC team responsible for the CTCNet evaluation as part of its NSF national expansion grant.

At the Evaluation session at the Board of Advisors' meeting this last April: (l to r) Seth Chaiklin, on leave from the University of Aarhus, Denmark; June Mark; Tony Butler, Vice President, National Urban League; Eric Elbot.

new jobs, others found the courage to start their own businesses, or just reported increased self-confidence because they are learning new computer skills that are necessary in our society.

Our research indicates that community technology centers provide computer access to a majority of people who do not have technology access elsewhere. And, for individuals who have technology access at libraries, homes or elsewhere, community technology centers provide them with additional technology applications, such as the Internet or scanners, that they do not have access to at other locations. Many participants, both adults and youth, reported that they come to the community technology centers for the social interaction with staff and other visitors. The informal, learner-centered atmosphere that encourages exploration also was cited as a reason for preferring a community technology center to other locations.

Community impacts include building collaborations with other community agencies which result in reaching a broader population, and exploring revenue generating options to decrease centers' reliance on "soft" money.

All the centers that are participating in the intensive study reported supporting conditions that encourage visitors to return. Quality of staff and volunteers; appropriate

programming and pedagogy; a comfortable, egalitarian atmosphere; location; and cost were all given as reasons participants continue to attend the centers. Additionally, staff development activities supported the operations of community technology centers by providing staff with opportunities to grow and learn.

The first phase of our research indicates that community technology centers are a feasible strategy for providing technology access to a wide range of people. Our future research will build on and seek to increase our understanding of the individual and community impacts found at CTCNet centers. In the next year of the project, the research team will conduct (1) a broad-based quantitative impact study, and (2) pilot a process for community mapping of technology access resources. We hope to work with participants and staff in all the CTCNet centers on the quantitative impact study, and will be sending you more information about this process during the summer. This summer, we will also conduct a pilot for a community mapping process adapted from the community assets model for assessing a community's resources (Kretzmann and McKnight 1993). In addition, the research team will be designing a longitudinal research study, and working to develop evaluation resource guides and training for community technology access

providers in CTCNet.

As part of the report, an intern from the Harvard Graduate School of Education, Ana Yook, prepared an annotated bibliography of research and resources on technology access and community technology centers. We are working to make this bibliography available through CTCNet's Web site. ❖

References

Anderson, R. H., Bikson, T. K., Law, S. A., and Mitchell, B. M. (1995). *Universal Access to E-mail: Feasibility and Societal Implications*. Santa Monica, CA: RAND.

Katz, J., and Aspden, P. (1997). "Motivations for and barriers to Internet usage: Results of a national public opinion survey." Paper presented at the Twenty-fourth Telecommunications Policy Research Conference, Solomons, MD, on October 6, 1996. Morristown, NJ: Bellcore.

Kretzmann, J. P. and McKnight, J. L. (1993). *Building Communities from the Inside Out: A Path Toward Finding And Mobilizing A Community's Assets*. Chicago, IL: ACTA Publications.

Schuler, D. (1996). *New Community Networks: Wired for Change*. New York, NY: Addison-Wesley Publishing Company.

Williams, C. (1996). "Making A Case For An Information Safety Net." Community Technology Center News & Notes. (Spring 1996).

At EDC in the Center for Education, Employment, and Community (CEEC)

VIVIAN GUILFOY

Education Development Center (EDC) has been CTCNet's parent organization for more than a year now, housing CTCNet at the Center for Education, Employment, and Community. Here is a brief overview of some of the resources which EDC and CEEC provide.

Vivian Guilfoy is the Director of EDC's Center for Education, Employment and Community, and can be reached at viviang@edc.org. For more information about EDC and CEEC, check out the web page at http://www.edc.org.home.html.

EDC was founded in 1958 when a group of scientists at the Massachusetts Institute of Technology joined forces with teachers and technical specialists to develop a new high school physics curriculum, PSSC Physics. EDC refined the curriculum, which taught science as the product of experiment and theory, constructed by real people, and introduced it successfully in schools across the country.

Through the 1960s EDC brought this approach to developing

materials and instruction in other subject areas and in other countries. EDC's first social studies program, "Man: A Course of Study," won numerous awards including an Emmy for its ethnographic films. And during the same years, the Africa Science Project provided training and materials for schools to eleven African countries.

In the 1970s EDC applied the educational techniques that had proven so effective in science, mathematics, and social studies to

challenges in the areas of child development, gender equity, cross-cultural understanding, and health education. At the same time, EDC's international work grew beyond basic education to include projects to promote community health, nutrition, and democratization.

The 1980s brought innovation in the areas of special education, workforce preparation, and numerous projects designed to prevent violence, substance abuse, and AIDS. Mathematics and science curriculum development continued to be a major focus of EDC's work, with an increasing emphasis on creating an expanding and award-winning range of educational tools for learning, from videotapes to computer software and networks. Programs to promote private and non-governmental sector development and preservation of the environment were a new emphasis in the international arena.

As EDC grows through the 1990s, projects continue to build on the collaborative approach used in our earliest work: our programs are not designed solely by theoreticians; they reflect the ideas of those who know the field as educators and learners. We develop programs in partnership with — and balancing the diverse viewpoints and expertise of — the people who will use them.

Today, more than 350 EDC staff members work on over 150 projects in the United States and around the world. EDC's main offices are in Newton, Massachusetts but projects are also based in Carlisle, Massachusetts; New York City; Washington, D.C.; Atlanta, Georgia; and Miami, Florida; with much international work carried out from field sites in South America, Africa, the Middle East, and Eastern Europe.

Equity, Work, and Health Resources

CEEC is one of the major divisions of EDC. Here are three examples that illustrate our work at EDC that are of special relevance to CTCNet affiliates and others involved in community technology.

The Women's Educational Equity Act (WEEA) Resource Center is a national project providing gender-fair multicultural materials, training, consulting, and referrals.

We translate the lessons of field-based educators and community practitioners into models and materials that others can use, and maintain a network of thousands of women and men committed to equitable education for all students. We are committed to educational opportunity for all students and believe that education that is successful with women and girls benefits all students. Our free catalog lists over 300 products for learners of all ages from pre-school to graduate education, community leaders, parents, teachers, and mentors. Areas include mathematics, science, and technology; social studies, language arts, women's history, school-to-career; language and history; violence prevention; disabilities; family life, health, and professional development. Some recent titles include *Teaching Girls and Boys with Disabilities; Exploring Work: Fun Activities for Girls; Women in American History; Math and Science for the Coed Classroom; School-to-Work JumpStart Equity Kit*; and *Hand in Hand: Mentoring Young Women*.

WEEA has a long track record of experimenting with different kinds of technical assistance. Our expert panels on gender equity, violence prevention, and mathematics and science are helping the federal Office of Education Research and Improvement (OERI) explore new ways to identify and validate promising practices.

WEEA's Web site offers detailed information on the variety of assistance available through the WEEA Equity Resource Center, providing on-line access to the WEEA Digest, information about past and present WEEA grantees, publications, and links to organizations and resources (http://www.edc.org/CEEC/WEEA).

EdEquity (Educational Equity) is our Internet discussion list that focuses on equity issues in community, education, family, business and labor. Members share information on best practice and innovative resources, explore questions of diversity and learning theory, and consult with practitioners from across the country and around the world. To subscribe, send the message "subscribe edequity" (without a "subject" line) to majordomo@confer.edc.org.

CEEC leads the National School-to-Career Consortium, a group of 25 organizations that provide technical assistance to states and local communities, funded under the School-to-Work Opportunities Act. Requests range from providing keynote speakers to developing statewide STW models to analyzing state academic frameworks in light of STW industry standards. We have received four technical assistance grants from the State of Washington to help conceptualize proposals for their STW Implementation Grants and Statewide One-Stop Career Centers and local partnerships.

STWNet (School-to-Work Network) is our international Internet discussion forum on school-to-work transition, the U.S. Youth Fair Chance initiative, and all other STW-related issues. To subscribe, send the message "subscribe stwnet" (without a "subject" line) to majordomo@confer.edc.org.

Healthy Beginnings: Lead Safe Families is an English as a Second Language Curriculum on Lead Poisoning Prevention supported by the U.S. Environmental Protection Agency. Children in minority and low-income communities—including many for whom English is a second language—are at increased risk for lead poisoning because they tend to live in older, unmaintained homes. The curriculum is designed to help ESL instructors encourage use of English and present lead information within the context of daily living situations that new English speakers face. It was developed to raise overall English literacy and health-related skills and teaches important skills such as communication, risk assessment, self-advocacy, decision making, and healthy self-management. Student materials and a teacher's guide focus on units such as Going to the Doctor, Identifying Symptoms of Illness, Making Water Safe to Drink, Preparing and Storing Food, Avoiding Dangers in the Dirt, Finding the Right Home, Identifying Household Hazards, Making your Home Safe and Renovating your Home. Glossaries are available in English, Spanish, Chinese, Haitian-Creole, Khmer (Cambodian), Polish, Portuguese, Russian, and Vietnamese. You can obtain materials free of charge by contacting http://www.epa.gov/docs/region01/eco/lead/ or sending email to lead.esl@epamail.epa.gov. ❖

A Web of Information: Publications, Videos, Reports, Manuals, and More

CARL KUCHARSKI

The following were reviewed in the last issue of the CTCNet Review. Full summaries and ordering information is on pp. 36-37 and is also available at the CTCNet web site:

Lansing Computer Learning Center Training Guide; videos: **"Children, Computers & Community,"** and **"Children, Computers & Community / How You Can Push All the Right Buttons"**

New Community Networks: Wired for Change by Douglas Schuler

Civilizing Cyberspace: Policy, Power, and the Information Superhighway by Steven E. Miller

NetActivism: How Citizens Use the Internet, by Ed Schwartz

Aether Madness: An Offbeat Guide to the Online World by Gary Wolf and Michael Stein

HUD Neighborhood Networks Resource Guide

Keystrokes to Literacy: Computers as Learning Tools for Adult Beginning Readers by Antonia Stone

The Neuter Computer: Computers for Girls and Boys by Jo Schuchat Sanders and Antonia Stone

The Secret Guide to Computers, **22nd ed.,** by Russ Walter

From EDC

Gender, Discourse, and Technology, by Katherine Hanson
http://www.edc.org/CEEC/WEEA/pubs/ workingpapers/index.html

Technology is the buzz word of the decade. Technology use and occupations are hailed as the new frontiers. But the role of females in the use of technology is still open to question. "Gender, Discourse, and Technology" explores the unconscious message that technology is "male" and relates this discussion to the use of technology within classrooms and the implications for the world of work. It also shows how sexual discrimination is built into the very fabric of discourse about technology. Working Papers Series #2759, $4.00 The Working Papers Series enables EDC and equity colleagues to explore recent interpretations and research on gender equity and education. Papers can be ordered by calling the distribution center at 800-793-5076. Please add $3.50 for shipping for one, $.80 for each additional title.

Carl Kucharski is an Alliance for Community Media activist and CTCNet Associate who tracks an inordinate number of resources and is reachable at cski@tiac.net.

From the Alliance for Community Media

ACM State and Local Advocacy Handbook
http://www.alliancecm.org

Edited by Thomas J. Karwin with Jan Sanders and Fred Johnson, this guide contains sections on Getting Organized, Advocating at the Local Level, a Checklist of Key Documents, Advocacy and the State Level, and more, 36 pp.

"Training for Citizen Empowerment and Community Development"

Upcoming issue of *Community Media Review,* edited by jesikah maria ross & Kelly Aiken. "Building and strengthening community," "creating informed and critical media users," "democratizing the media," "empowering people with access to the tools of telecommunications"— these are but a few of the slogans frequently heard in community media circles.

Community media training programs are often the main avenue to implement these lofty visions. The question is: How do we create training programs that develop technical skills while encouraging empowerment, participation, and critical perspective? To explore this question, this edition of CMR

*   provides a series of articles looking at the theory and practice of allied fields such as media education, organizational development, participatory learning, and community organizing to discuss the key ingredients for empowerment and community development within a media production context and

*   offers practical guidelines, methods, and profiles for the design, delivery, and evaluation of media training programs which might help advance the concept of empowerment and community development in the community media field.

Articles include:
• "Nurturing Learning Communities" by Paula Manley
• "Technology for Democracy and Empowerment" by Antonia Stone & Peter Miller
• "Public Access Television as Community Organizing" by Todd Samusson
• "Cyberskills Training for the Information Age" by Lauren-Glenn Davitian
• "Participatory Training for Community Development" by Laurie Lippen
• "A Community Media Curriculum Development Primer" by P. Rachel Levin
See p. 32 for ordering information.

The Benton Foundation

1634 Eye Street, NW
Washington, DC 20006
(202) 638-5770

The Benton Foundation State by State Directory
http://www.benton.org/Library/State/
This directory provides a look at where states are heading on the telecommunications front. It includes a look at the planning process and infrastructure commitments that states are instituting regarding telecommunications.

From CTCNet/EDC

(Make check payable to CTCNet/EDC and send to CTCNet, EDC, 55 Chapel St., Newton, MA 02158):

❏ *CTCNet "Start-Up" Manual*
$25 (See pages 11-12)

❏ *CTCNet Video*
Clips/profiles of ten centers, 20 minutes, $10.

❏ **EVALUATION REPORT: End User Study, Part 1**
by June Mark, Janet Cornebise, and Ana Yook, April 1997. See pages 48-49, $10.

❏ **EVALUATION REPORT: "The PTW Network: History, Change, and Opportunities"**
by June Mark and Kimberly Briscoe, October 1995, 100 pp., $8. Reports and Papers in Progress, EDC/Center for Learning, Teaching and Technology

❏ *"PTW Network: Year 3,"*
CTC News and Notes, #1, summer 1994, 20 pp., $5

❏ **"Telecommunications, Video, and Neighborhood Centers,"**
CTC News and Notes, #2, fall-winter 1994-95, 36 pp., $5

❏ **"Libraries, Cable Access, and New Media Centers,"**
CTC News and Notes, #3, Fall 1995, 36 pp., $5

❏ **"Neighborhood Centers and Public Policy,"**
CTC News and Notes, #4, Spring 1996, 40 pp., $5

❏ **"CTCNet and HUD-Supported Technology Centers,"**
CTC Review, #5, Fall-Winter 1996-97, 44 pp., $5

❏ **"The Role of Community Access Centers in Bridging the Technology Gap,"**
by Susan Rose, MA Thesis, Tufts University, Dept. of Urban and Environmental Policy, 75 pp., $8, also at http://www.ctcnet.org.

From EDC

❏ **"Gender, Discourse, and Technology,"**
Katherine Hanson, see description left, $7.50

Name _____

Address _____

_____

Phone _____

email _____

Local Places, Global Connections: Libraries in the Digital Age

http://www.lff.org/technology/local.html
Local Places, Global Connections is a Libraries For the Future/Benton publication documenting libraries providing public access to technology. Call Benton Foundation at (202) 638-5770 or Libraries For the Future at (212) 352-2330.

Best Practices

http://www.benton.org/Practice/Best/B-list.html
Benton's Best Practitioners is a resource for nonprofits to see and share effective uses of communications technology. Consider this part of your promotional and even development efforts, as Benton commits to promoting your best practices to media, funders, policymakers, and others who share your interests.

KickStart

http://www.benton.org/Library/KickStart/
As part of its role in connecting people to the Superhighway, a community must form and articulate its vision and goals. What does it wish to accomplish? In what time frame? For what uses? The vision needs to include a plan for what technology must be acquired and put into place and for how to train personnel. Goals need to include what kind of content – the funding, using, and creating of information – is most effective in bringing the Superhighway to the target group.

FCC Telecommunications and Health Care Advisory Committee Summary of Findings and Recommendations

http://www.benton.org/Policy/Med/telemedrec.html
A summary of the findings and recommendations from the FCC's Telecommunications and Health Care Advisory Committee.

The Benton Foundation's Universal Service and Universal Access Virtual Library

http://www.benton.org/Policy/Uniserv/
Documents and links including original papers, multidisciplinary perspectives, definitions, education, health and public interest institutions, federal, state and international information, commercial perspectives and publications.

Center for Media Education

http://tap.epn.org/cme/
This site contains links to the Center's projects and publications such as "InfoActive" which is available for $35.00 per year - 1511 K Street, NW, Suite 518, Washington, DC 20005, 202 / 628-2620. "Connecting Children to the Future: A Telecommunications Policy Guide for Child Advocates" is a new CME publications available at the web site (a pdf document).

About TIIAP

Lessons Learned from the Telecommunications and Information Infrastructure Assistance Program

http://www.ntia.doc.gov/otiahome/tiiap/lessons.htm
This report presents the initial lessons learned from the TIIAP projects that were funded in 1994 and 1995. The report offers a snapshot look at the community impacts of TIIAP projects, and presents examples of how specific projects are using advanced telecommunications and information technologies to provide better services, to strengthen community ties, and to provide increased access to information for thousands of Americans. Seven of the ten best practices cases have center-based access as key components, including several CTCNet-affiliated projects. In the Preface to *Lessons Learned*, Larry Irving, Assistant Secretary for Communications and Information, provides some key data about the number and extent of these centers: 210 grants "to projects in 48 states, the District of Columbia, and the U.S. Virgin Islands," and for every grant, "13 others applied for funds, and another 65 requested application materials." The report is "aimed at these latter groups" — the 13,650 "schools, hospitals, clinics, police departments, libraries, and community colleges, state, tribal and local governments, and community-based organizations" that seek to bring the information superhighway to their communities.
You can request a print copy of the complete report online at this site or call the TIIAP office at (202) 428-2048.

TIIAP Newsletter

http://www.ntia.doc.gov/otiahome/tiiap/Newsletter/
The newsletter provides short summaries of the activities and accomplishments of previous TIIAP grantees.

TIIAP's Funded Projects

http://www.ntia.doc.gov/otiahome/tiiap/funded.htm
TIIAP has completed three grant rounds since its inception in 1994, and is currently announcing its fourth grant round. TIIAP has funded 276 projects, providing a total of $79 million in federal funds. Many of the 276 projects funded by TIIAP have served as models to other communities. Short descriptions of funded projects can be found at this site or by calling TIIAP's office at 202 / 482-2048.

About the FCC

FCC 's LearnNet

http://www.fcc.gov/learnnet/
LearnNet is about important FCC policy and education initiatives. Join the dialogue to help spread the benefits of technology to schools and libraries nationwide.

Digital Tornado: The Internet and Telecommunications Policy March 1997, OPP Working Paper No. 29

http://www.fcc.gov/Bureaus/OPP/working_papers/
The goal of this paper is to promote greater understanding, on the part of both government and the private sector, of the unique policy issues the Internet raises for the FCC and similar agencies. A fundamental position of this paper is that government should work to avoid unnecessary interference with the Internet's development.

FCC Universal Service Page -

http://www.fcc.gov/ccb/universal_service/welcome.html
Extensive links to original documents, statements and related information included in the FCC's universal service rulemaking.

Joint Federal-State Board Recommendations on Universal Service

http://www.fcc.gov/bureaus/common_carrier/www/universal_service/welcome.html
The Federal Communications Commission's Federal-State Joint Board took the first major step to realize the mandate for universal service set forth in the Telecommunications Act of 1996 which requires the Commission and the states to ensure that the goals of affordable service and access to advanced telecommunications services are met by means that enhance rather than distort competition.

Public Policy

Reinventing American Culture

http://www.netaction.org/bollier/index.html
As the MacArthur Foundation and other civic-minded philanthropies grapple with the challenges ahead, there are three vital perspectives that should inform our thinking: the need for a sovereign citizen vision for the new media; the transforming effects of distributed information networks; and the need for a telecommunications architecture that fosters community, democracy and culture.
Bollier argues that non-profit organizations and foundations are in danger of being "locked into a reactive, catch-up mode," and that in order to avoid being left behind, the public interest community must assume a leadership role.

Staking Out the Public Interest in the Merger Between Pacific Telesis and Southwestern Bell Corporation by Armando Valdez, Charles Carborne, and Laura Syuchinsky

http://consumernet.org or http://www.ucan.org/ucan/news/whte_doc.htm
The passage of the Telecommunication Act of 1996 dramatically changed the rules that have governed telecommunication policy in the United States for the last 60 years. Now, competition, rather than regulation, is considered the primary means by which consumers will be guaranteed affordable access to not only phone service but the information superhighway. If SBC's $16.52 billion bid to buy Pacific Telesis is approved, it will constitute the fourth largest corporate merger in the history of the US, assuming the price is adjusted for inflation. The new company would control more than 20 percent of the nation's access lines, with approximately 50 million customers nationwide and more than $20 billion in operating revenues. This white paper offers interesting proposals for funding community technology. The Executive Summary is on pp. 27-28. California Telecommunications Policy Forum, 10 Jordan Ave., Los Altos, CA 94022, (415) 949-4330.

Education-Related

Education Watch

http://www.edtrust.org/
"The 1996 Education Trust State and National Data Handbook" and "Community Data Guide" draw from a range of published and unpublished sources to provide a disturbing portrait of student achievement, kindergarten through college. The reports also rank the 50 states and the District of Columbia on 17 indicators of educational quality and equity. The "State and National Data Book" is $16.50, the "Community Data Guide" is $8.00. The Education Trust, Inc, 1725 K Street, NW, Suite 200, Washington, DC 20006, (202) 293-1217.

Technology Literacy Challenge Fund

http://www.ed.gov/Technology/
A new program to support technology in education received $200 million in the fiscal year 1997. State education agencies receive

grants from the U.S. Department of Education after developing statewide plans for financing educational technology, collaborating with outside partners, and assisting those schools with the highest poverty and greatest need.

The Future of Networking Technologies for Learning
http://www.ed.gov/Technology/Futures/

In an attempt to answer the question, "What is the future of networking technologies for learning?" the U.S. Department of Education's Office of Educational Technology commissioned a series of white papers on various aspects of educational networking and hosted a workshop to discuss the issues.

Advanced Telecommunications in Public Elementary and Secondary Schools, 1996
http://www.ed.gov/NCES/pubs/97944.html

The Survey of Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, Fall 1996 requested information regarding the availability and use of advanced telecommunications in regular public schools and, in particular, access to the Internet, plans to obtain Internet access, use of advanced telecommunications by schools and teachers, and sources of support for advanced telecommunications in schools.

KIDS Report
http://www.cs.wisc.edu/scout/KIDS/

The KIDS Report is produced twice monthly by Net Scout in association with four groups of students–two classes of the Madison Metropolitan School District in Madison, Wisconsin, and two classes of the Boulder Valley School District in Boulder, Colorado. The students involved are responsible for all aspects of the report, including its title and the site evaluation criteria.

To subscribe to the KIDS Report, send email to: listserv@lists.internic.net with the following message:

subscribe kids Yourfirstname Yourlastname

The Apple Virtual Campus
http://hed.info.apple.com/

The Apple Virtual Campus redefines the higher education community. It exploits a new world of hardware, software, and networking technologies to advance the principles of the university. The infrastructure of the Virtual Campus is information. The Virtual Campus links people with shared resources, anywhere, anytime. It empowers the student, the professor, and the administrator, while creating new communities for interactive learning and collaboration.

A*DEC Distance Learning Consortium
http://www.adec.edu/

A*DEC is a national consortium of state universities and land grant institutions providing high quality and economic distance education programs and services via the latest and most appropriate information technologies.

Educational Technology by State
http://www.qeddata.com/sttech.html

Chart containing information on Computers, Multimedia Computers, and OnLine statistics for schools in every state.

Libraries

All-Out Internet Access: The Cambridge Public Library Model by Miles Fidelman of The Center for Civic Networking
http://www.ala.org/market/books/internet.html

Published in February 1997 as part of the Technology Trailblazer Series from American Library Association Editions, this book details experiences installing high-speed Internet workstations in the Cambridge, MA Public Library. The book provides detailed, how-to guidance on planning, implementing, operating, and supporting Internet service in a public library setting. Complete with time-saving checklists and worksheets.

MCI & ALA 'LibraryLINK' Grants Million Dollar Program Provides Critical Link Between Libraries and the Information Superhighway
http://www.librarylink.com

MCI Communications Corporation and the American Library Association (ALA) announced today the ten cities selected for the 1997 MCI LibraryLINK program, the third year of a national community service initiative designed to help bring the information superhighway closer to Main Street, USA.

Community Networking

Community Networking; Leveraging the Public Good Electronically! (Or, Networking in the Public Interest) Written for AT&T by Frank Odasz, June 1996
http://www.ag.uiuc.edu/~heca/odasz.txt

Community networking is an idea that has caught the global imagination. Communities worldwide are creating telecottages, televillages, teleservice centers, community technology skills centers and more. In the US alone, there are more than 150 community networks and nearly 3000 community web sites.

Blacksburg Electronic Village's Community Network Planning Guide
http://www.bev.net/project/evupstart/planning.html

Contents: Introduction, Community network checklist for success, Checklist for building an online community, Network planning tips, Sources of funding and other support, Learning more about community networks.

NonProfit Management

Volunteer Tech Corps To Assist Nonprofits
http://www.philanthropy-journal.org/tech/techcorp.htm

A partnership between IBM, Public Allies and the United Way will develop a "tech corps" to assist nonprofits at 10 sites nationwide. A corps of volunteers will provide technology assistance to nonprofits in about 10 U.S. cities under a partnership among IBM Corp., the United Way and Public Allies.

PULSE!

PULSE! is a free online newsletter for nonprofit management support organizations and professionals. Distributed via e-mail twice a month, PULSE! provides readers with a brief digest of what's happening in the management support community and the nonprofit sector as well as interesting ideas and relevant resources.

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Economic Development

CommerceNet
http://www.commerce.net/

CommerceNet is the leading industry consortium, dedicated to accelerating the growth of Internet commerce and creating business opportunities for our members. This is achieved through development, implementation and expansion of the technical and institutional protocols required to impart electronic commerce to all world wide markets. CommerceNet pioneered Internet Commerce by legitimizing the Internet as a place for business, developing key elements of the infrastructure such as security and payment, and fielding pilot demonstrations.

Center for Sustainable Communities
http://www.naco.org/memserv/sustain.htm

National Association of Counties and the U.S. Conference of Mayors launched the Joint Center for Sustainable Communities (JCSC). Our county leaders want help with such things as leadership skills education and training, visioning with and involving effected citizenry, consensus-building among disparate interests and intergovernmental relations. Our efforts will complement those of other national organizations, including the President's Council on Sustainable Development.

Community Economic Development Information
http://www.sils.umich.edu/Community/Students/twigs/economics/economics.html

This page has been designed as a resource for community network developers. Gathered here are examples of community networks which provide economic and business development information and pointers to potentially helpful federal and state economic resources. Includes links to: Community Networks with Economic Development, State Economic Information, Federal Economic Information, and General Business Information.

Rural Development

New Mexico Rural Development Response Council
http://www.rurdev.usda.gov/nrdp/nm1.html

The New Mexico Rural Development Response Council is playing a leading role in building the telecommunications capacity of that state's 2 Enterprise and 12 Champion Communities. NMRDRC has devoted significant resources to their involvement with Connect New Mexico, a 13-member consortium of private firms, state agencies, universities, and hospitals dedicated to developing collaborative leadership related to telecommunications issues and to addressing the telecommunications needs of underserved New Mexico communities. Connect New Mexico and the Council have come up with the idea to utilize these 14 communities as telecommunications "models."

Project Shooting Star
http://www.edonnet.com/fourcorners/edd/star/

Economic Development Districts, Tribes, Universities and Local Governments contiguous to the Four Corners Region have a common interest in developing telecommunications knowledge, use, and infrastructure for the Four Corners Region. The lead agency for this project is the Northwest New Mexico Council of Governments. Project Shooting Star has two phases: Phase 1) Task Force Development/Community and Infrastructure Needs Assessment and Phase 2) Project Implementation.

Others

National Information Infrastructure Advisory Council (NIIAC) -

http://www.niiac-info.org/~niiac/

Work products of the Council are listed at this site. The NIIAC represented many of the key constituencies with a stake in the National Information Infrastructure including private industry; state and local governments; community, public interest, education, and labor groups; creators and distributors of content; privacy and security advocates; and leading experts in NII-related fields.

Cyberspace Law for Non-Lawyers

http://www.ssrn.com/cyberlaw/ CyberspaceLawList.html

The seminar will help you learn the basic principles of — and unlearn some common myths about — copyright law, free speech law, libel law, privacy law, contract law, and trademark law as they apply on the Net, from three of the top experts in the law of cyberspace. The seminar is aimed at educated laypeople, not primarily at lawyers. You'll receive approximately 3 postings a week through this broadcast list.

To subscribe to Cyberspace-Law by e-mail by sending e-mail to: LISTSERV@PUBLISHER.SSRN.COM with the subject line (optional): SUBSCRIBE and the body message in the first line:

SUBSCRIBE CYBERSPACE-LAW FIRSTNAME LASTNAME

Center for Applied Special Technology: Universal Design for Learning

http://www.cast.org/

CAST is a not-for-profit organization whose mission is to expand opportunities for individuals with disabilities through innovative computer technology. We pursue this mission through research and product development that further universal design for learning.

Chicago Community Information Consortium

http://www.cnt.org/ccic.html

The overall goal of this project is to develop expertise, techniques and software for disseminating and using government information at the grassroots community level. The Center for Neighborhood Technology and Roosevelt University's Institute for Metropolitan Affairs, propose to work with a consortium of civic, grassroots and community organizations to design and test an innovative, accessible community information system for the Chicago metropolitan area.

The HomeNet Project

http://homenet.andrew.cmu.edu/Progress/

HomeNet is a Carnegie Mellon research project studying what people do with the Internet and how it affects their lives. The HomeNet project provides participants with computer equipment, subsidized access to the Internet and training in using both their computers and the Internet. Through detailed, ongoing questionnaires and electronic data collection, Internet usage and its effects on participants' lives can be studied and analyzed in unprecedented detail.

A Survey of Community Computing Centers

http://www.compfuture.org/compfuture/ciof-rock.html

In December 1995 through February 1996, CompuMentor undertook a nationwide survey of Community Computing Centers (CCCs), in order to determine underlying principles, operational strategies, and best practices. The survey was conducted for two primary reasons: to gain familiarity with existing centers, their aims, and their methodologies; and to develop practical lessons from the experience of these centers as regards program issues, challenges faced, and indicators of success.

Pew Partnership for Civic Change

http://www.cpn.org/sections/affiliates/ pew_partnership.html

The Pew Partnership is a national initiative committed to community building, especially in the smaller cities of our nation. Resisting the allure of quick fixes and easy answers, the Partnership works with communities to: create new ways for citizens to tackle tough community issues — at-risk youth, job creation, family health, and neighborhood revitalization; build trust between diverse sectors of the community to face immediate crises while engineering long-term solutions addressing the root of a problem; communicate innovative, emerging strategies to meet the challenges of the 21st century to citizens and policymakers across America.

Learn — Teach — Lead Neighborhood Renaissance Training Institute

http://www2.southwind.net/~wininc/nrti.html

The Neighborhood Renaissance Training Institute is a multiple partnership among the Wichita Area Chamber of Commerce, the American Society for Training and Development, the Junior League of Wichita, Inc., Wichita Independent Neighborhoods, Inc., Project Freedom Family and Youth Coalition, and the citizens of Wichita-Sedgwick County.

The Urban University and Neighborhood Network

http://131.183.70.50/DOCS/UUNN/ accessT.htm

The Urban University and Neighborhood Network (UUNN) is a network of university-based researchers and neighborhood-based organizations in Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown. The UUNN is coordinated through the University of Toledo Urban Affairs Center and funded by a $69,800 grant from the State of Ohio Urban University Program.

Community Information Exchange

http://165.190.9.161/cie/index.htm

A national, nonprofit information service that provides community-based organizations and their partners with the information they need to successfully revitalize their communities. The Exchange provides comprehensive information about strategies and resources for affordable housing, economic and community development, customizes this information for individualized inquiries, and offers technical assistance. Its staff draw from an extensive base of original data that informs and guides organizations to plan, finance, and carry out all types of community development activities.

Creating Learning Communities: Practical, Universal Networking for Learning in Schools and Homes — A Report for School and Community Technology Planners & Policymakers

http://cosn.org/EPIE.html

This report, published jointly by The Center for Information, Technology & Society and The Educational Products Information Exchange Institute, is designed to be a useful tool for those school and community decisionmakers who may agree with the goal of networking, but who are concerned about the practicality of achieving it for their schools and communities.

General Social Survey

http://www.icpsr.umich.edu/gss/about/gss/ gssintro.htm

The General Social Survey is an "omnibus," personal interview survey of U.S. households conducted by the National Opinion Research Center (NORC). The special features of the GSS follow from its unique origin as the first, perhaps only, social science data set designed to be analyzed by "users," rather than by project staff. The mission of the GSS is to make timely, high-quality, scientifically relevant data available to the social science research community.

At the fall CTCNet Washington, DC, gathering former DC area coordinator Chuck James (left) and Mark Kuenzel from the Capital Children's Museum (seated) greet visiting staff from Black Data Process Associates: Rudy Duke, President, BDPA DC chapter, and Pat Drumming, Administrative Assistant for the BDPA National Office. At the right are Marleen McCoy with the Sasha Bruce YouthWorks and Rev. Fred Williams, SYF Ministry and Morino Institute Advisor.

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Boys & Girls Clubs of Tracy
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Community Career Development, Inc. / Urban Los Angeles Community Partner
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Community Health Centers of the Central Coast / Community Computer Center
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Community TV of Santa Cruz
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Human Outreach Agency / Computer Street Academy
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http://www.pls.lib.ca.us/pls/literacy/top.html

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http://www.newbedford.com/
nc3.html

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Haitian Computer Learning Center
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508-559-1023

Harbor Point /Walter Denny Youth Center
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Jack Satter House / Modern Mavens Computing Center
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Letters

Kids' Project Idea

From: skritiko@nyx.net

Subject: Re: CTCNet Review/letters opportunity

> ...working on the spring/summer CTCNet Review, we'd like to establish a "Letters to the Editor" column....

That's a great idea! In general IMHO any possibility for increasing interactivity is a good idea. Given that, I would like to start off the new column by sending my letter through the list:

As a volunteer who was involved with one of the CTCNet affiliates I'm aware that many of the members cater to children. Is there any way that CTCNet would be interested in supporting/organizing a essay competition of children's essays? This could be an annual event in which children from the network affiliates would be asked to write about their community for example. The best essays could be presented through the CTCNet Web site, if possible there might be a small financial reward etc.

My 0.02 Regards
Sam Kritikos

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The Virtual Community Workshop
http://uu-gna.mit.edu:8001/
~napoli/VC/vcw.html

_/_/_/_/_/_/_/_/_/_/_/_/_/

From: ma_ebogard@seovec.ohio.gov

Subject: Re: CTCNet Review/letters opportunity

Sounds good if possible!!   Ella Bogard

Thanks, Thesis Available

To CTCNet:

Enclosed is a copy of my thesis "The Role of Community Access Centers in Bridging the Technology Gap." Thank you for sending me a copy of the CTCNet resource guide, and for putting me in touch with Janet Cornebise. Janet was a valuable member of my thesis committee.

One constant theme that emerged in my research is that CTCNet members love the organization. All of my case studies, and other people at CACs I spoke with, all raved about how wonderful CTCNet is in providing guidance and support. I wanted to share that with you because I have never come across such consistent and enthusiastic praise for an organization. It

was very impressive. After months of research into the subject of computer access, I must agree with the CTCNet members. I too am impressed with the organization. Thank you for sharing information with me, and I hope you find the thesis of interest.

Susan Rose

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ed. note: for copies, see p.51.

Universal Service

From: mlr@ClarkRockoff.com

To: upforgrabs-l@cdinet.com

Subject: The Role of CBO's in Promoting Universal Service

Dear Colleagues:

The FCC is unlikely to mention community-based organizations (CBO's) when it deals with universal service tomorrow; those of us who attended the Up-for-Grabs Conference heard Congressman Markey argue forcefully that pleading for a special CBO rate would muddy the waters. Nevertheless, the experience of settlement houses in New York City suggests that CBO's can play a powerful role in making the benefits of universal service both meaningful and available in poor urban neighborhoods.

In my view, "universal service" must have at least these three components:

- access to a computer with a World Wide Web browser;

- a personal Internet e-mail address; and

- the capability to make one's own information available via the Web.

The strength of settlement houses is that they already attract community residents to programs (pre-school, after-school, college readiness, adult education, GED preparation, job training, senior centers, etc.) that can be enhanced through each component of universal service. For example:

- Web information-seeking can be tied to program goals, whether it's a teen exploring college opportunities or ESL students reading soccer scores on an Ecuadorean newspaper's Web site;

- a personal Internet address makes it possible for community residents to participate in electronic discussions of neighborhood issues and priorities; and

- creative writing and photography programs can be readily expanded to incorporate Web publishing.

I hope that we don't lose sight of CBO-based opportunities even as we enthusiastically support the contributions to universal service that we can expect from schools, libraries, and rural hospitals.

Maxine Rockoff
Brooklyn, NY

From: BKFulton2@aol.com

To: mlr@clarkrockoff.com,
upforgrabs-l@cdinet.com

cc: urban-leaders@nul.org,
leadership@nul.org

Subject: Re: The Role of CBO's in Promoting Universal Service

I agree with Maxine. Her findings are also true for local Urban Leagues (some 115 of them Nationwide). The truth is that any community based organization providing direct services to a community should be entitled to benefit from Universal Service funds.

Let's look at this from another angle. A few days ago, the National Urban League (along w/ 15 other CBOs) was asked to share its technology and perspective at the President's Summit for America's Future. One clear outcome was that CBOs (NOT schools and libraries) will be asked to absorb more of the slack in serving children, families and communities. We must screen, train, put to work and track the work of "new" volunteers. How can we do this efficiently and effectively w/o the benefit of resources that make us 21st Century ready?

It's time to walk the talk . . . Government, Corporations, and CBOs are all a part of an intertwined socio-economic infrastructure that requires a balanced investment of resources to keep any part of the whole from suffering unnecessarily. Bottom line, CBOs need to be expressly stated as part of the beneficiary pool for Universal Service funds and other emerging technology resource pools. But for the Nation's 1.4 Million CBOs, more Americans would be homeless, hungry, w/o training, and/or w/o hope.

We are a vital part of the 2nd chance opportunity structure of these United States. Anything less than the full participation of CBOs in the resource pools of the Information age is a disgrace and ought be considered down right "Un-American."

Virtually,

B. Keith Fulton
Director, Electronic Communications and Technology Development
National Urban League, Inc.
New York, NY

Friends, Partners, and Collaborators

Affiliate Collaborations

The Alliance for Community Media: Promoting CTCNet among its community cable access center membership in order to expand its definition of community access to technology and those organizations and programs that promote and develop it; providing leadership in the arena of public policy.

The National Urban League: Expanding the development of technology access centers among its 115 affiliates through a major partnership with CTCNet with collaborative support from **NYNEX**.

The Ohio Community Computing Center Network: Responsible for negotiating the $2.2 million Ameritech settlement supporting the establishment of 14 community computing centers across Ohio.

Baptist Homes of the Midwest and **Baptist Churches of Wisconsin**: Active in building upon their five established community computing centers in their state.

Libraries for the Future: Active in assisting Friends of the Libraries and other library collaborations in building upon access programs in the libraries.

Open Studio: A Benton Foundation/National Endowment for the Arts program for establishing technology centers access programs in the arts.

United Neighborhood Houses: NY NTIA grantee subcontracting Network services toward developing five settlement house technology learning "family rooms."

The Boys and Girls Club, YM and YWCA, and **Volunteers of America**: Three national organizations working with CTCNet to establish technology access programs across their membership.

Plugged-In: Technology youth center in East Palo Alto collaborating on CTCNet development; **LEAP**: developing affiliate centers in CT and NTIA grantee for the National Youth Center Network.

The Boston Computer Museum: With support from the MIT Media Lab, leading in establishing Clubhouse programs for youth in metropolitan Boston and across the country.

Hardware and Software

Apple Computer Community Affairs: Equipment grant to more than 25 affiliates; current "Expanding Technology Access" partnership program now in second year.

The National Cristina Foundation and **The Lazarus Foundation**: Provide donated hardware to CTCNet affiliates.

The Lotus Development Corporation: Supporting a variety of Network initiatives including grants to individual affiliates, the All-Affiliates Conference, Network services, resource development, and site license partnership program for all Lotus products.

Volunteers/Tech Support

AmeriCorps*VISTA: Developing community organizing and empowerment on-line resources and supporting the placement of Community Technology Specialists with CTCNet affiliates.

Computer Professionals for Social Responsibility (CPSR) and **Black Data Processing Associates (BDPA)** : Providing volunteer support and associates to CTCNet and affiliates.

Technology Resource Consortium (TRC) and **CompuMentor**: National organizations of computer professionals dedicated to assisting non-profits. CTCNet works especially with Nonprofit Technology Resources (NTR) in Philadelphia and Information Technology Resource Center (ITRC) in Chicago helping develop center programs in those areas.

Public Policy

The Alliance for Public Technology, The Benton Foundation, OMB Watch, and **NetAction**: Active in developing CTCNet relationships with national policymakers and funding/resource providers.

Housing Collaborations

HUD: Supporting computer learning centers in public and assisted housing through its Neighborhood Networks, Campuses of Learners, and Safe Neighborhood Action Program (SNAP), and other initiatives.

DSSA, National Housing Enterprise Corporation and National Homes Trust, Inc., and **the National Low Income Housing Coalition** — providing workshop, conference materials, technical support and management for computer learning centers in HUD-supported developments.

Program Collaboration

I*EARN: Global social justice/ environmental science education projects open to participation by Network affiliates on IGC.

Lawrence Berkeley Laboratory: Supporting four Network affiliates' participation in the "Hands-On Universe" project.

SeniorNet: Establishing community computing centers for seniors and working with CTCNet to expand technology resources for the elderly.

The Education Trust, Inc.: Active in extending technology access in the K-16 school community.

Other

The Morino Institute: Supporting a variety of Network initiatives including individual affiliates, the All-Affiliates Conference, and Resource Development.

Institute for Global Communications (IGC): Current CTCNet telecommunications service provider, home of EcoNet and PeaceNet, and gateway to the Internet for CTCNet affiliates.

The Association for Community Networking (AFCN), local FreeNets and **CWEIS projects**: Community telecommunications initiatives working with CTCNet to expand technology access through telecommunications AND center-based access.

ABOUT CTCNET MEMBERSHIP...

REQUIREMENTS:
...A commitment to providing technology tools for those who would otherwise have no access to them;
...An active or planned community service, social action, and/or education program with computerized resources available to its constituency and/or the public;
...A willingness to be active in the CTCNet community, open to sharing expertise, successes, failures, and resource information.

BENEFITS:
Membership in the CTCNet community provides you with a number of central staff-supported resources and a group of Regional Coordinators as well as the expanding community of affiliates, associates, and support groups. As a member of CTCNet, you will find expanded:

Connections...
...with the growing number of community organizations throughout the U.S. that are engaged in similar efforts, and the individuals, organizations, funding sources, businesses and industries that are providing resources for this work.

Technical Assistance...
...from CTCNet staff, other affiliates, and CTCNet associates: in organizational and program planning and development; equipment, software, and telecommunications evaluation and selection; community outreach; volunteer recruitment, training and leadership; board and/or advisory committee support; staff development.

Opportunities to...
...present the unique resources and achievements of your own program;
...engage in collaborations with other affiliates;
...participate in framing CTCNet policies.

Affiliates receive:
1. Written material including the CTCNet *Center Start Up Manual*, our biannual *Community Technology Center Review*, Network evaluation reports and other literacy, math, science, program development, and community action tipsheets.
2. Subscription to CTCNet's monthly "On-line News and Notes," general membership and specialized electronic discussion lists; telecommunications support includes Internet service provider selection and web page development.
3. Regional meetings and workshops, and a national All-Affiliates Conference held each June.
4. Hardware and software donation/partnership programs.
5. Program evaluation support including resources developed by the NSF-supported four-year End User Evaluation Project.

Additional Membership Benefits for Affiliates in CTCNet Cluster Areas... through a CTCNet Regional Coordinator who will:
...convene regional meetings at least twice each year around topics of common interest and concern to area affiliates;
...serve as liaison between CTCNet staff and the area affiliates;
...when possible, visit your site twice in your first year of affiliation (once annually thereafter) to assist in developing an individualized plan of goals and objectives under affiliation and provide any necessary orientation to other CTCNet services;

MEMBERSHIP COSTS & OBLIGATIONS:
Membership Fee: $100 per year for nonprofit organizational membership.
Affiliates agree to support participation and costs associated with:
...attending the Annual All-Affiliates Meeting and regional meetings;
...weekly interaction on telecommunications;
...participation in CTCNet research and evaluation effort;
...participation in CTCNet's emerging self-governance structure.
For-profit organizational membership is available for $250. For-profits are not eligible for hardware and software donation and partnership programs. ◆

Apple and Lotus Partnerships Leads Industry Collaborations for Second Year

A basic lab package of five Performa 6360/160s (with CD-ROM drives, internal modems, microphones, and loaded with software), LaserWriter 12/640 PS, Apple ColorOne Scanner, and QuickTake camera is being awarded to CTCNet affiliates on a mini-RFP basis in 1997. 23 full systems are being distributed to 26 CTCNet affiliates in this second year of the "Expanding Technology Access" partnership (see p. 19 for list). CTCNet Advisory Board members and Associates, EDC volunteers, and Apple Computer employees review the proposals.

Lotus Development Corporation continues to offer CTCNet affiliates site licenses for any and all Lotus products, with applications submitted on a quarterly basis. Tom Snyder will also be providing limited quantities of up to $300 worth of software per affiliate on a first-come, first-served quarterly basis. For further information on both these software partnership programs and offers, contact CTCNet Administrator Steve Ronan at ctcnet@edc.org. ◆

ctcnet Community Technology Centers' Network

Education Development Center
55 Chapel St.
Newton, MA 02158-1060

(617) 969-7100 or 7101 x2727
Fax: (617) 332-4318
ctcnet@edc.org; http://www.ctcnet.org

Date _____

Application for Organizational Membership

Parent organization name: _____

Address: _____

_____

Director: _____

Telephone: _____ Fax:_____ Email: _____

Check box if 501(c)3: ❏   Check box if other nonprofit: ❏   http:// _____

Services provided: _____

_____

Technology Program Name: _____

Address (if different): _____

_____

Director: _____

Telephone: _____ Fax:_____ Email: _____

Ways in which computers and technology are currently used (check all that apply).
If not currently in operation, check here ❏ and respond to all below that apply to your plans:

❏ job training   ❏ adult education   ❏ school-age education
❏ open access   ❏ computer classes   ❏ collaborations with other agencies
❏ other (please specify): _____

_____

Equipment/platform and peripherals: _____

_____

_____

hours/week computers used: _____   Est. # participants who use each week: _____

❏   Please attach a brief overview with the history, goals and educational philosophy of your program.
Include any promotional or other materials that you think might be of interest, such as sample proposals,
brochures, newspaper stories, photographs and/or annual reports.

Send to: CTCNet at the above address along with a $100 check payable to CTCNet/EDC ($250 if organization is
for-profit). Network staff will review your application and respond within four weeks with telecommunications
list membership and additional information.

Support / Keep Up-to-Date with CTCNet

If you are a CTCNet Affiliate (see enclosed information sheet and application form on pp. 62-63) or Associate (page 11), you're sure to be kept up-to-date through on-line and hard copy mailings and electronic discussion lists. If you're not and would like to be supportive and/or simply kept informed, please send in the form below to CTCNet, EDC, 55 Chapel St., Newton, MA 02158, or contact us at 617/969-7100 x2727 or online at ctcnet@edc.org.

Name: _____

Organization (if appropriate): _____

Address: _____

City, State, Zip: _____

Telephone: _____   Email: _____

- ❑ Yes, I'd like to be a CTCNet Associate and volunteer in person and/or online to help out with affiliate needs and network support (see p.11).

- ❑ Yes, I would like to become an individual member, support CTCNet development, and receive the semi-annual newsletter. Enclosed is my tax-deductible contribution, payable to EDC/CTCNet:
  - ❑ $50   ❑ $100   ❑ $250   ❑ $500   ❑ Other: _____

- ❑ Yes, our organization would like to receive the semi-annual newsletter. Enclosed is our subscription, payable to EDC/CTCNet:
  - ❑ $20 (for 2 years)

- ❑ Yes, I'd like to be kept informed. Please send me occasional updates.

- ❑ Yes, I'd like to be kept informed with occasional electronic postings to the above email address.

- ❑ Yes, I'd like to order the attached CTCNet literature (clip or photocopy p. 51).

ctcnet

Community Technology Centers' Network

EDC

Education Development Center
55 Chapel Street
Newton, MA 02158

Address correction requested.

Non-Profit Org.
U.S. POSTAGE
PAID
BOSTON MA
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