

3

chapter

Determining Program Focus

"He wants nothing more than a job. Times have been rough . . . with the recession and the attacks on September 11th, jobs are scarce. He comes in 2 to 3 days out of the work week to search for jobs online. He searches for, and corresponds with, potential employers via the Internet. He entered our community center with no knowledge of how to do so. We showed him how to set up an email account, how to read, compose, reply and forward emails, and search the Internet. He does not hesitate to ask any member of staff for assistance."

*As submitted by Amanda Hartt, Program Coordinator
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Introduction

Providing opportunity to use and/or learn to use computer technology is of course the fundamental rationale for a Community Technology Center. Learning to use a computer without some sort of constructive purpose in mind would be like learning to use a hammer without something to pound. Having access to computer technology means having access to a new set of tools—tools that can be used in myriad ways to help achieve work, life, and learning goals. Because computer applications range over such a vast area, it is useful for a start-up CTC to identify specific areas in which to concentrate its programming activities. This remains the case even if the CTC is being created in a larger agency amid a backdrop of other services.

This chapter will discuss likely focus areas for CTC programming and the process that the Steering Committee should follow in planning CTC offerings. The data gathered through Mapping Community Resources (Chapter 2) will guide the Steering Committee in making decisions about programming in general and will determine specific offerings or concentrations, and hence, what software will be needed.

The area(s) of program focus chosen by a CTC will also help with accessibility planning. While certain standards need to be met regardless of age range or program activities, a

youth program might indicate a different organization of space or prioritization of assistive technology.

While establishing an initial focus for the CTC and engaging in preliminary program planning are essential steps, the results must not be regarded as set in stone. It is more than likely that, as the CTC grows, focus areas may change or broaden. It is probably wise, in the beginning, not to try to accommodate every need or interest, but to leave room for constructive response once usage patterns emerge and active participant needs can be identified. It is most important to learn about your target population, what content is important to members, and develop criteria and content in response to that need. In the long run, this is better than choosing a particular product. As far as curriculum is concerned, this chapter will help fine-tune your evolving content development strategy.

What are Likely Program Areas for a CTC?

Most CTCs will plan program offerings in two or more of the following areas:

- Public Access or Open Lab Time, Basic Internet Access
- Pre-school and Family Activities
- Afterschool Activities, Youth Education, and Youth Development
- Adult Education, Literacy, and ESL
- Elder Services
- Career Development, Job Preparation, and Workforce Development
- Technical Assistance, Financial Literacy, and eCommerce
- Electronic Publishing (including print, video or multi-media)
- Social Services and Advocacy
- Computer Recycling or Refurbishing

A description of each type of program area follows. Please note that none is exclusive of others; overlap in terms of program focus area and required software is anticipated.

Public Access, Open Lab Time, or Basic Internet Access

Although the media touts Internet access as a route to information, most centers offering Internet access have found that self-publishing and email for initiating and maintaining contact with friends, colleagues, and relations in distant areas are just as important for many participants. Self-publishing encompasses the development of personal web pages, publishing stories, recollections, poetry, music, still pictures, and video to a world-wide audience. Internet chat and instant messaging tend to be instant attractions for youth.

Some people may need a degree of computer comfort with a variety of applications before they are willing to launch themselves into cyberspace; others may want to start browsing the web on day one. Hence, a CTC with Internet access as its focus should still plan on offering introductory courses aimed at equipping its participants with basic computer skills. Most centers will want to include some public access and/or open lab time.

- Public Access offers members of the community the opportunity to use computer and communications technologies to explore their own interests, to develop skills, and to discover what the technology can do.
- Open Lab Time provides those otherwise involved through structured classes with opportunities to practice what they are learning or to branch out into further explorations.
- Some centers ask for a small voluntary contribution from participants in open labs. This sum can help to defray the costs of printer paper and cartridges, and disks.
- Consider asking participants to volunteer in exchange for open access.

Important considerations

- It may be necessary to designate some times specifically for children and other times for older teens and adults.
- It is important to schedule some times during the day and some in the evening.
- Special rules limiting one person's access time may need to be instituted for CTCs with a large volume of users.
- It is advisable to have introduction programs for the most popular software (see Chapter 5). These are available both as on-screen tutorials and in audio

form (if you use the audio versions, get earphones for the users).

- At least one staff person or volunteer should be experienced with customizing the computer setup for participants with diverse physical, sensory or cognitive requirements.
- This will normally be a heavy usage time with a variety of individuals each doing different things. Thus it is advisable to have a high concentration of staff or volunteers present: at least one for every ten users.
- If public access is to include Internet access, more than one phone line or a high-capacity access line may be needed. Many CTCs have migrated to broadband and wireless connectivity options. While requiring greater costs, these options typically allow for very high bandwidth usage.
- It is imperative to set ground rules for the CTC during open access time. These rules should explicitly cover policies on headphones or speakers, downloading materials, saving material (on floppy disks, hard drives, CD-ROMs, etc.), printing, chatting and meeting with strangers from the Internet, email and attachments, and pornographic materials. Penalties for abuse should be clearly specified. With children and teenagers it may be helpful to quiz them on ground rules from time to time or prohibit access until they understand the guidelines on their behavior in the CTC. Using a guiding phrase and corresponding philosophy such as "You can do whatever you want in the CTC except break the rules" is one way to positively redirect negative behavior. If possible, cover this information with CTC participants before they begin their activities.
- Some CTCs have found it helpful to involve youth in establishing center rules, helping to foster a sense of ownership for participants. In addition, these sites may prefer to reframe their rules in terms of expectations. The guiding philosophy of such a site might be "While rules may be made to be broken, Expectations are made to be met: Respect yourself, Respect others, and Respect our tools and equipment." Center staff can have some really interesting discussions with youth about what respect means to them and how they know when someone respects or disrespects them. Youth should also be engaged in the process of determining what happens when expectations are not met. Generally, kids will be more harsh when meting out consequences than adults would be, so they will need guidance. It is also important to be consistent and apply the consequences evenly and fairly. (Mercedes Soto, IT Resource Center)

Examples of successful public access/open lab programs

- PTW/Harlem CCC was founded in 1983 on the concept of public access but

quickly learned that free availability did not guarantee participation. Talking to children and family members in playgrounds, distributing invitation map-cards, and outreach through other community organizations were some of the strategies employed to inform the community of the opportunities available.

- At the Family Learning Center's Computer Center (Marietta, OH), community members use the resources to perform job hunts on the Internet, write and print resumes, research school projects, research for personal satisfaction, improve keyboarding skills, design quilts, and play games. When the computer center is not open for public access, the Adult Basic and Literacy Education and Literacy Volunteers of America participants use the equipment in their work to improve their basic skills in reading, math, writing, and computer skills.
- In partnership with other local organizations, the Austin Free-Net (<http://www.austinfreenet.com>) in Texas has developed the East Austin Media Lab, a multimedia development center for disadvantaged youth. The design elements of the project include: open access periods at each lab; basic training on Internet/Web page development; intensive training and mentor/protege relationships for small groups of teens; and internships with local companies.

Pre-School and Family Activities

Pre-school and family programs include:

- Times when parents can bring young children and work together with them to explore appropriate software such as drawing, animation, and learning games.
- Opportunity to partner with a local Even Start, Head Start, or day care program that may not have access to computers.

Important considerations

- The attention span of young children is limited, so such sessions should be short—a half hour or 45 minutes at most.
- Young children may not be able to reach the mouse or keyboard comfortably from ordinary chair height. If you don't have adjustable chairs, stock plenty of telephone books or pillows.
- Children with disabilities will provide a great opportunity for the use of creativity in making appropriate use of assistive technologies, e.g. picture-

based keyboards, switch activated toys, cause and effect software.

- Parents may need prior guidance in using the software to enable them to work effectively with their children. Plan on an introductory session or two for the parents.

Examples of pre-school and family programs

- The Durham County Literacy Council offers a computer-assisted reading program, Parents' Part, that teaches parents to use computers to help their children learn to read. This project, funded by the Triangle United Way, Bank of America, Verizon, and IBM, provides a new approach to family literacy. In Parent's Part, pairs consisting of a parent and a child, aged 4-7, work together at computers over 16 sessions to accomplish several goals. Parents master basic word-processing and "parent as teacher" skills. At the same time, their children use multimedia, phonics-based software to develop reading readiness. Reading "offline" is stressed through homework assignments and a "free" bookstore providing participants a chance to develop a home library of age-appropriate, high-quality children's books. Parents Part workshops are held at many community sites including the YMCA, day care centers, the public library and various public schools. Teaching materials are presented in easy-to-read, bilingual format. Reader's Powered Up, developed with grants from the CISCO and AOL Foundations, provides a second option for Parents Part graduates and children in 2nd-3rd grades. Using the Internet, parents and children access online reading and writing sites that provide useful information to parents and literacy practice to children. (Lucy Haagen, Durham County Literacy Council)
- Established in October of 2000, the RAFT center in Stonington, CT enjoys strong community support, actively engaged partnerships, and a diverse client base from Connecticut as well as Rhode Island residents. In addition to RAFT's involvement with the West Broad Street's families, they also offer classes to all of the preschoolers housed at West Broad Street School. This not only includes the district's preschoolers, but also the Family Resource Center's preschoolers and Head Start program. (Paula M. Cymbala, RAFT Regional Access for Technology)
- "Our most successful Department of Education CTC programs thus far at CyberSkills/Vermont has been the distribution of refurbished computers to parents and children from low-income areas. They have a local job training agency working with technicians refurbishing computers. The computers are then sold to the program as a part of the U.S. Department of Education CTC grant. Parents and Parent/Child teams sign up for a 6 hour training in

Windows, Internet use and Internet Safety, how to set up and maintain the computer, and how to access the Internet. They receive a free 6 month ISP subscription. After training they take their computers home. Cyberskills/Vermont did this two years ago and received local recognition for it and have now set up 10 sessions this year for a total of 100 participating families." (Harold Smith, CyberSkills/Vermont)

Afterschool Activities, Youth Education, and Youth Development

These can be structured for different age groups or offered as open lab time for children. It may be helpful to contact and/or partner with national youth service organizations for assistance with activities, curriculum, and possibly financial assistance. Some possibilities include the Boys & Girls Clubs of America, YMCA, National Urban League, and the Intel Computer Clubhouse. In addition to giving children an opportunity to acquire skill with basic computer applications, some will enjoy:

- **Subject-Area Activities.** Commercial software that offers homework help, tutorials, and other activities covering subjects, such as reading, writing, math, sciences, and other subjects, is readily available (see Chapter 5 for evaluation guidelines.)
- **Games.** Games can be effective tools for getting children and young adults interested in learning more about computer technology. Exercise caution in choosing games—some are violent, others are mindless (see Chapter 5 for evaluation guidelines). Encourage children to play two-player games together. Children may be excited about a game of the week contest; be mindful about selecting games for different age levels of children. Do not be surprised if most children want to play games much of the time and consider the environment the child is coming from; there is nothing wrong with enjoying the luxury of recreation from time to time. Indeed, this may be one of the few sources of regular fun a child has access to enjoy. Consider developing a curriculum around gaming, especially in light of the increasing workforce opportunities for game developers.
- **Exploring the Internet.** Once children are equipped with basic computer skills, they may wish to test and improve them by “surfing” the Internet, using the World Wide Web (WWW) as a research tool, or communicating with far-flung peers through electronic mail.
- **Multimedia Publishing:** designing personal web pages, constructing family or neighborhood profiles, creating project reports for school.
- **Music-making:** learning about and/or writing music and songs (may

require additional hardware and software).

Important considerations

- Know every child. Enforce sign-in and sign-out procedures. Be sure you can notify an appropriate person if special circumstances arise.
- Make sure all children know the rules of the center and where to find what they need.
- Young people working alone need frequent attention. To facilitate peer tutoring and collaborative learning, encourage two or more to work together at a single computer.
- There is an opportunity here for staff to help kids explore assistive technology options that they might not have available in the school, and also help them and families advocate for access in the schools if appropriate.
- Assign more knowledgeable children to work with the less knowledgeable.
- Provide ample space to move around, stow bookbags, coats, etc.
- Successful youth programs often engage youth in program planning and design. Consider starting a rotating member, youth advisory board.

Examples of successful afterschool activities

- In the January 2002 a new program, “The DISKovery Hour,” was implemented through collaborative efforts among the West Broad Street School, Family Resource Center, Stonington High School and the RAFT Center in Stonington. The “DISKovery Hour” targets 12 children at risk and provides them with an extended opportunity to learn by offering homework and reading support in a safe and educational environment. The goals of the DISKovery Hour is to offer enrichment activities that are specifically designed to assist third and fourth grade students to develop competency in a technologically rich environment while providing homework assistance. This program was created in order to decrease students after school isolation through fostering teamwork, friendships and strengthening group dynamics. The program also incorporates mentoring opportunities for Stonington High School Honor Society students thus enhancing learning opportunities for young children through the integration of community service and technology. (Paula M. Cymbala, RAFT Regional Access for Technology)
- Malden Access Television Studio (Malden, MA) has offered a program for

children brought to the studio by the local YMCA to learn animation software using Fractal Design, Dabbler, and D-Paint.

- The Intel Clubhouse at the Museum of Science provides a place where young people ages 10 to 15 can use computers to create their own computer-based projects. Computer-using professionals and graduate students serve as mentors, offering educational guidance and inspiration to participating youth.

See Exhibit 3-1 for additional information on curriculum and resources for youth.

Adult Education, Literacy, and ESL

Establishing a comprehensive adult education program will involve far more than computer access. There will need to be classroom or tutorial space for non-computer-based learning and instructors with the experience and qualifications needed to teach these classes. Rather than developing an adult education program from the ground up, a collaboration or partnership with an existing program in the community may serve the goals of both. Adult education generally includes:

- **General Equivalency Degree (GED) training.** Participants are taught certain skills to prepare them to take a test to obtain the equivalent of a high school diploma.
- **English as a Second Language (ESL) courses.** These programs teach the basic skills to speak and understand English. The class concludes with a test measuring students progress towards fluency in the English language.
- **Adult Basic Education (ABE) classes.** These classes enable residents to develop the ability to read, write, and perform basic math. Learners progress to GED classes.
- **Life-long Learning Opportunities:** Extension courses, distance learning, or online learning opportunities.
- **Basic computer comfort and introduction to technology.** These workshops introduce people to the keyboard, the mouse, how to turn the machine on and off, and some basic applications which will enable them to use the computer without supervision and prepare them for more advanced computer training in the future.

Important considerations

- Many adults must bring their children with them. The CTC should establish simultaneous classes for the children and/or a play area.

- Some adults prefer to learn among other adults rather than in a class integrated with children. The CTC should, if possible, set aside teaching time specifically for adult instruction.
- Many adults work; accommodate these schedules.
- It may be possible to locate the CTC within a local school equipped with computing facilities as most schools are available in the evenings.
- Many of the tools designed for individuals with reading related disabilities are also great tools for those learning English as a second language.
- Computers are good tools for practicing memorization skills.

Examples of successful adult education programs

- The Marietta Area Community Computing Center (Marietta, OH) offers ABE classes 4 hours per day on 10 computers in their Apple/Macintosh Center. The adults often return during public access hours to learn other software applications such as word processing, spreadsheets and graphics design.
- The Henry Street Settlement (New York, NY) offers programs for mentally challenged adults aimed at building their self-esteem, teaching them to work and play with other people, and helping them learn problem-solving tools.
- At the Brooklyn Public Library in New York, adult learners work together in collaborative, learner-centered projects using wordprocessing and other productivity tools to develop a foundation of knowledge of writing, reading, problem solving, and information and literacy skills.

Elder Services

Some older persons particularly enjoy:

- Connecting to other older adults
- Mentoring younger people
- Exploring their hobbies and interests
- Games such as chess, go, or backgammon
- Telecommunications contact with relatives and friends
- Telecommunications and CD-ROM-based travel explorations

- Financial planning assistance
- Family tree programs and family history productions
- Health care and other services information
- Just “being part of” the communications age

Holly Harrison of the Alamo Area Community Information System (AACIS) recommends the following for working with Seniors:

- Use Youth Mentors - At a neighborhood senior center we successfully tested an intergenerational training strategy that it will use throughout our work with 50 senior centers. In this strategy, students from an alternative high school serve as tech mentors to senior citizens. Results: Seniors appreciate the time to spend with youth and respect their mastery of the technology. Youth improve their self-esteem and benefit from seeing seniors struggle to learn new things, receive stay-in-school support, and develop positive relationships with adults.
- Recognize that it takes insight and time to create a culture among senior citizens that appreciates the value of technology and what it can do. AACIS uses “project-based learning” for seniors and for each of its targeted customer groups. Project-based learning is really a simple concept that says that learners learn best and sustain interest in learning when their instruction focuses around things of interest to them. A coordinator surveys seniors and provide feedback to mentor-trainers. These results are integrated into handouts as well as informal instruction sessions. Our survey results from a pilot site on most popular technology uses among seniors are: 1. email; 2. beauty web sites; 3. health information; 4. I don’t know what it can do — show me! Actually, we try to incorporate “show me” into all of our work.
- We start with where users are, what their interests are, and then broaden and deepen the topic. Often our new users may have no idea what you can do on a PC or with the Internet. We have to show them the potential. We have to be patient with them watching other users be successful and giving them time to come around. How we measure success and the time frame for getting to “success” must accommodate time for this shift. Having the right tools is equally essential: large font, big screens, and easy-to-use mice with trackballs.

Important considerations

- Seniors often prefer to learn about computers in classes made up of other seniors. Offering “seniors only” courses may go a long way to making them

pleased to be at the CTC and likely to return. In addition, like any other population, seniors learn better in smaller classes and need to be listened to.

- Some seniors truly enjoy working with young people. Consider forming a senior volunteer corps to assist during lab times open to children. Young people may also be eager to staff senior classes.
- Some seniors have a hard time trying to get the mouse to stay put; some are afraid of the mouse. A wheel mouse may facilitate scrolling.
- Seniors often prefer activities during daytime or normal business hours. This may allow for more efficient use of the CTC if it would otherwise be empty when children are at school and adults are working.

Examples of successful elder service

- The Seattle Human Service Department and the Mayor's Office for Senior Citizens has a volunteer program entitled "Seniors Training Seniors". Computer literate volunteers (50+) receive 14-16 hours of training in a very unique and special curriculum specifically designed to teach older people computer basics, email and the Internet. Four, 2-hour classes are taught each month at various senior and community centers in a relaxed and non-intimidating atmosphere where elders learn to expand their horizons with new technology. (Patti-Lyn Bell, City of Seattle, Mayor's Office for Senior Citizens)
- CyberSkills/Vermont works with seniors in training seniors from the local senior centers in the use of email and the Internet. This is one of the parts of a U.S. Department of Education CTC grant. The staff run short, 1.5 hour workshops for up to 6 participants over a 4 week training time. They will train approximately 60 seniors this year, providing access to computers when the senior center is full. They have worked in developing meaningful curriculum for seniors through the senior center for over 2 years. (Harold Smith, CyberSkills/Vermont)

See Exhibit 3-2 for additional tips on working with senior citizens.

Career Development, Job Preparation and Workforce Development

As with Adult Education (see above), a comprehensive job preparation focus will entail additional, non-computer classroom space along with instructors who have the experience and qualifications needed to conduct the classes. Job preparation generally includes both job skills training and job search activities. *Job skills training* includes

classes teaching basic computer literacy, keyboarding skills, word processing, graphics applications, spreadsheets, databases and other office skills classes. *Job search activities* include resume writing workshops; classes teaching interviewing skills such as what questions to ask and what is likely to be asked; how to dress; workplace behavior training; and, how and where to look for a job. A focus on job training cries out for collaborative relationships with existing community services (e.g., those that perform job placement). If a CTC offers job placement to complement its job training program, such activities may replicate services available at employment agencies.

Important considerations

- The factor most likely to produce a successful job preparation program is the availability of real jobs to those who complete the program. If Job Preparation is to be a CTC focus, the Steering Committee should form an Employer Advisory Council that will match the types of training offered, software selection, and program emphasis to the types of jobs actually available in the community.
- A technique proven to be particularly motivating in engaging young people in job preparation courses is to present them with promised employment after successful completion of the CTC course. An Employer Advisory Council can take the lead in lining up these jobs.
- Staff should be able to refer participants with disabilities pursuing a vocational goal to their state department of vocational rehabilitation (different name in each state) for services as appropriate.
- It is imperative to research the main types of jobs that are available in your community to get a better sense of what local employment needs are. It may be helpful to work with other workforce development programs to ensure that the CTC fills a niche in the community.
- It will be helpful to develop a database of how to find available jobs in the community. Jobs can be researched through the Steering Committee and/or through neighborhood partnerships. Other sources include newspapers (and their respective web sites), trade journals, local magazines, web sites (may be local, statewide, national, or international in scope of job offerings), and electronic bulletin boards. Idealist.org (<http://www.idealists.org>) may be particularly useful as a listing of nonprofit jobs and regional career fairs. Note that databases require regular maintenance to remain up-to-date.
- Job Preparation students, as an activity, may wish to prepare a database of available local jobs and a second database of their own skills and desired types of employment. Note that databases require regular maintenance to remain up-to-date.

- The Employer Advisory Council (see Job Preparation) can recruit local businesses to notify the CTC of vacant or soon-to-be vacant positions together with advance notice on the skills required for those positions.
- Job openings can be posted on a bulletin board, a community electronic bulletin board, and/or published in a CTC Job Listings Newsletter. Performing these tasks can be assigned to participants in the program.
- The CTC can organize and/or host a “Job Fair” with participants doing the research and implementation as a project. Alternatively, participants can be encouraged, and prepared, to attend job fairs sponsored by other agencies in the community.

Examples of successful job preparation programs

- Jobs for Youth (Boston, MA). Industries, such as environmental technology and biotechnology development companies, send representatives to the CTC to establish computer classes for skills that are needed by the companies. Persons trained at the CTC in these classes are later hired by the companies.
- The Seward Adult Learning Center in partnership with AVTEC (Alaska Vocational Technical Education Center) is an adult basic education program serving local citizens plus students who arrive from all over Alaska to acquire computer literacy, basic reading, math and language skills.
- SER Jobs for Progress, Inc. was formed in 1972 as a joint effort by the two oldest and largest U.S. Hispanic volunteer organizations, the American G.I. Forum and the League of United Latin American Citizens (LULAC) to provide better opportunities to disenfranchised Austin residents. The organization is developing an Internet-Based Interactive Career Center.
- The NOVA Private Industry Council of Sunnyvale, California and its partners unveiled Youth@Work, an on-line community service connecting employers with youth seeking work in Santa Clara and San Mateo Counties. NOVA supports school staff in the use of the system and also maintains public access sites throughout the two counties where out-of-school youth who don't have home Internet access can use terminals free of charge.

Technical Assistance, Financial Literacy, and eCommerce

Electronic commerce is a term used to describe a variety of business activities that can be conducted at the CTC. These types of business activities include outsourcing, small

business support, self-employment, and entrepreneurship. It is imperative that the CTC is cognizant of the local business community as both a resource and as competition for services.

- **Outsourcing** is an activity in which the CTC is hired by an organization or business to undertake a task it usually performs itself, such as payroll processing, data processing, and inventory. The CTC might be able to perform tasks for local businesses, certain government agencies, community-based organizations and schools for a fee, thereby employing CTC participants to do the work and earn revenue they share with the CTC.
- **Small business support** is an activity where the CTC is made available to CTC users to support their business operations, such as by using computers for accounting, tracking inventory, billing, advertising and so forth.
- **Self-employment** is an activity for which a CTC participant uses CTC facilities to perform work for a fee, such as designing fax sheets, producing brochures, providing technical assistance to establish a computer system, and/or creating homepages on the Internet. Individuals who use the CTC in this way should expect to recompense the center from their earnings.
- **Entrepreneurship** is a business activity created by a CTC member or former member in which the person establishes a business at home or at another location using skills learned at the CTC.

Important considerations

- The CTC is likely to need new or additional equipment and the latest software in order to compete in the marketplace.
- Teenagers and young adults could work with the CTC in fulfilling business contracts, learning business skills, and developing relationships with the business community.
- Both the CTC and individuals would make money.
- The CTC must develop a system for sharing profits.
- Written contracts are extremely helpful for clarifying responsibility, quantity and quality of work to be completed, timeline obligations, and appropriate recourse in the event of a problem.
- It may take significant time for profit to defray start-up costs; plan accordingly!

Examples of successful programs

- At the Owerri Digital Village, a community technology center in Nigeria created and managed by Youth for Technology Foundation (YTF), a revenue-sustaining model that has been established is in the area of communications technologies. The center has one general mailbox where mails are received from individuals in urban areas of Nigeria or abroad. The individuals sending these e-mail messages are account holders at the Owerri Digital Village where they pay a nominal fee every month for up to ten e-mail deliveries each month. Owerri Digital Village staff members then sort through the e-mails and twice a week deliver the e-mail messages to loved ones, family members or friends in the rural communities. This approach ensures that the lack of access (at the grassroots level) doesn't exclude underserved community members from communicating with the outside world. (Njideka Ugwuegbu, Youth for Technology Foundation)
- At Plugged In, students learn technical skills, such as mastering multimedia programs and hypertext mark-up language (HTML), which enable them to offer a service. The students also learn business skills, including how to meet with clients, bid on contracts, negotiate agreements, and develop business plans. In the first two months of operation, Plugged In Enterprises grossed approximately \$3,000.
- A "friends of RAFT" campaign has been crafted for individuals as well as corporations to make donations to our program. Along these lines it is important to stress community outreach. For example, after a presentation to recruit interns from a group of graduate students enrolled in a program in Workforce Education & Development, staff from RAFT was approached by an engineer who wanted to know if they were interested in "corporate giving." This person was impressed by the presentation and the project and felt his pharmaceutical corporation would be interested in making a donation to RAFT. In other words you never know who is in an audience. (Paula M. Cymbala, RAFT Regional Access for Technology)
- Over the past 3 years CyberSkills/Vermont has deliberately worked to create revenue streams to keep this CTC alive. Without sources of money from places other than the government the organization would have been out of business long ago. Staff work diligently in setting up relationships with other NPOs as well as social serving government agencies such as DET, PATH, and VR. They sit on the local Adult Ed Council and attend meeting with each of these agencies. Their full program of public enrollment classes provides some opportunities to DET and PATH participants to gain computer skills. Their other work has been in developing a full ladder of opportunity for individuals to progress from no computer skills to job skills involving technology. Over the last 3 years they have developed

programs called Getting Ready To Work, Making It Work 1, Making It Work 2, and most recently STEP-IT UP. The STEP-IT UP program provides qualified individuals with over 100 hours of training from the very basics to the level of work in web development programs such as Dreamweaver, Fireworks, and Front Page. CyberSkills/Vermont recently ran this program at Dale Correctional Facility for Women with great success. Revenue is where you find it and you can only find it if you are looking for it through a variety of channels including other NPO needs, government channels, and through advertising. Most significantly, the CTC does this with a full-time staff of 6, work experience people from DET and PATH, interns from the local college, and volunteers from other NPOs. (Harold Smith, CyberSkills/Vermont)

Computer Centers in Faith-Based Organizations

The following content was submitted by Andrew Sears from the Association of Christian Community Computer Centers.

"A Christian Community Computer Center is any ministry using computers as an outreach to serve the community and address the Digital Divide, which is the gap that separates those with access to and skills with computers to those without such benefits. Some of the way Christians are addressing the Digital Divide include:

- After school programs which integrate technology into their activities
- Computer classes offered either at low cost to unemployed adults and at-risk youth
- Adult basic education classes using computers
- Job training and placement programs which offer computer training
- Walk-in computer centers that offer free computer access in low-income areas
- Technology entrepreneurship programs where youth do Web page design, graphic design or other work
- Computer refurbishing that takes used computers from companies and individuals and refurbishes them to provide low cost computers to individuals
- Computer ministries in churches of teams of volunteers to support computer centers

"Part of what makes Christian community computer centers unique is that they are trying to address spiritual needs in addition to physical, economic and educational needs. We believe that learning computer skills is one of the best ways for people to be able to make a living. We also believe that a good spiritual foundation is the best way for people to make a life and find happiness.

"There are currently over 200 Christian community computer centers on our list across the USA and many developing in other countries. The key goal of AC4 is to assist churches and Christian organizations to become a major driving force behind computer literacy just as they were with basic literacy.

Social Service and Advocacy

Many CTCs are increasingly partnering with social service agencies in their communities to address a broad range of needed services. Often technology programs are an added benefit to such programs and may help with sustainability. While there is no set formula for creating such a CTC, the following examples may prove helpful:

- Philadelphia Concerned About Housing (PCHAH) was founded in 1981 to be a "next step" for homeless families coming from shelters. Its mission is to help low income, single parent, formerly homeless families reach true, long-term self-sufficiency by providing these families with comprehensive, intensive, integrative, supportive social services in tandem with housing. It has developed 148 mostly scattered site housing units and continues to manage 129 of these. In December 1999, PCHAH opened its computer center that focuses on assisting clients with their education and employment goals. Aside from computer and multimedia equipment and broadband Internet connectivity, the center provides computer training and activities, intensive individual and group tutoring for parents and children, after school and summer activities, education and career assessment, counseling, planning and placement, child care subsidies and transportation subsidies. Each PCHAH client family has a social worker that helps integrate computer center services with other PCHAH services such as case management, drug and alcohol counseling, life skills workshops, psychological counseling, family recreational and cultural enrichment activities, leadership development activities, housing and home-ownership counseling. (Terry Guerra, Philadelphia Concerned About Housing)
- DePaul University and the Association House of Chicago, a non-profit community-based social service agency, collaborated to create the DePaul Learning By Association CTCs. They are located in the West Town and Humboldt Park areas of Chicago. University students provide technical expertise, academic tutoring assistance, and general lab support. They

work with the various departments of the agency to create targeted workshops and programs. Examples include: the inquiry-based project in which children in the after school program team up with university education majors to work on research projects; Los Monstros del High Tech in which youth in the alternative high school learn hardware and software skills to support various departments within the agency; and the Senior Memoirs Project in which senior citizens learn to use various technological resources to create their memoirs. (Roxanne F. Owens, Ph.D., DePaul University)

- The broad goal of the Morehouse School of Medicine Community Technology Centers project is to lessen the “digital divide” by making educational technology available to indigent populations. A narrower goal is to demonstrate to both the indigent consumers and publicly-funded health care systems that hospital-based Community Technology Centers can enable populations to better educate themselves about their own health and the health of their children. Facilitating the ability of low-income populations to educate themselves about their own health and the health of their children will meet national and local needs by: a) Increasing people's understanding of the important ways in which such technology can facilitate their learning and functioning; and b) Providing skill-building to enable them to use the technology. The Morehouse School of Medicine Prevention Research Center (PRC) in cooperation with the Emory University School of Medicine, Grady Health System, and the City of Atlanta Parks and Recreation Department has established a health-focused Community Technology Center dispersed in three sites: (1) Grady Memorial Hospital, (in particular, the Teen Services Clinic), (2) Hughes Spalding Children's Hospital (in particular, the Young Men's Clinic), (3) Thomasville Recreation Center, a neighborhood center in the area targeted by the Prevention Research Center. The two hospitals serve the indigent population in Atlanta. Their catchment area encompasses the area served by the neighborhood recreation center enabling hospital clients to continue to learn about their health and develop computer skills without having to return to the hospital. A mini-site in the PRC's offices (1 computer) has also been set up for use by community board members. The computer is equipped with foundation information and Internet access to enable them to find information helpful in writing their own grant proposals for the benefit of the community. (Marion Howard, Ph.D., Morehouse School of Medicine Community Technology Centers Project)

How Does the Steering Committee Determine a Program Focus?

The Steering Committee must now use the data obtained through the processes described in Chapter 2 together with the material presented above to determine the program focus for the CTC. It will be helpful to have a summary report of findings related to interests and needs of neighborhood residents together with a report summarizing complementary programs already available in the community.

The data will likely provide good indication of what initial offerings a CTC should provide and which populations need to be served. Decisions should certainly be made in light of the data, but should not be regarded necessarily as final or “cast in concrete”.

Suppose that the data relating to neighborhood residents’ interests and needs indicates that a large percentage have only a grade school education or less, and have not had any experience using computer technologies. It would seem reasonable to rank “Adult Education” high on your focus list. If, however, the Steering Committee is not ready to commit to a full-fledged Adult Education program, it might be possible to collaborate with an existing agency, providing computer accessibility to them in return for other services.

A CTC, established as part of an existing program, may be presented with an opportunity or a need to expand, and thus have recourse to the community mapping data. It may be that the focus of the CTC parent agency dictates the general focus of the program but that the data can be used to determine other aspects of the offering.

- The Somerville CCC was given space by the Somerville Center for Adult Learning Experiences (SCALE) so that SCALE students could acquire computer skills. It was agreed that when SCALE students and teachers were not using the center, it could serve other groups as well as the general public. This partnership led to the very comprehensive program now run by the SCCC including pre- and after- school groups, elder services, and public hours in addition to SCALE access.
- At The Bridge (Jacksonville, FL), the CTC was introduced to enhance the job skills of pregnant and parenting teens. No community mapping process was undertaken until more recently when the opportunity to expand the program arose. The recent data indicated that a partnership with one of the local schools would provide access to students afterschool and would give The Bridge access to school services such as software licenses, technical expertise, and volunteers.

See Exhibit 3-3 for a CTC programming worksheet, Exhibit 3-4 for policies and regulations, and Exhibit 3-5 for a lab policy violation letter.

Documentation

Reports generated by work specified in this chapter will include:

- A summary of community interests and needs;
- A summary of partnership building efforts and results (Exhibit 2-2 provides a useful model);
- A statement of program focus areas determined by the Steering Committee; and
- Minutes of Steering Committee deliberations on the above issues.

Additional Contact Information

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<http://www.youthfortechology.org>, njidekau@youthfortechology.org,
425-681-3920

Additional Resources

- **ACC-Resources-Program Design**
<http://www.americconnects.net/resources/default.asp?topicid=42>
- **Alliance for Technology Access Resources Library**
<http://www.ataccess.org/resources/default.html>
- **AskERIC — Education Information**
<http://ericir.syr.edu/>
- **AskEric — Educational Technology**
http://ericir.syr.edu/cgi-bin/res.cgi/Educational_Technology
- **Association of Christian Community Computer Centers**
<http://www.ac4.org/>
- **Discussion logs for EDTECH Email List**
<http://h-net.msu.edu/cgi-bin/logbrowse.pl?trx=lm&list=EDTECH>
- **edtech — Technology Foundations Knowledge and Skills K-12 Matrix**
<http://edtech.sandi.net/tech/matrix/matrixoverview.html>
- **Getting Involved in Seattle Community Technology - Info Age Campaign**
http://www.cityofseattle.net/tech/get_involved/infoage.htm
- **Technology Literacy Benchmarks for Nonprofit Organizations**
<http://www.benton.org/Library/Stratcom/TechLit.pdf>

Exhibit 3-1

The Best

of Curriculum and Resources for Youth

by Mary Margaret Pavan, AmeriCorps *VISTA Member

Introduction

“The Best” is a quick-reference for the longer report, “Curriculum and Resources for Youth.” The full report contains more sections, including ones on projects others have actually done and software and is available at <http://www.prephosting.org/acccc/curricula/report.html>

For Curriculum

YouthLearn is the best general site for lesson plans and help in making your own curriculum at a Community Technology Center. This web site by the Morino Institute (<http://www.morino.org>) addresses issues related to working with youth and technology, specifically in out-of-school settings. This site offers advice on *how* to plan as well as actual lesson plans. You can also subscribe to their list service. <http://www.youthlearn.org>

A good web site for fairly academic lesson plans is **Tammy’s Technology Tips for Teachers**. This page includes curriculum plans for computer projects, including Word Processing/Drawing, Spreadsheets/Databases, Internet Projects, and Multimedia. These projects seem appropriate for a school-like setting. Most projects are for 4th-8th graders. This site also offers presentations about teaching technology well. <http://www.essdack.org/tips/page1.htm>.

In addition there are significant curriculum resources for youth at the Association of Christian Community Computer Centers Website at www.ac4.org. For digital art curriculum, see the **Faces of Tomorrow** web site. Not only will you see some results of this project, but you will also find a nice pdf-format manual about the project. This free manual includes some lesson plans for digital art projects. <http://www.cyberfaces.org>. Also check <http://www.youthlearn.org/creations/feelings.html> for ideas on digital photography projects.

For Youth

There are several websites that stood out for youth. In general, these sites are fairly educational, colorful, and interactive. **Discovery Online** for kids (and teachers!), grades K-12, has *tons* of information. Youth can type in a math problem and it will explain *how* to find the answer. There are also entries from a slave about what slavery was like and guidance about how to plan a science project. This site is *very educational!* There are also resources for teachers and parents. <http://school.discovery.com/>

I Know That is a free e-learning website for younger children, ages 2 to 12. This site is very educational and truly aimed at young children by being fun, colorful and interactive. There’s an on-line sticker book of dinosaurs or ancient Egypt, art activities and educational games with math, science, geography and phonics. When children complete an educational activity successfully, they can print an award certificate. Kids can also save completed projects. <http://www.iKnowthat.com>

PowerUp has several sites for children. These sites are good starting places for kids, because they link to other kids’ sites. They also have a theme for each month and a related activity to direct kids in surfing the web. These could be particularly useful in a walk-in center environment to encourage youth to look up something besides WWF and lyrics.

- PowerUp Kids is for grades K-3. <http://www.powerup.org/powerup/kids/>
- PowerUp Kids Plus is for grades 4-6. <http://www.powerup.org/powerup/kidsplus/>
- PowerUp Teens is for grades 7-9. <http://www.powerup.org/powerup/teens/>
- PowerUp Teens Plus is for grades 10-12. <http://www.powerup.org/powerup/teensplus/>

New York Public Library’s fun sites for kids has some great links, especially on its Science and Technology page (you can view earth from real satellites!). Additional sections include Arts & Games, People &

Places, and Sports among others. Many of the links are to ThinkQuest sites (student-made sites). <http://www2.nypl.org/home/branch/kids/>

Web Page Design

Web Monkey for Kids teaches HTML-based web page design. It is the best (and only) site I have found for teaching youth web page design. This site includes a basic “Lessons” section that makes learning HTML un-intimidating. Kids make a web page right away. There is also a “Projects” section, where kids can see examples of web sites, view the HTML code and are encouraged to copy, paste, and change the code to make it their own. The codes include comments to help kids understand. The projects are a good step from lessons to more advanced work, without more tedious lessons. The site offers Shockwave videos to watch during “Playground” time. Finally, there’s a “Tools” section that not only has software download information, but also a list of all HTML tags and a chart of web color codes. Finally, there’s a Planning Guide for parents and teachers.

Please note, however, that there is a lot of reading and although witty, it may be intimidating/boring for young children. You may want to adapt the lessons so you’re the teacher instead of the website. It would probably be fine for middle school and older for self-study if an adult is around for questions. <http://hotwired.lycos.com/webmonkey/kids> (You can also link to this site at the bottom of <http://www.webmonkey.com> which is a popular site for web page designers).

Black History

I have really enjoyed using **AFRO-America’s Kids Zone** with K-7th graders, especially the Myths & Fables section, which allows students to become familiar with clicking through web pages even as they work on their basic reading skills. There is also “Brain Teaser,” which includes puzzles, African animals and a Black History quiz. There are great maps in “Discover Africa” and, of course, games in “All Fun and Games.” <http://www.afroam.org/children/children.html>

For Girls

Three sites stand out as fun, interactive sites specifically for girls: **Girl Tech** (<http://girltech.com>), **Girl Power** (<http://www.girlpower.gov/>), and **The Adventures of Josie True** (<http://www.josietrue.com>). Girl Tech predominantly encourages girls to communicate on-line. Girl Power focuses on health issues (it’s sponsored by the U.S. Department of Health and Human Services). The Adventures of Josie True is an educational game that stars a Chinese-American girl and allows youth to practice their math skills as they go through history.

For older girls and women (high school and up), check out **WOW/EM** (<http://raven.dartmouth.edu/~wowem>), **Girls Inc.** (<http://www.girlsinc.org>), and **The Gale Group: Celebrating Women’s History Month** (<http://www.galegroup.com/freresrc/womenhst>). WOW/EM offers resources to girls interested in both the arts and math/science/technology. Girls Inc. encourages girls to be “strong, smart and bold.” Celebrating Women’s History Month focuses on women’s history.

Homework Help

Ask Jeeves Kids is a great and popular homework help site. It’s simple: Students type in their question and Jeeves gives them possible subjects that probably include the answer they want. This is appropriate for any age level.

Andrew Sears, Association of Christian Community Computer Centers, 670 Washington Street, Dorchester, MA, 02124; <http://www.ac4.org>

Exhibit 3-2

SENIORS TRAINING SENIORS IN COMPUTER BASICS

Tips & Lessons Learned Teaching Elders

- Provide small classes with a ratio of 1:3 for optimum, one-on-one learning
- Senior instructors without adult-learners, teaching background may require more training time with a “seasoned” instructor (12 – 16 hours)
- Follow lesson plan as closely as possible, but adapt for varying levels of students
- Realize that most attendees are between 65+ to 90 years old with very little or no knowledge of keyboarding skills
- Senior instructors (over 50+) and assistants will help each student individually throughout the four, 2-hour classes
- Physical limitations such as eye-hand coordination; stiffness in fingers; limited vision and hearing loss increase instructor’s individualized attention to students
- Remember that teaching this technology to elders is like teaching an elderly person how to drive for the first time!
- Avoid excessive computer terminology – it is intimidating – relate to what they know from past experience
- Develop early on a comfortable and relaxing atmosphere among the students and yourself – let them know they do not need to learn everything in these first 4, 2-hour classes. We would like them to feel comfortable about returning.
- Do not lecture; break your day’s lesson into timed sections (i.e., 10 minute introduction; 15 minutes practice; 10 minutes Q & A)
- Do not push beyond what each one can do individually – have series of exercises for varying levels of competency as you assist each student
- Build in practice time where they can search for or work on what they would like to do. Adult learners like to make decisions for their learning.
- Enjoy their amazement. Have a great sense of humor. Create a comfort level so they will return and have lots of fun with your students.

***-- STS Tips and Lessons Learned, Created 5-02 / pb / Nancy Birdwell, Instructor
The City of Seattle Human Services Department, Mayor’s Office for Senior Citizens
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Exhibit 3-3 -- CTC Programming Worksheet

CTC Programming			
Lab Environment	Choices	What will it look like?	How will you get there?
Signage What does your lab environment look like? Is it inviting? Is it updated? Do you have client work up on the walls? Are specific lab procedures posted and clear?	Client work Lab rules Posters		
Requesting Help How do your users request help?			
Overall Feel Is there a friendly, welcome feeling when users come in? Welcoming staff, sign-in, inviting?			
Course Design	Choices	What will it look like?	How will you get there?
Drop-in	A Safe Place Tutoring Homework		
Integration into "non-tech" courses	Courses with a product Research Activism Collaboration Academic Skills		
Tech Specific Courses	Websites Programming Robotics Newsletters Applications		

-- *Salesforce.com/foundation, 1 Market Street, Landmark Bldg., ste. 300, San Francisco, CA, 94105, <http://www.salesforcefoundation.org>; <http://www.youthspace.net>*

