

Communiversality

Envisioning an Internet Center for Homeless Individuals: One Group's Quest to Reduce the Digital Divide

Prepared in partnership with
Open Access Connections and
The Internet Cafe Working Group including:
Alliance of the Streets
Free Geek Twin Cities
Main Street Project
Minnesota Center for Neighborhood Organizing
Trans Youth Support Network
Voices for Change

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FREE COMMUNICATIONS TOOLS FOR PEOPLE IN NEED

“I speak to many homeless individuals, being one myself. One of the most pressing problems is our limited access to technology. Each individual seems to have limited ability to access technology at different levels.” - Former homeless individual

“Knowing how to read is no longer sufficient to be ‘literate’ in the 21st Century. Basic literacy must be supplemented with digital literacy.” -FCC commissioner Mignon L. Clyburn, addressing America’s Broadband Summit March 9, 2010

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Executive Summary

The goal of this project was to research the feasibility and logistics of creating an internet center for homeless individuals. The group who would like to see this project come to fruition is known informally as the Internet Café Working Group, and consists of individuals from the following organizations: Open Access Connections, Voices for Change, Minnesota Center for Neighborhood Organizing, Main Street Project, Trans Youth Support Network, and Alliance of the Streets.

For this research project I was given several questions to research. First of all, I was asked to identify where individuals could currently access the internet for free in the Twin Cities. After many hours of research I was able to identify 151 places in the Twin Cities where this was possible. This included libraries, non-profits, workforce centers, park and recreation centers, shelters, and transitional housing sites. In my appendix I include a list of these places along with the information I found out about each one. Significantly more of these centers are located in Minneapolis than in St. Paul.

The second research topic I was given was to identify what the homeless population currently thinks about their access to the internet. To identify this I surveyed homeless individuals in several area shelters, led focus groups, and left a voice mail message in the inboxes of Open Access Connections voice mail users asking for their opinion. I found that large amounts of homeless individuals report having little to no computer skills, and that many would benefit from increased access. I also found out that many individuals do not know about other places to access the internet for free outside of libraries. A portion of the homeless community is satisfied with their current access, but a portion of the community feels frustrated with it, particularly in St. Paul. A common frustration was that many I spoke with knew no one who could show them how to use computers.

I was also asked to consider specific aspects about the homeless community to keep in mind in the design of an internet center. It is important that the center be open during times when there is reduced access in shelters, and in other Community Technology Centers. Times of reduced access for homeless individuals include weekends and early mornings. In addition, it is important that the center be located in an area convenient to shelters, and that safety and security measures be paid careful attention to. Finally it is important to have clearly defined rules and expectations of who is in charge.

In addition I was asked to identify whether there were any current projects that had similar characteristics to the vision that the Internet Café Working Group developed for the center. With a few exceptions, I found that many of the characteristics that were envisioned for the center were quite unique.

Last, I was asked to identify best practices for developing and managing free internet centers. To do this, in addition to internet based research, I interviewed Community Technology Center professionals and made site visits to Community

Technology Centers. In my report I discuss ten “best practices” for managing public computer centers.

Introduction

Digital literacy, or the ability to manipulate computer concepts and skills to access and share information, is increasingly important in the modern age. According to individuals involved in the Twin Cities based Technology Literacy Collaborative there are four reasons why it is important to increase the number of people who are digitally literate.

First of all, digital literacy is necessary to develop a 21st century workforce. Knowing how to access the internet, use search engines, and send email, is increasingly important in both searching for a job and performing basic job functions once a job offer is made. Secondly, the manipulation of computer based technology is essential towards connecting with online information. Whether it is searching for health information online, or finding the address of the nearest bus station, it is clear that access to the internet is pertinent in getting around in the modern age. Third, access to the internet is partially responsible for the achievement gap in education that separates the kids who do well in school, and the kids who don't. In one national study of children aged 6 to 17, a full 90% of children reported that access to a high speed broadband connection in their homes was important in completing their assignments and 70% reported it helped get them better grades.ⁱ Lastly, being digitally literate is important in creating civically engaged citizens and in expanding social networks. Whether it is networking on LinkedIn, or sending an email to a congressional representative, digital literacy helps make our world more connected.ⁱⁱ

While it is important for anyone to have digital literacy skills, it is especially important for individuals who are homeless. Finding housing and other resources to get off the streets is infinitely easier if you know how to perform basic computer functions like sending an email. While most people take for granted that they know how to perform basic tasks on the internet, the reality remains that a significant portion of the homeless population is still digitally illiterate. Increasing the number of people who are self sufficient digitally decreases the number of people dependent on case workers and other overburdened social service providers.

To try and address this problem, a collaborative of individuals has recently come together to envision a solution. One option that they have come up with is the idea of developing an Internet center specifically for people who are homeless. This collaborative informally calls themselves the Internet Café Working Group. They consist of individuals from the following organizations: Open Access Connections, Voices for Change, Minnesota Center for Neighborhood Organizing, Main Street Project, Trans Youth Support Network, and Alliance of the Streets.

In order to assess the feasibility of an internet café for homeless individuals and figure out logistics, I came on as a research assistant. I am a graduate student at the University of Minnesota who has experience working within a public computer lab for low income individuals and with other digital inclusion initiatives. My research was supported by the University of Minnesota's Center for Urban and Regional Affairs. The organization providing weekly guidance for my research was Open Access Connections, a nonprofit organization situated in St. Paul, Minnesota, dedicated to providing free access to technology for low income and homeless individuals.¹ Currently Open Access Connections provides free voice mail services so that people who can not afford reliable phone service can still be reached via voice mail. In addition they have recently been funded to launch a "Netbook lending library" for homeless and recently homeless individuals.

I was given the below topics to research.

- 1) Where can people who are homeless and low income currently access the internet for free?
- 2) What does the homeless community think about the access that they currently have to the internet?
- 3) What unique characteristics of the homeless community should we keep in mind when we envision an internet center?
- 4) How is our vision different than what currently exists? Are there similar projects out there?
- 5) What are best practices for developing and managing free internet centers?

Vision for Internet Center

Before I discuss my methodology for answering the above questions I wish to first detail briefly the specific aspects of the vision for the center that the Internet Café Working group envisions. They do not see this center as simply a place for homeless individuals to use computers, but as a community building space where individuals who are homeless can become more engaged with technology, and use it to better themselves and their communities.

Here are some of the specific aspects of the vision. I will return to this vision in more detail in subsequent sections of this report.

- 1) Run by and for individuals who are homeless and low income. Traditionally the relationship between low income and homeless individuals and nonprofit service providers is a client and staff relationship. The Internet Café Working Group turns this theory on its head by insisting that from the beginning, the relationship that the internet center will have with these individuals will be a more collaborative

¹ Open Access Connections was formally known as Twin Cities Community Voice Mail.

and participatory relationship. They intend on having individuals who are homeless be involved in every step- from brainstorming what the center will look like, to staffing the center once it is created.

- 2) Job Creation for Homeless- As part of this new relationship, they will employ homeless and formerly homeless individuals to staff the computer lab. This will help to offer a way out of poverty for people. Open Access Connections has already started to identify people it works with who are homeless who would be good candidates for these positions (*See Appendix A*).
- 3) Hours and Location- Many public internet centers in the Twin Cities offer limited hours and a location that is not convenient to people who are homeless. When designing the hours, Open Access Connections should pay particular attention to the gaps in service of other internet centers and shelters. The homeless population often does not have access to transportation, so it is very important that a center be located within walking distance to shelters.
- 4) Unrestricted Content -Many places that offer free internet access have strict restrictions on what people can do on the computers. Many focus exclusively on searching for employment, so there is a service gap that is created if people want to connect to other resources. Furthermore, research shows that people learn computer skills best when they can play games or do other activities that are low stress and low pressure.ⁱⁱⁱ Many existing public computer centers do not allow this.
- 5) More than an Internet Center: A Second Home- The center will be more than an internet center, it will have couches and food, and offer a place for people to relax and build community in a safe place. When shelters let people out in the morning, many homeless individuals don't have anywhere to go. This will give them a safe place to go where they can build community.
- 6) Addressing Fear- Many people who are homeless and who do not know how to use computers have reported that they are fearful of going to existing centers because they do not know if there will be someone there who can help teach them step by step how to perform the tasks they want to learn how to do on the computers. Not all centers have the staff to do this.
- 7) Digital storytelling/civic engagement- The Internet Café Working Group is very interested in securing a space where homeless individuals can “tell their story” to help inform public policy. In addition they would like to see homeless individuals become more connected with social media and other topics that will help them feel more connected to society as a whole and with each other.
- 8) More than a Drop in Center - The Internet Café Working group envisions the space for the Internet Center to be used in ways that build community and help

out the homeless community. They want to create a culture at the center where people feel empowered to create a positive and collaborative environment.

Methodology

To address the question, “Where can people who are homeless and low income currently access the internet for free?” I conducted an inventory of all the places where people could access computers and technology outside their homes in the Twin Cities. These centers are commonly known as Community Technology Centers (CTCs), and will be referred to as such in the rest of this paper.² In this list I did not include universities, schools, or other areas where access was limited only to people who pay.³ To inform my list, I started out with the list of CTCs from the Technology Literacy Collaborative, and added to it computer labs in shelters, public housing, and in other non- profits that were not currently on the list.⁴ In forming my list, I made numerous phone calls to find accurate hours, and to follow up on sites that were no longer in operation. I also made site visits to a variety of the labs.

To answer the question “What does the homeless community think about the access that they currently have to the internet?” I conducted numerous interviews of homeless individuals and human service professionals, led focus groups, administered surveys to homeless individuals on their access to technology, and collected responses from a broadcast messaging system that Open Access Connections uses to solicit feedback from their participants who receive free voicemail services (*See Appendix B*).⁵ The places in which I asked people who were homeless to fill out surveys were Dorothy Day, Listening House, Project Homeless Connect at the Minneapolis Convention Center, and Salvation Army Harbor Lights. All those who completed a survey were given the “Handbook of the Streets” resource manual as a thank you. In total, I surveyed 89 individuals who were homeless, 47 from St. Paul, and 42 from Minneapolis. The survey questions consisted of three open ended questions asking individuals about their internet access and their recommendations for developing internet centers (*See Appendix C*).

To answer the question, “What unique characteristics of the homeless community should we keep in mind when envisioning an internet center?” I talked to a variety of

² For the purposes of this paper I will refer to places where people can access the internet publicly as Community Technology Centers. There are also known as neighborhood network centers by HUD, Community Computer Centers by Minneapolis Parks and Recreation, and Public Computer Centers by the recipients of the most recent grants by the Broadband Technologies Opportunity Center.

³ Many lists of Community Technology Centers do include these centers, it all depends on how you define community technology.

⁴ Computer Labs not currently on the TLC’s list will be added in upcoming months.

⁵ This messaging system works by having Open Access Connections send out a “broadcast message” that automatically messages everyone who has a voice mail number. When these individuals check their voice mail they will receive the message, and then they have the option of responding. In the past Open Access Connections has used this broadcast messaging system to solicit information from homeless individuals that will educate legislators on the issues relevant to them.

human service providers and homeless individuals as well as the Open Access Connection staff.

To answer the question about best practices to run a center and the uniqueness of the model that they are proposing I performed considerable internet research, visited many different Community Technology Centers and talked to a variety of professionals who run public computer labs. I also incorporated the feedback from homeless individuals I talked to.

Limitations

There were several limitations to my study. First of all, I was operating under a time constraint. I only had about 15 weeks on a part time basis to perform the research for this study. In addition my topic was very broad. As a result, I was not able to cover the intricacies of each subtopic as thoroughly as I would have liked.

Furthermore, I could not find any other research specifically on the access that homeless individuals had to technology and only limited information on best practices for designing Community Technology Centers.

As a result, much of my research was original research, and based largely on primary interviews. Given my limited time constraint, I could not interview as many people as I would have liked to.

Another limitation I faced dealt with the specific demographic I was attempting to connect with. Because the homeless population is very transient, there was not a way to develop a random sample to survey. Because of this I had to rely on a convenience survey of homeless individuals staying at shelters, and homeless individuals who went to the Minneapolis Homeless Connect. For my survey, I only had time to survey 89 individuals.

In addition there was a response bias inherent in my survey. Individuals who took the time to answer my survey or chose to respond to the broadcast message that Open Access Connections sent out were self selecting themselves as inherently being more knowledgeable about and interested in technology as a whole than the greater Twin Cities homeless population. In addition the homeless individuals I questioned for the focus groups were part of pre-selected groups of individuals working towards improving the conditions of homeless individuals, so are not a representative survey of all homeless individuals.

Community Technology Center Inventory

In total there are 151 known places where people can access the internet and other technology for free in Minneapolis and St. Paul (*See Appendix D*). In Minneapolis and St. Paul people can access computers at libraries, workforce centers, non profits, park and recreation sites, shelters, and at various transitional housing locations. These locations offer a variety of different services and have a variety of different restrictions on usage. For instance, some Community Technology Centers are only available to certain clientele, and some only offer classes, while others are open to whoever wants to use internet technology. In addition, there is a range of assistance available- some centers cater to individuals new to computers while others, such as public libraries, allow individuals to browse the internet on their own, free of restrictions. Many technology centers only offer internet access to those seeking employment, and most are not open outside of the hours of 9 to 5, Monday through Friday.⁶

Of particular interest to the Internet Café Working group are the internet centers available specifically to those who stay at shelters or in transitional housing. These are private labs open only to residents or individuals involved in programming at the shelter or transitional housing location. There are 33 such centers known that offer internet and computer access for their guests. Many of these labs are sponsored by private charities such as Catholic Charities, or public housing agencies such as the US Department of Housing and Urban Development (*See Appendix E*).

There are several very interesting components of the Twin Cities technology literacy scene. First of all, the Twin Cities is home to the Community Technology Empowerment Project AmeriCorps group. As part of their AmeriCorps service, these AmeriCorps members are placed in Community Technology Centers throughout the Twin Cities area. They provide direct service in computer labs, and offer capacity building services, providing as an invaluable resource to the non-profits and community centers that they serve within. No other city in the country has such a large amount of AmeriCorps members working specifically to address digital literacy issues. This force of AmeriCorps members helps the digital literacy scene in the Twin Cities prosper.

Another interesting component of the Twin Cities technology literacy scene is that there is much better access to Community Technology Centers in Minneapolis than in St. Paul.⁷ As of July 2009, approximately 37% more people lived in Minneapolis than St. Paul. However, Minneapolis has nearly twice the number of Community Technology Centers as St. Paul (97 verses 54).^{iv,v} Furthermore, public libraries, which represent the largest number of Community Technology Centers, offered significantly better access to the internet in Minneapolis than St. Paul. There are significantly more computers for each library patron in Minneapolis, and each person can spend a longer time each day on the computers. Every person with a library card in Minneapolis shares each computer at the

⁶ Of notable exception are the public libraries, many of whom have extended hours during the week and on weekends.

⁷ Within Minneapolis, a large number of Community Technology Centers are located in the South Minneapolis area.

library with 633 other people. In contrast, every person with a library card in St. Paul shares each computer with 926 other people.^{vi,vii,viii} In addition, the St. Paul Public Library system has a policy that makes it more difficult to access the internet for a prolonged period of time than Minneapolis Public Libraries. Under this policy, a person has a maximum daily limit of 60 minutes at each St. Paul library even if there is no one else waiting for the computers.^{ix} In Minneapolis, in contrast, there is no daily maximum time limit.

In addition, the Twin Cities community is unique in that there are such a large number of places to access internet technology outside of the parks and library system.^x This can be explained in part due to a wide number of social service providers understanding the importance of connecting people with internet technology. In fact, a local group known as the Technology Literacy Collaborative has formed to share best practices and network with other providers about digital literacy. Collaborations such as this are relatively rare.^{xi}

However, despite there being a large number of places to access the internet free of charge, the message about the availability of these Community Technology Centers is not getting out to the wider population. Everyone knows about the library and workforce centers, but many do not know that there is access to free internet technology available at many smaller centers. Given that each of these smaller centers have their own rules and their own times when they are open (and their own restrictions for use), it can be very tricky to navigate the system. In the Twin Cities, traditional channels of getting the word out about social services do not seem to be operating very efficiently in terms of getting the word out about these internet centers. When providing referrals, Twin Cities based social service agencies often either refer people to the Handbook of the Streets or United Way 211. The Handbook of the Streets, while an excellent manual for navigating social service resources for homeless and low income individuals, does not currently include a section for Community Technology Centers. In addition, United Way 211 does not keep track of Community Technology Centers as a resource either.

As an experiment, I called United Way 211 with a St. Paul zip code and was told that the only places I could access computers were at the Family Place or Listening House if I were homeless or the public library if I wasn't. When I called United Way with a Minneapolis number, I was told my only options were the public library or the workforce centers. This is despite there being 151 Community Technology Centers in Minneapolis and St. Paul alone! Obviously, the word is not getting out about these centers in the way that it needs to.⁸

To address this issue, the Technology Literacy Collaborative has made a list of local Community Technology Centers on their website. This is an excellent movement

⁸ I also called the Minnesota Adult Literacy Hotline, a hotline that provides information on adult literacy in Minneapolis. They did not have any information on nonprofits that offer computer classes or other free places to access the internet apart from libraries, even though many consider digital literacy to be an essential part of adult literacy.

towards getting the word out about CTCs. However, in my research I found that there were quite a few CTCs that weren't listed on their website because their existence wasn't widely known. This basically means that the Twin Cities social service community at large needs to do a better job about spreading the word about the services that they offer pertaining to internet technology!⁹

Voices of the Homeless Community

So where does the Twin Cities homeless population connect with technology and what do they think about their access? Of the individuals I surveyed, there were a wide range of different perspectives. By far, the most commonly reported place for people to access the internet was the library, with 48 out of 89 respondents reporting that they access the internet there. Individuals also reported that they access the internet at area shelters, non-profits, universities, at the houses of friends and families and on their smart phones and laptops. However, many individuals specifically mentioned that they did not know of other places to access the internet besides public libraries.

Individuals in Minneapolis gave mostly positive responses about their access to internet technology, often citing the Minneapolis Central Library for having computer access normally instantly available with no wait. In contrast, the homeless community in St. Paul gave less positive responses, often mentioning that accessing computers at the downtown St. Paul library was very difficult, and often resulted in long waiting times. In several cases, people mentioned feeling so frustrated with how difficult it was to access the internet due to their limited skills and the long waiting times that they effectively gave up trying. One St. Paul respondent mentioned, "I waste time when I go to the library. [I] use the internet for one hour and wait for 3 hours." People also expressed frustration over the 60 minute daily time limit saying that it wasn't enough time to do the things they needed to do on the computers. Another St. Paul respondent remarked, "If you're not familiar with the internet, you could spend a whole hour just trying to get on."^{xii}

When asked what they wanted to do on the computers, individuals gave a wide range of responses. Many wanted to search for housing or find employment, but others wanted to learn advanced computer skills, build a website, or just see what the internet had to offer.

Of the 89 individuals I surveyed, 20 people, or 22% of my sample, reported that they did not know how to use computers at all. Among the homeless community in both cities, for individuals that did not access the internet there were a wide range of reasons they gave for why they did not. Responses ranged from those who were very eager to learn how to use internet technology, but as of yet no one had showed them, to those who had misconceptions about what the internet was about, such as the person who mentioned, "The internet is bad news.- too many drug dealers and sex offenders." In

⁹ In the coming months the TLC's website will be updated to include previously unintentionally omitted CTCs. The website can be accessed at: <http://tlc-mn.org/ctc>

addition, some felt that that accessing the internet would not have any positive benefit in their lives, such as the person who mentioned, “When you’re on the street, [you] just go by what people tell [you], and it’s normally pretty good.” In addition, there were several individuals who mentioned that they did not access the internet because they did not know how to read, suggesting a larger underlying issue, needing access to remedial education.^{xiii}

Unique Characteristics of Homeless Population

When we think of the needs of the homeless population there are several things that come to mind. First of all, because they often do not have reliable access to transportation, it is important that services for homeless individuals are close to area shelters.¹⁰ In addition, services should be open during gaps in service of other places for homeless individuals to go. Currently, the Twin Cities homeless population appears to be underserved in terms of social services early in the morning, on weekends, and on certain days of the week (*See Appendix F*).¹¹

Another factor that needs to be considered carefully in designing an internet center for people who are homeless is that of safety. Given that many individuals who are homeless experience mental or chemical health struggles, or are down on their luck economically, measures need to be taken so that individuals feel safe and that equipment does not get stolen. This is particularly important if the internet center is a stand-alone center that does not offer other services, and if is open at times when there may not be many other people around. One idea that the Internet Café Working group had to address issues of security would be to have “bouncers” or people employed who can take control of the situation if there are issues. The working group should also consider installing security cameras or alarming the facility to protect the building from theft. To protect the liability of the Internet Café Working group, an insurance policy should be taken out for the facility.

Safety has been an issue in the past with other groups contemplating creating internet centers. In 2006, a group putting together suggestions for the Minneapolis’ Community Benefits Agreement associated with the municipal wireless project, considered suggesting that the benefits agreement include kiosks offering free 24/7 wireless access in low income neighborhoods. However, this group ended up not including this recommendation in their proposal for the Minneapolis Community Benefits agreement due to their concerns over safety issues in unmonitored locations. People were

¹⁰ While there are some homeless individuals who do not stay in shelters scattered around the city, many stay in shelters most commonly located in the downtown Minneapolis, downtown St. Paul, or South Minneapolis areas. For this reasons, it makes sense to situate an internet center around these areas, most likely in St. Paul due to the reduced access to Community Technology Centers.

¹¹ According to one advocate, early mornings, Wednesdays, Fridays, and weekends as the times of reduced service for the homeless population in downtown St. Paul.

afraid that the kiosks could be used for illegal activity. This security issue was the same reason why many public phones have been phased out.”^{xiv}

In order to address concerns of safety, the City of Seattle’s Community Technology Program recommends that Community Technology Centers consider carefully the tradeoffs that present themselves in terms of the visibility and location of internet centers. They state, “a tradeoff must be struck between making them [CTC’s] visible and attractive to casual drop-in traffic on the one hand, and making sure they do not become inviting targets for theft, vandalism, and other security hazards.”^{xv}

To address safety concerns, several Community Technology Centers have stressed the importance of having adequate numbers of paid staffing to mitigate risks. For instance, the neighborhood of Harlem in New York City has a famous Community Technology Center known as the “Playing to Win Harlem Center.” Because it is located in the heart of a high crime neighborhood, they have a policy that at all times there must be two paid staff present. In regards to this policy they say “we cannot ask volunteers to take sole responsibility for the security of the space or the occupants at any time.”^{xvi} CTCNet, a group that acts as a resource to Community Technology Centers across the country, also gave similar recommendations, advising that at least two staff members (paid or volunteer) be on the premises at all times the center is open.^{xvii}

While it is important in all Community Technology Centers that there be help available if people need it, it is particularly important in centers for individuals who are homeless. Learning a new skill like computer competency can be especially difficult if one has not slept properly the night before as is the case for many homeless individuals, or if one is battling any number of other issues that many people who are homeless face. In a conversation I had with long time homelessness advocate, Bret Byfield, the importance of having staff who are adequately trained in how to interact with people positively was stressed, so that the center is a positive place for individuals to go to. He suggested that all staff be trained in a counseling technique known as Motivational Interviewing.^{xviii}

Another issue of particular importance to the homeless population is that everyone who visits the center understands “who is in charge” and what the rules are. This issue was brought up in both focus groups with homeless individuals and in my conversation with Doug Fountain, former X-Committee member, as one reason why the X-Committee ended up not being able to survive.^{xix} At first, when there was one leader, the X-Committee functioned well, but once that leader had to step down, there were too many directions the group was trying to go in, and no one in charge to direct the group, so the group was not able to survive.¹² In the Voices for Change focus group, I was told

¹² Voices for Change is a group of homeless individuals that meets at Listening House in St. Paul about issues pertaining to ending and preventing homelessness. The X-Committee was an initiative started by homeless individuals in St. Paul in 2004 that lasted one year. In this year they were able to successfully secure their own office space, have a computer lab, organize their peers to mentor other peers in fighting drug addictions, and secure lockers for homeless individuals to put their belongings during the day.

that a major reason why internet access was removed from Listening House was that there would be fighting over who would use the computers, stemming from conflicts over unclearly defined rules about the length of time that individuals could use computers for.^{xx}

How the Vision is Unique

As discussed above, in designing the center, the Internet Café Working Group has made it very clear that they intend for it to be run by the individuals it intends to serve. This is a very unique way of providing a service because traditionally the social service model is one of clients and staff. However, in this vision, the participants will be part of the staff, and be active in both designing and running the center. Currently, Open Access Connections employs homeless and low income individuals to spread the word about their free voice mail program, and to give feedback on how their organization is run through their advisory group. They will use a similar method to design and run the Internet center. As part of this, jobs will be created that will help individuals who are homeless get out of poverty. The Internet Café Working Group has already started to identify people it works with who are homeless or recently homeless who would be good candidates for these positions (*See Appendix A*).

The Internet Café Working Group model is also unique because it envisions (relatively speaking) unrestricted content on what people can do on the computers. Instead of saying that people can only conduct job searches or only complete educational activities, Open Access Connections wants to provide as close to open access as possible. The only centers that I am aware of that offer such open access are libraries, which may sometimes not be useful to the segment of the homeless population that is not comfortable using computers or does not have a library card.^{13,14} Instead of providing open access, a large number Community Technology Centers focus almost exclusively on workforce readiness.¹⁵

For this reason, there is a service gap if individuals want to learn how to use the internet for other purposes, such as accessing affordable housing, or just gaining comfort with using computers. Research shows that people learn computer skills best when they can play games or do other activities that are low stress and low pressure, so it makes sense to provide open access time. This is because low pressure interactions with technology, whether it is getting acquainted with social networking, or playing a game online, offer the “path to becoming an empowered user who views the internet as a

¹³ Libraries do not always have the staff capacity to sit with someone one-on-one for an extended time period to show them how to perform a particular task on the computer

¹⁴ One thing that was mentioned several times in focus groups was that individuals would often lose their library internet privileges because they would check out books, store them in lockers, and then the lockers would be cleaned out a certain time, and they would lose the books. They would thus rack up fines that they could not afford to pay and would therefore lose their library cards.

¹⁵ This is because much of the funding available to Community Technology Centers comes from agencies and foundations dedicated to helping people secure employment.

resource or expansion of his or her world.”^{xxi} Carl Redwood, former associate director of the Hill House Community Access Network also emphasized the importance of providing unstructured access. “I think there is a danger in the technology center movement, particularly as it relates to low-income communities, to assume we’re doing something for people...I think what we have to do is just make resources available to the community, and the community will figure out what, when, and how to use them. And they may not use them the way the mayor’s office or someone else thinks they should use them... But I think it just needs to be open like that.”^{xxii}

There is just one word of caution I have for the Internet Café Working Group on this subject. Just as there are tradeoffs that must be made in the hours and location of the proposed internet center, there also are also tradeoffs in how much time people are allowed to use the internet, and how unstructured the time is. This is because while there are definite merits to open access, a large amount of unstructured time can result in a few people monopolizing the computers doing activities like playing games, while others are waiting to use computers for other more immediately constructive activities. One of the respondents to the broadcast question I sent out brought this up in his response. He said, “The problem with the library is that you get an hour and people don’t want to do work on the internet, they want to watch a movie or listen to music or play games. This is limiting when you want to look for housing or employment, so you have to wait an hour and are lumped into the same pool (as those playing games).”^{xxiii}

The Internet Café Working group’s vision is also different from other centers because it hopes to use its space as a place for civic engagement and potentially civically motivated media projects. Central to the core of their mission is a community organizing model that aims to incorporate the feedback of low income individuals into the policy sphere. One of the methods that Open Access Connections currently employs to do this is by collecting people’s opinion about different current policy initiatives on their broadcast system, and sending the recorded messages to policy makers. They would love to do this on a larger scale, and dream of some day incorporating some kind of video into this advocacy. If they want to move forward on this, good partners would be St. Stephen’s Human Services, who has done some media advocacy with homeless populations in the past, or St. Paul Neighborhood Network, who is always looking for new organizations to partner with.

In getting people connected to the internet, the Internet Café Working Group wants people to feel comfortable. They recognize that many homeless people are intimidated by the idea of the internet and don’t want anything to do with it.^{xxiv} To address this hard to reach population, the Internet Café Working Group wants to make their center as comfortable as possible, with a meeting place and couches for people to socialize as they are taking breaks from the internet. In envisioning the vibe that Internet Café Working Group wants people to feel when they walk into this center, they think of the Wellness Center at First Lutheran Church on the east side of St. Paul. The Wellness center opens its doors every Thursday evening for a few hours as a community building space for homeless and low income individuals. There are meditation classes, opportunities to get acupuncture preformed for free, and an opportunity to build job skills

by volunteering in the kitchen preparing a community meal. It is run with the philosophy that it is a community building space for everyone to feel welcome. People come to the Wellness Center to relax and interact with friends and neighbors; there is no pressure to do any particular activity.^{xxv}

Has this been done before?

Many shelters provide internet access to homeless individuals. However, there is a big difference between what is provided at many shelters and transitional housing facilities and what the Internet Café Working group is proposing will occur at their internet café.

What are the differences? First of all, many local shelters provide internet access mainly only to those seeking employment.^{xxvi,xxvii} This alienates those who want to use the internet for other means, such as looking up information related to health care. As was discussed in the section above, the Internet Café Working Group wants to provide truly “open access” to the internet and technology to homeless and low income individuals. They see an open environment to interacting with technology as key to community building and creating civically engaged civilians. In addition they recognize that there are many activities of merit to do on computers in addition to seeking employment.

The desire to use the center for media or civic engagement also sets the proposal that the Internet Café Working Group has highlighted apart from many other existing internet centers in shelters and transitional housing facilities.

Many facets of the vision for this internet center also mirror an initiative started in 2004 by the homeless community known as the X-Committee. As part of this initiative a space was rented out in a storefront in downtown St. Paul as a place for the homeless community to have a place of their own. Everything was run by and for the homeless community.

There were several projects that the X-Committee championed. First of all, there were computers available for people to get acquainted with internet technology. Even though employment searching was not a formal program that was offered, 25 people found jobs by searching for employment at this center. Secondly, the X-Committee noticed that the homeless community needed a place to put their belongings during the day, so that they did not have to take them with them everywhere they went, and make a bad impression on potential employers. For this reason, they worked hard to secure lockers where people could store their belongings, and ultimately were successful. Finally, the X-Committee developed a peer mentor program to counsel those who were addicted to drugs to fight their addictions.

Unfortunately, however, the X-Committee model ended up being unsustainable, and only lasted a year. According to one of the founders, Doug Fountain, there were two main reasons why it fell apart. First of all, the leaders of the project were overworked and exhausted. They were working 10-12 hour days without being paid. When one of the main leaders had to step down due to personal issues, the project waned. Secondly, there were too many leaders and not enough followers. Too many people were championing different initiatives, leaving too few people to do the work to get them established.¹⁶

What can we learn from the X-Committee? First of all, we can learn that it is important to let the users of Community Technology Centers have a say in the programming that occurs within the center. We can also learn that it is important to have a sustainable business model in order to sustain the center from year to year, and to not overwork the staff. Finally we can learn that it is important that the center be located in an area convenient to individuals who are homeless, and to not pursue too many initiatives at once.^{xxviii}

Best Practices for Running Internet Centers

While some of the below policies may seem a little mundane or obvious, they are important things to think about in running internet centers.

1. From the beginning, get the word out about the internet center, and spend a lot of time advertising. If you do not let a lot of people know about your center, people will not come. Many computer labs have made this mistake when they were just getting started, they didn't do much advertising, so in the beginning many of their labs were under utilized.^{xxix}
2. For funding purposes, many centers find that it is helpful (or required by funders!) to track the demographics of individuals who visit the center.^{xxx,xxxi,xxxii} Consider from the beginning having a sign in sheet that new users fill out tracking their demographics. One might also consider tracking information such as the number of jobs received, or the number of civic media projects created.
3. It is important to decide conclusively whether or not the center will allow kids. If kids are allowed, they will have to be monitored more closely so that they do not damage the equipment. One innovative way that the People Serving People Shelter addresses the issue of childcare is to have an unsupervised play area situated next to the computer lab in a separate room. While parents are using the

¹⁶ Other big issues that occurred with the X-Committee were that homeless individuals would sleep in the building where the X-Committee was housed overnight, causing problems with the building's property owners. In addition many people just used it as a place to get out of the cold instead of a community building space.

computers in the lab, they can monitor their children in the next room on a webcam.^{xxxiii}

4. Many centers also find that it is helpful to post the rules of the center so that everyone who visits the center is clear on what is expected of them. Typically these rules include variations of “No food or drink” so that computer systems do not get damaged, “Silence please” so that people can concentrate on their work, and “Be respectful of others” to set the tone for a harmonious environment.^{xxxiv,xxxv}
5. If at all possible, the center should aim to have consistent hours. Community users get very frustrated when hours change a lot, so it is often better to have shorter, consistent hours, than longer, wildly inconsistent hours.^{xxxvi} Many centers stretch the hours that they are open with volunteer help, but there is a tradeoff, volunteers can not be expected to have the same level of responsibility and reliability as paid staff members.¹⁷ Furthermore, in planning for volunteers it is important to remember that volunteers need to be recruited, trained, and managed, which can often be a job in and of itself.^{xxxvii}
6. Do not underestimate the amount of planning it will take to start up a stand-alone computer center. Starting one up from scratch can be very expensive, difficult, and time consuming.^{xxxviii,xxxix} If at all possible, it is best to partner with an existing initiative. Most computer labs do not exist as stand-alone centers, but within nonprofits and other organizations for this very reason. When searching for partners, the requirements of a good location and a shared mission should be prioritized.
7. Be leery of donated equipment- It is worth it to invest in new equipment if it means your internet center will offer individuals more reliable access, and be less prone to breaking down.^{xl}
8. Make sure to schedule regular maintenance, and have someone on staff who can inexpensively maintain and troubleshoot computer and printer problems. If the equipment that is bought is new, there will be less maintenance expenses necessary, but there may still be some. In order to keep computers running fast, the library and several other non-profits reset the memory of their computers every time they log off.^{xli}
9. Develop a policy regarding whether or not people are allowed to save material on the computers. Centers approach saving in different ways. Project for Pride in Living does not allow people to save files on the computers, but offers them a flash drive that they can purchase, or teaches them how to save to their email.^{xlii} Catholic Charities’ Mary Hall takes this a step further by giving participants a flash drive that fits around their wrist so that it is a lot harder to lose.^{xliii} Visitors to

¹⁷ When finding volunteers, volunteermatch.org is a good place to start. It is also a good idea to connect with local college community service offices to let them know you have volunteer opportunities available.

the Workforce Center are often encouraged to save to their email.^{xliv} It can be very confusing for beginning users to learn how to do this, but it is a good skill to know how to do. Another option is to allow people to save on the computer's hard drive. Waite House Neighborhood Center approaches the issue of saving by allowing each person to have a separate folder on the computer that they can save their documents within.^{xlv} There is a way to make a place where people save sensitive information password protected, so that the risk of people looking at sensitive information saved on the computer is reduced significantly.^{xlvi}

10. Also develop a policy on printing. If unlimited printing is allowed, people can quickly eat up the budget of the Community Technology Center, by printing huge amounts of paper. St. Stephen's shelter solves this problem by requiring that before anything is printed it gets sent to a control computer that the lab monitor staffs.^{xlvii} If the lab monitor okays it, then it can get printed. This negates the likelihood of someone deciding to print out an entire book online, or 50 copies of their favorite recipe.

Alternatives

Before running fully with the project of developing an internet center, it is worth it to consider the merits and disadvantages of other potential projects that would build upon the digital literacy of homeless individuals as well. These projects could be implemented in addition to, or instead of, a formal internet center.

One alternative project would be to create a mobile laptop computer lab that could circulate to nearby shelters. The Internet Café Working Group could embed laptops with 4G data plan cards and bring them to drop in hours at area shelters. This would have the advantage of potentially reaching those who were harder to reach- who might not make the trek to an internet center, but might be curious enough about internet technology that they would try it if it were brought to them. In addition a mobile computer lab would have the advantage of being significantly less expensive than an internet center and less difficult to coordinate and put together. It could be used to provide computer access to shelters that do not currently offer access, to extend the hours of the shelters that do, or to offer a different kind of computer access than many shelters currently allow.¹⁸ However, a mobile computer lab would have the disadvantage that it would not be based out of a physical space so programming hours would be dependent on when shelters were open.

¹⁸ Shelters that do not currently have computer labs include Simpson Housing and Sharing and Caring Hands. Listening House has computers but not internet access, so could also benefit from a mobile computer lab.

This would also not address the concern of many homeless individuals that there is nowhere to go in the mornings when shelters let out, or on weekends.^{19,20}

Another project that Open Access Connections could pursue would be spreading the word about existing Community Technology Centers, given that so many people who are homeless do not seem to be aware of them. Several service providers and experts in the field of community technology have mentioned that this would be very valuable, because some centers are currently underutilized^{xlviii,xlix}. A disadvantage of this would be that the Internet Café Working Group would not have a space to call their own to lead programming in.

A final option would be to lead workshops advertised to the broader homeless community about how to access computers at the library or on how to use computers. Open Access Connections already plans to do a variation of this for the netbook lending library that they are establishing, so this would just be taking it a step further. A disadvantage to this would be that it would not reach as many people as an internet center or mobile computer lab would.

Conclusion

Regardless of the direction that this project goes in, it will be fascinating to see how it develops.

If the Internet Café Working group decides to continue moving toward the development of an internet café, it will be important to start taking tangible steps towards thinking about practical details including where the funding will come from, who the partners will be, and where it will be located.

Based on my research, I would highly recommend not trying to develop a stand-alone center because it seems like an overwhelming amount of work, expense, and

¹⁹ If the Internet Café Working group does decide to pursue a mobile computer lab, they should get in touch with St. Paul Public Libraries and Wilder Foundation, both of whom who have mobile computer labs.

²⁰ Open Access Connections recently received a grant for a similar project- a Netbook lending library, where homeless individuals will be able to rent out laptops. This could easily lead to developing a mobile computer lab from that initiative.

potential liability. There is a lot of work needed in developing an internet center anyways and there will be even more so if it is a stand-alone center. As digital inclusion advocate Catherine Settani, who has experience creating stand-alone internet centers put it, "If I had to do it again I wouldn't have done a storefront, I would have found an existing space. There's all this stuff to think about - Humidity to make sure the computers don't burn out, security, insurance, liability, staffing... it's overwhelming."¹ Instead, the Internet Café Working group should start reaching out seriously to potential program partners that they already have ties to, and who are situated in a location that they believe is best for the center.

Again, based on my research, downtown St. Paul seems like the best place for an internet center, since it seems to be of the more underserved regions of the Twin Cities in terms of internet access and is accessible to area shelters.

I would also recommend skimming through the CTC Center Start up manual to get an idea of all the different tasks that need to be considered prior to starting up a center. The manual is accessible at this link:

www.ctcnet.org/what/resources/startup_manual.htm

Another good resource is the Department of Housing and Urban Development's planning guide for its transitional housing computer labs. That resource guide is accessible here:

<http://www.hud.gov/offices/hsg/mfh/nw/resourcesforcenters/startworkbook.pdf>

There are lots of other conversations to be had about the logistics of the internet center, but perhaps those conversations cannot be fully discussed until practical details of the center are more developed. As mentioned previously, there are a lot of tradeoffs that will occur based on how the rules are developed. Here are just some of the concepts that need to be discussed thoroughly:

- Who can use the computers?
- Will there be any restrictions on computer usage? For instance, if someone randomly shows up at the door, will they be able to use the computers, or will it only be membership based?
- How long can individuals use the computers for, and how does one balance wanting to provide open access to computers for an unlimited amount of time, and also not wanting people to have to wait for computer usage?
- How does one balance wanting to have a center that has a convenient location and hours for people who are homeless to get to, but also not wanting the center to turn into a drop in center?
- How does one balance the desire to provide individuals who use the center with some level of privacy, while at the same time protecting the center's liability and safety?

These are all questions that need to be considered.

If the internet center is developed, there are several interesting programming angles that could be pursued. One interesting angle it could take would be partnering with various community media organizations such as St. Paul Neighborhood Network to create community media made by homeless individuals.

Another angle that the café could take would be as a community space for free community education of all types. Several homeless individuals I spoke with mentioned that they could use a variety of different types of education. To accomplish this the Internet Café Working group could partner with the Experimental College of the Twin Cities (EXCO), St. Stephen's Human Services, and other organizations interested in providing free community education, and use the center as a meeting space.

The internet center could also be used as a place where individuals who are homeless could be introduced to a variety of different types of social networking and information tools ranging from Facebook to blogging. In addition, there are several exciting initiatives occurring with civic engagement in the Twin Cities and beyond that the homeless community could be introduced to. First of all, many individuals in the Twin Cities communicate online about issues they care about through a list serve known as E-Democracy. There might be potential to create an issue based forum specific to homelessness. If not, there are other methods that can be used to create free online communication tools, such as Google groups. In addition, there is a resource forum and message board being developed to share resources within the homeless community by an individual who is homeless himself.^{li} Both of these options have a lot of potential to create community in a digital sphere for individuals who are homeless.

There is a lot of exciting potential for this project, and I am excited to see it develop!

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- ⁱ Carlson, Natalie. 2007. "National Survey Finds Kids Give High Marks to High Speed." *Hispanic PR Wire*. Retrieved from: <http://www.hispanicprwire.com/generarnews.php?1=in&id=2774&cha=0>
- ⁱⁱ Koschinska, Sarah, VanCura, MaryAnn, Thao, Terri, Richard, John, and Libby Caulum. 2010. "Towards Digital Inclusion: The Role of Community Technology Centers." Power point presentation prepared for the 2010 MN Council of Nonprofits Technology & Communications Conference.
- ⁱⁱⁱ Dharma Dailey et al. Broadband adoption in low income communities. Social Science Research Council Report. March 2010
- ^{iv} Dunbar, Elizabeth. Minneapolis, St. Paul Populations up slightly. 2010. *Minnesota Public Radio*. Retrieved from: <http://minnesota.publicradio.org/display/web/2010/06/22/census-side/>
- ^v "Known Community Technology Centers." Compiled by Rebecca Orrick, Fall-Winter 2010.
- ^{vi} Minnesota Public Library Statistics. 2008. State Library Services, Minnesota Department of Education. Retrieved from: <http://education.state.mn.us/mdeprod/groups/Library/documents/Data/015386.pdf>
- ^{vii} Hennepin County Website. <http://www.hclib.org/pub/info/HCL2009Facts.cfm>
- ^{viii} Email Conversation with St Paul Public Library Librarian about the number of patrons. October 12, 2010.
- ^{ix} "Using the Internet at the Library." *St. Paul Public Library*. Retrieved from: <http://www.sppl.org/userguide/internet-signup.html>
- ^x Settani, Catherine, Digital Inclusion Advocate and Founder of CTEP AmeriCorps. Personal Interview. September 29, 2010.
- ^{xi} Technology Literacy Collaborative. Retrieved from: <http://tlc-mn.org/>
- ^{xii} Ibid
- ^{xiii} Ibid
- ^{xiv} Email Conversation with John Richard, Adult Employment Coordinator at Waite House Neighborhood Center. September 15, 2010.
- ^{xv} "Models of Sustainability for Community Technology Programs." *City of Seattle Community Technology Program*. Retrieved from: <http://www.cityofseattle.net/tech/reports/sustainability.htm>
- ^{xvi} "CTC Net Start Up Manual." Retrieved from: <http://www.ctcnet.org/what/resources/ctcnetmanual/ch4.pdf>
- ^{xvii} Ibid
- ^{xviii} Bret Byfield. *Phone Conversation*. October 11, 2010.
- ^{xix} Personal Interview with Doug Fountain, former X-Committee Member. November 1st, 2010.
- ^{xx} Voices for Change Focus Group at Listening House. October 12, 2010.
- ^{xxi} Dharma Dailey et al. Broadband adoption in low income communities. Social Science Research Council Report. March 2010
- ^{xxii} Servon, Lisa J. 2002. *Bridging the Digital Divide: Technology, Community and Public Policy*. Blackwell Publishers, Malden.
- ^{xxiii} Mark Knipping, Open Access Connections Voice Mail User. Broadcast Response, Fall 2010.
- ^{xxiv} Twin Cities Survey, Broadcast, and Focus Group Responses, Fall 2010.
- ^{xxv} Wellness Center Site Visit. December 2, 2010.
- ^{xxvi} Dorothy Day Site Visit. December 9, 2010.
- ^{xxvii} Opportunity Center Site Visit. November 9, 2010.
- ^{xxviii} Personal Interview with Doug Fountain, former X-Committee Member. November 1st, 2010.
- ^{xxix} Personal Interview with Angelina Nguyen, former worker at Asian Community Technology Center (Part of Broadband Access Project). October 22, 2010.
- ^{xxx} Site Visit, PPL. October 18, 2010.
- ^{xxxi} Waite House Neighborhood Center Site Visit. October 13, 2010.

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- ^{xxxii} Personal Interview with Angelina Nguyen, former worker at Asian Community Technology Center (Part of Broadband Access Project). October 22, 2010.
- ^{xxxiii} People Serving People Site Visit, October 13, 2010.
- ^{xxxiv} Waite House Neighborhood Center Site Visit. October 13, 2010.
- ^{xxxv} Dorothy Day Site Visit. December 9, 2010.
- ^{xxxvi} Waite House Neighborhood Center Site Visit. October 13, 2010.
- ^{xxxvii} “CTC Net Start Up Manual.” Retrieved from:
<http://www.ctcnet.org/what/resources/ctcnetmanual/ch4.pdf>
- ^{xxxviii} Settani, Catherine, founder of Community Technology Empowerment AmeriCorps Project and digital literacy advocate. *Personal Interview*. September 29, 2010.
- ^{xxxix} CTC Start Up Manual. 2003. CTC Net. Retrieved from:
http://ctcnet.org/what/resources/startup_manual.htm
- ^{xl} Personal Interview with Catherine Settani, founder of the Community Technology Empowerment AmeriCorps Project and digital literacy advocate. September 29, 2010.
- ^{xli} Site Visit, PPL and Minneapolis Central Library. October 18, 2010 and October 13, 2010.
- ^{xlii} Site Visit, PPL. October 18, 2010.
- ^{xliiii} Personal Interview with Open Access Connections Outreach worker Manuel Moore. December 9, 2010.
- ^{xliiv} Site Visit, Workforce Center. October 18, 2010.
- ^{xli v} Waite House Neighborhood Center Site Visit. October 13, 2010.
- ^{xli vi} Personal Interview with David Jordahl, advocate for homeless individuals and web developer for the Community Services and Resources Network for Minnesota. October 13, 2010.
- ^{xli vii} Site Visit, St. Stephen’s Computer Lab. November, 4, 2010.
- ^{xli viii} Settani, Catherine, founder of Community Technology Empowerment AmeriCorps Project and digital literacy advocate. *Personal Interview*. September 29, 2010.
- ^{xlix} Zimmer, Jeanne F, Program and Evaluation Specialist, UROC Broadband Access Project.
Personal Interview. November 5, 2010.
- ^l Settani, Catherine, founder of Community Technology Empowerment AmeriCorps Project and digital literacy advocate. *Personal Interview*. September 29, 2010.
- ^{li} Community Services and Resources Network for Minnesota. Retrieved from: <http://csrnetwork.yuku.com/>