

Reclaiming public spaces: Issues of visibility in ICT training for persons with disabilities in Latin America

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ABSTRACT

As technology becomes more and more ubiquitous in the workplace and within social interactions, interest in the role of technology for the disabled has increased—first, in accessible design of technology itself, and second in the role of technology to enable people with disabilities to more fully participate in society. While work regarding accessible technology and disability has been conducted, it has been quite limited to developed countries. In this paper, we examine the use and perceived value of computer training centers throughout Latin America in order to understand how these services fit within the larger issues around employability and socio-economic exclusion of people with disabilities in society. We draw from in-depth research conducted with computer center users as part of the Organization of American States' POETA program in Mexico, Guatemala, Ecuador and Venezuela, as well as contrast such technical services with Colombian libraries which have sought to increase accessible technical services as a means of including people with disabilities in the broader public sphere. Using interviews with program and library administrators and users with disabilities, we explore the impacts of such training courses on employability, socio-economic exclusion of people with disabilities, and visibility of persons with disabilities in society. We find that libraries are a key point of discussion of the provision of technical training for people with disabilities when considering the perception that libraries are neutral, "safe spaces" in society which could allow for creating greater institutional awareness regarding the rights of people with disabilities.

Keywords:

Disability, ICTs, libraries, Latin America, visibility, employability.

1. INTRODUCTION

The United Nations High Commission on Human Rights reports that over 600 million people, approximately 10 per cent of the global population, are living with some type of disability. Over two-thirds of people with disabilities live in developing nations. It is estimated that between 80-90 per cent of people with disabilities in Latin America and the Caribbean are unemployed or living outside of the workforce, with 82 per cent of the population living in poverty.

In recent years, various factors including disability-related legislation, international conventions, academic departments of disability studies, and the work of thousands of community

organizing groups and activists have raised mainstream recognition of issues of disability in terms of access. This period has coincided with tremendous developments in electronic technology that have impacted issues of disability in two important ways. First, there has been much work on access to technologies that have played a role in increasing the ability of people with disabilities to participate both socially and economically. Second, there has been much work in accessibility in daily living situations to expand the social participation of people with disabilities. While accessibility refers to a range of physical, communication, and virtual environments, the increasing ubiquity of personal technology has raised awareness on issues of accessibility on personal computers, mobile phones, and the internet.

There has been varied interest in technical and social science issues around technology and disability within the information studies realm on topics such as web accessibility [1], services in libraries [2], information organization [3] interfaces on accessible devices [4, 5], meta-data [6] and community informatics [7]. While the work in this space is diverse in areas of interest, the same is not true for geography. Both the work within information studies and more broadly in accessibility draws on empirical cases from a few industrialized nations. Work on disability in the developing world either comes from a global health burden perspective [8], or from the perspective of the social construction of disability [9]. Work on the role of accessible technology is virtually absent in studies of disability issues in the developing world.

In recent years, both disability rights groups and organizations working closely with them have recognized the importance of basic technology training for access to formal employment. In Latin America, a number of projects have been created in the past decade to provide subsidized technology training for people excluded from access to home computers [10]. Some such projects offer technology training and access to people with disabilities as a means of creating more equitable opportunities for them in the workplace. In this paper, we draw from extensive field research in Mexico, Guatemala, Ecuador, Venezuela, and Colombia to examine the use and perceived value of training at such centers, and to understand how these services fit within the larger issues around employability and social exclusion of people with disabilities.

We examine the work of several technology centers under two agencies in the region – the first, POETA¹ is a large multi-country project providing computer training for people with disabilities in 18 countries throughout Latin America and the Caribbean. Our research throughout all countries except Colombia is mostly at POETA-affiliated centers. In Colombia, we examine the work of the Bogota libraries.

2. METHODOLOGY

We use a qualitative interview-based methodology, with open-ended semi-structured interviews conducted over four months of field work. Our choice of using visibility as a central construct in our analysis is based on our preparatory field work with individual respondents and organizations in the course of our fieldwork. Issues of social and economic exclusion around disability are related to prevailing cultural issues, and in this environment both rights-based groups working on policy issues, as well as people with disabilities themselves, felt that their visibility in public space was a key first step towards greater inclusion.

Utilizing evidence from fieldwork, we seek to demonstrate our preliminary finding of the disconnect between the goals of individuals and their self-perception of employability in relation to ICT training, and the broader mission of social movements led by people with disabilities to emphasize the importance of visibility in the public sphere. The transcribed data from the field work is 1400 pages long. All interviews were conducted in Spanish.

2.1 Instrument Design

We conducted semi-structured, qualitative interviews, held primarily at the technology centers, offices, homes, libraries or in public places. The interview instrument was first developed in Seattle and iterated on the ground for the first week of interviewing to maintain a relatively consistent set of core questions across sites. In Colombia, we also conducted semi-structured focus groups with library users and we followed a similar set of questions to explore, although questions varied. The entire interview process, including briefing the respondent, took between 45 and 120 minutes per interview.

2.2 Sampling and Recruitment

Our selection of POETA centers and the Bogota libraries was based on two main criteria. First, we were interested in the role of Corporate Social Responsibility (CSR) in funding services for people with disabilities, thus both groups are selected from within beneficiaries of the Microsoft Community Affairs program. In this paper, we do not discuss issues around CSR and services for people with disabilities, but they are important to mention in explaining why we chose to select these two specific organizations.

Our second reason for selecting these two groups in our analysis is the focus of Bogota libraries on working within the state and institutional set-up, as contrasted with the POETA approach of establishing new technology centers for training of people with disabilities in which few centers link with government institutions.

With regard to the sampling of respondents, we used a snowball sampling method in all field sites. In each site we started with 3-5 respondents recruited through the training center followed by the remaining respondents recruited through the networks of the first

¹ POETA: Partnership and Opportunities for Employment through Technology in the Americas

set of respondents. We conducted research with primarily people with motor, auditory, and visual disabilities. In addition, we also interviewed program administrators, policy makers, and activists working in this space. The sampling varies from 5-20 interviewees at each location, and in all we conducted 150 interviews. The coding and analysis of the transcripts was done utilizing Atlas Ti.

2.3 Field Sites

We visited seven ICT training centers in Mexico, Venezuela, and Ecuador supported by POETA. They partner with local grantees in each country for up to two years. POETA grantees researched in our study included both public and private vocational training centers, universities, rehabilitation facilities, and NGOs primarily serving people with disabilities. POETA provides hardware and software including JAWS and screen magnifiers for people with visual impairments as well as some adaptive hardware. Program administrators often adapt curriculum from Microsoft's Unlimited Potential Program, which is required to be taught at every POETA center. Their courses seek to teach users the very basic functions of Microsoft operating system (nearly solely Windows XP) and the Microsoft Office Suite of programs. Users were also introduced to the Internet and e-mail programs. Some POETA partners teach modules in self-esteem, job-seeking strategies, resumes workshops, and socially acceptable, formal behavior in an office environment.

In Bogota, Medellin and Villavicencio, Colombia we visited four public libraries and three vocational and ICT training centers serving people with disabilities. Both the Bogota and Medellin network of libraries are winners of the Bill and Melinda Gates Access to Learning Award, in 2002 and 2009 respectively, for offering free access to ICTs in some of the country's poorest neighborhoods. Computer training courses for users with visual and auditory impairments focus primarily on training users in various assistive technologies, including scanners, screen reading technology known as JAWS, screen magnifiers, OCR (Optical Character Recognition) programs, as well as Braille. Programs at the libraries serving the disabled also include "invisible theater" courses, open meeting spaces, and workshops educating users on how to pursue further education.

3. DISCUSSION

3.1 Visibility in the Public Sphere

The disability activism movement has moved away from philanthropy and charity-based discourses towards those based on promoting disability rights and access in several parts of the western world through much of the 20th century. This transition has been relatively slower in the developing world, but calls by the UN Human Rights Commissioner to move away from charity in conceptualizing disability [11] and the specific terminology of rights in the United Nations Convention of the Rights of Persons with Disabilities has set the tone for greater recognition of equity in access to framing the international discussion on disability². As Harlan Hahn argues,

"Features of architectural design, job requirements and daily life that have a discriminatory impact on disabled citizens...support a

² United Nations. (2006) Convention on the Rights of Persons with Disabilities and Optional Protocol.

<<http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>>

hierarchy of dominance and subordination between non-disabled and disabled segments of the population that is fundamentally incompatible with legal principles of freedom and equality...” [12]

Access to public space is a freedom or right which many non-disabled citizens may take for granted, however it is highly valued among the disabled community due to structural barriers, such as inaccessible transportation, and profound stigma and discrimination towards people with disabilities in society. The following quote highlights one interviewee’s opinion of the public visibility of people with disabilities in Venezuela.

“You see many more people with disabilities, in jobs, in the street. People who have come out of their houses, most likely. It seems like the population of people with disabilities has grown, but I think it’s not that it has elevated, but that they are leaving their homes. People see that there is a change, they are looked upon a bit better, and you have to take advantage of that.”

‘Juan’, Venezuela (quadriplegia)

His opinion is optimistic and can be contrasted with that of another interviewee who uses a wheelchair in Ecuador.

“Yes, even the building where I work, where we are right now is not that accessible. For example, there is an elevator but when you need to leave the building there are steps so I always have to ask for help when I need to go up or down the steps. There is no ramp. There are many places where I always have to ask someone for help, or where there are steps or the entrance is very narrow.”

‘Adán’, Ecuador (paraplegia)

Within this visibility framework, we look at programs, particularly Colombian libraries, which have implemented ICT training in order to not only give access to services, but also foster community building and respond to the need for computer training by the community of the disabled itself.

At this moment, *Biblioteca El Tunal* is one of few libraries in Bogota, Colombia which is fully accessible to people with disabilities, particularly the visually impaired and the deaf or hard of hearing. However, the community of people with disabilities has called upon policy makers and library administrators to make all libraries in the Bogota system accessible. By reconfiguring pre-existing institutional services in order to reach people with disabilities, the Bogota library system represents a shift in not only public policy, but also overall society, to allow people with disabilities an opportunity to be visible in a public space—the public library.

Libraries may be typically considered neutral “safe spaces” where community members are welcome; however, many library services are not accessible for people with disabilities, particularly technology services for people with visual impairments.

“They shut the doors in our faces at companies and refuse us employment so we wanted to convene here in the library as the National Association for the Blind in order to inform those companies that we are useful, productive people and just because we have a disability, that doesn’t mean we are invalid... in order to do this we have to continue training and studying and so we that’s why we come here to the library in order to stay up to date on systems and informatics training with the use of a program called Jaws.”

‘Martin’, Colombia (visual impairment)

Jaws, the leading screen reader software from the U.S. publisher Freedom Scientific, is one of few tools which enables people with visual impairments to utilize a computer. It is also a significant barrier for people with disabilities, particularly those living in Latin America, due to a cost between US\$1,000 and US\$2,000. Very few technology training centers where our team conducted research had purchased original Jaws licenses, while most had acquired a licensed copy from ONCE-FOAL (The Spanish National Organization for the Blind’s Foundation for Latin America), utilized a download demo version which required users to reboot every 45 minutes, or downloaded a pirated copy of the software.

“What has made things much easier is that through coming to the computer center in the library, I was able to burn a copy of a portable, more compressed version of Jaws, onto a CD and then I can go to a cyber café if I need to and I can work independently. But to be honest, I do not go to the cyber café though because I have the ease of being able to come to the library and use the services here...I practically live here.”

‘Claudia’, Colombia (visual impairment)

Various beneficiaries of the computer training center in the Bogota Library referenced the sense of community they gained through attending courses and using the technical services offered. Despite the fact that some computer center users had access to a computer with Jaws at home, they still felt that coming to the library provided them with a community that was important not only to the advancement of their technical skills through computer training courses, but also to the rights-based movement led by people with disabilities. Visually impaired users travel from all around the urban area of Bogota to use the accessible technical services offered at the library. However, the library has come to represent much more than simply a public access point, but a place for people of all disabilities to convene, unify as a movement, and leverage the communal strength to reclaim human rights which were historically not granted to people with disabilities.

“Unfortunately, here in Bogota and Colombia in general, the disabled community is invisible in public policy and government priorities...people [with disabilities] stay invisible. They don’t go out on protest. They stay silent...but alone as a community of the blind, we cannot do it...so what the library does for us is give us the ability to unify as a movement and it opens up opportunities and services to us. It is a great advancement to have access to services here. To be able to use the computer, the internet, all those services for free. It is a success that those here at Biblioteca el Tunal, weren’t conformists.”

‘Micaela’, Colombia (visual impairment)

3.2 Employability and Individual Capacity Building

The overwhelming statistics of unemployment and poverty among people with disabilities not only in Latin America, but throughout the world, has led to an increase in both public and private training centers which metric success based on employment rates of computer center graduates. This is also known as ones’ *employability*, or “the ability to secure a job; the ability to keep an existing job or to improve that position in quality or income; the ability of beneficiaries to use elements of the training program as platforms to gain job experience if new to the labor market; and the ability to contribute to the overall productivity of business, government, and social labor.” [13] We conducted research with several centers with similarly stated goals and carried out interviews with program beneficiaries, center administrators, and

potential employers. By contrasting such centers with the case study above of the Colombian libraries, we came to a preliminary conclusion that there is a disconnect between the goals of individuals and their self-perception of employability in relation to ICT training, and the broader mission of social movements led by people with disabilities to emphasize the importance of visibility in the public sphere. Typically, at computer training centers with a primary focus on ICT training and as a result, employability, individual capacity building is prioritized. The broader goals of including people with disabilities into the public sphere, building community, and the sharing of knowledge, become secondary goals. Many beneficiaries began attending the computer course in order to improve their individual skills and later seek employment. Basic computer competence was viewed by many users of centers focused on employability as an entry point into formal employment and a necessary tool in order to prove to employers and co-workers that a person with a disability was capable.

"I am not using Jaws there [at the post office] yet because I want to finish the course here first. Once I have finished the course here I will ask Agora to assist me in purchasing the license for Jaws so that I can install it on the computer at work...But I do not want to use it at my job yet because I want to learn a bit more, finish this course and I also want to prove to everyone at my job that I can do the job without it and once they trust me a bit more then I will install it. It is much easier for me to use the computer with Jaws and when my co-workers see me using it they are going to go crazy!"

'Felipe', Ecuador (visual impairment)

A theme among users interviewed in such centers was a self-perception of being more employable after acquiring ICT skills, but a feeling of disappointment once they attempted to actually enter the labor market. Few centers employed institutional champions, technical accompaniment services, or staff whose primary objective is to seek out potential employers, foster positive relationships with the community, and build a reputation of the center in order to bring in opportunities for program graduates.

"So we go, we explain to the company about our programs, we actually show them how they work because that's quite an important part because they always wonder how a blind person is actually able to use a computer because we are all accustomed to using a computer by sight."

'Jose', computer teacher for the visually impaired, Guatemala

However, such institutional champions were not commonly found. Many users had an expectation that once they had completed the course, they would be presented with opportunities of employment, but were faced with further discrimination.

"When I was doing the course, there were various companies for which one could submit their resume, and they would offer you employment. ...That's what I was hoping for, to finish the course, and to enter a company a short time later, but that didn't happen."

'Andres', Venezuela (paraplegia)

"I also think that Mexicans are lacking a culture, not just Mexicans, but sometimes they see you have a disability and they think that you can't do things, or they believe you will give the business a bad image, or I don't know, that's what they imagine, that's what I have seen."

'Consuela', Mexico (motor impairment due to rheumatoid arthritis)

It was not only social stigma or structural barriers that prevented people with disabilities from finding work, but also national public policy towards people with disabilities, particularly with hiring quotas. In 2006, both Ecuador and Venezuela implemented new policies which are notable for mandating employers to hire people with disabilities, and for implementing inspections and substantial economic sanctions for non-compliance. Ecuador's reformed *Codigo de Trabajo* (Labor Code) establishes a percentage quota mandating the hiring of people with disabilities by all public and private employers with more than 25 employees, starting with 1 percent by the end of 2007 and reaching a maximum requirement of 4 percent by the end of 2010. The law is enforced by the Disabilities Unit of the Ecuadorean Ministry of Labor, and employers that fail to hire the required number of employees with disabilities are fined each month until they have met the requirement, at a rate equivalent to ten minimum salaries (the monthly minimum wage, set at \$218 in 2009). However there were conflicting perceptions of such policies among users interviewed.

"What we need is a source of employment...there is a new law that says that every company must have at least three per cent of their workforce be people with disabilities but no one actually follows through with this. They are hiring people with disabilities in public companies but not in private companies because private businesspeople are not interested in collaborating with this kind of requirement or to support the handicapped population, or the disabled."

'Felipe', Ecuador (visual impairment)

4. CONCLUSION

The contrast between the Colombian libraries, which are public spaces and POETA's training centers, which are specialized spaces for people with disabilities, highlights an important area of contestation on issues of visibility. While both served very specific purposes, and it could easily be argued that the POETA centers were in themselves the best possible space for the services they provided, for respondents with disabilities themselves, the division between employability and visibility was in itself a spurious one. In a case of a rights-based approach where an awareness of social exclusion is an essential part of the movement for employability, the two are thus intricately tied and impossible to separate from one another.

It is, for instance, impossible to discuss employability in the context of Latin America without referring to the fact that most work places are not employing people with disabilities to perform the same functions as "normal" people. Thus, the use of public libraries in providing services for people with disabilities plays a larger and critical part in creating greater institutional awareness that necessarily comes with increasing employability.

Often, it was found that the employability metric was a goal imposed onto the institution by an outside funder. Previous work on ICTD and participatory design of computer training centers argues that in such development initiatives "the 'insiders' learn what the 'outsiders' want to hear...the needs become socially constructed and the dominant interests becomes community interests." [14] It is not to be said that many of such training centers also represented places of community, just as the library; the distinguishing factor is rather the primary purpose of creating the center in the first place. On one hand, the Bogota libraries system saw a warranted need by the disabled community to incorporate assistive technology into the libraries. A perception in society already exists that libraries are neutral, "safe spaces", open

to all members of the community, which makes it an easier transition for the non-disabled library users to acknowledge. In any discussion of the provision of training and technology access for people with disabilities, public libraries have to be a critical part of the discussion.

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