



COMMUNITY TELECENTERS:¹ ENABLING LIFELONG LEARNING

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INTRODUCTION

An expanded vision of education that has rocked the world is that of “cradle to grave,” or lifelong, learning, an ongoing process that the new century has made increasingly necessary. While devising the ways and means to promote, facilitate, and sustain the process, educators and computerphiles have crossed paths.

In informal education—the world of learning that goes on informally all around us—information and communication technology (ICT) is causing quite a stir, sometimes in the most unlikely of places. In developing countries on every continent, public ICT access centers are springing up and bringing information from around the world to communities that, for the most part, have had little experience with it. The phenomenon is particularly interesting in poor neighborhoods and remote and rural areas, where formal schooling suffers from access, equity, and quality problems and where, heretofore, informal opportunities for learning have been more or less limited to local wisdom. Though the experience varies from place to place, these centers are emerging as a new learning system for people of all ages and from all walks of life. Known by a variety of names, but generically as telecenters, they represent a potential means to enable lifelong learning in the best and broadest sense of the notion.

Yet, unequal access to ICT—also known as the *digital divide*—is an increasingly important concern in international development and education communities. While computers are spreading at a faster rate than any other technology in history, the gap between those with access and those without is growing as well. We all know the startling statistics: Less than 5% of computers connected to the Internet are in low-income countries, where fewer than four telephones per hundred people is the norm. Nearly half the world’s population has never even made a telephone call. And a computer alone, much less a telephone line that enables Internet connectivity, is an unattainable goal for most people in developing countries.

Can ICT increase opportunities for disadvantaged individuals, groups, and regions? Will it provide people with the potential for ongoing personal and professional growth? Or will it contribute to a growing information and knowledge gap between countries—and within them? The answer depends upon access.

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PUBLIC ACCESS

The most literal definition of *access* is to make Internet, computing, and telecommunications tools available in a given community. Once the technical issues are solved, those who already understand the advantages of ICT—a relatively small segment of the population—will use it. In this model, entry and start-up costs are relatively low. The risk, however, is that the digital divide within countries will widen.

Adding orientation and demonstration programs to the process combines access with *awareness*. This approach takes time, money, and planning, but it reaches beyond the technical elite to other early adopters who, given the opportunity, will take the time to learn and take advantage of the potential educational benefits of ICT.

The most comprehensive approach to a full-bodied access program includes *diffusion*, which involves a preplanned, systematic program of activities designed to spread the message broadly. (The message includes “what is ICT” and “how ICT can help you.”) Diffusion is time-consuming and resource-intensive, but it is how disadvantaged groups—those lacking access—are reached. Effective diffusion programs focus on local needs and priorities, both in the message conveyed and the method used. What works in one environment may not work in another.

To exploit the potential benefits of ICT for widespread lifelong learning, therefore, ICT access involves more than making equipment available, though that, too, is important. The full complement of access concerns includes:

- > reliable hardware;
- > appropriate software;
- > awareness of ICT functions and benefits;
- > effective training in use;
- > equitable/affordable opportunities for use;
- > sufficient literacy/language skills—or access to mediators;
- > ability to synthesize, organize, and apply information; and
- > ability to produce and disseminate information as well as receive it.

Public ICT access centers are diverse, varying in the clientele they serve and the services they provide. Some for-profit, private-sector cyber cafés cater to those able to pay well for online time, providing young people with a place to play computer games, for example, or talk in chat rooms. At the other end of the spectrum is the small computer kiosk, also a commercial endeavor but typically offering offline services only, for example, at outdoor country markets.

All models are useful. But so far, the version designed specifically to achieve education and development goals—including affordable access and training for students, teachers, nongovernmental organizations (NGOs), and other social development agents—is the most likely to ensure access for targeted, low-income populations.

Sponsored, subsidized telecenters—initially supported by local or national governments, bilateral or multilateral donor agencies, private foundations, or local entrepreneurs—are a case in point. This type of telecenter typically offers a host of technology products and services, ranging from a telephone, photocopier, and fax machine to computers equipped with a variety of software and peripherals, such as a printer and scanner.

A place for public access to ICT, these telecenters often offer technical assistance and training in use at rates affordable for low-income people. They build on the concept of public access but emphasize the learning functions of the communication technologies that are made available, thereby increasing access to lifelong learning opportunities. To ensure relevance to community priorities, needs assessments are conducted to identify needed products and services, and telecenter staff are trained to help visitors become familiar with the technologies, resources, and services offered at the centers. To facilitate long-term sustainability, fee and management structures are established based on ability to pay, and community involvement, as well as collaboration with the private sector, are actively promoted.

TAXONOMY OF A TELECENTER

The community telecenters model described above is characterized by an emerging taxonomy that includes:

- > the *adoption model*, where an NGO serves as the host organization, managing the center and integrating it, to one degree or another, into the organization's core business;
- > the *municipal model*, where a government agency opens a center, often disseminating information, decentralizing services, and encouraging civic participation as well as providing public ICT access; and
- > the *private-sector/commercial model*, in which entrepreneurs launch for-profit centers with “social good” services offered as well.

An Adoption in Benin

When the Songhai Center established telecenters at its three agricultural training sites in Benin, it called the program “CyberSonghai.” A strong, vital NGO with a reputation for world-class work, the Songhai Center is no stranger to challenge. Songhai's mission, overall, is to end hunger in Africa.

CyberSonghai provided the dedicated director and his staff formidable challenges:

- > limited infrastructure;
- > a largely illiterate population;
- > revenue prospects limited initially to fees for photocopiers, business card laminating, and Christmas card production;

BOX 12.1 • HOW TO REACH THE PEOPLE

In Savalou, Benin, the “town crier” announced the opening of a new telecenter providing ICT tools for public use. The telecenter also spread the word through radio interviews, strategically placed posters, brochures, newspaper ads, and open houses for groups from different sectors and segments of society.

In Asunción, Paraguay, the openings of new public telecenters were gala affairs, accompanied by music, dancing, feasts, and the local priest, who blessed the centers.

In Kumasi, Ghana, the Queen mother of Mampong Kronko, Nana Aboagyewaa Kente, cut the tape to the new telecenter facility.

Effective outreach, using traditional methods to market new ideas, is the first step in promoting public awareness of ICT benefits.

To reach disadvantaged communities, advertising access to computers may not be the most compelling draw. Initially, what appeals may be much more basic—the photocopier, fax machine, even the telephone. Over time, other functions become popular, too: laminating business cards, designing logos, desktop publishing to produce letterhead stationery—or even greeting cards.

- > staff turnover as trained technicians were lured away by the private sector in the capital city—or in Europe or the United States; and
- > a target group of farmers initially unfamiliar with—and little interested in—computers.

Nevertheless, with a commitment to “turning on the lights in Africa,” and with funding from USAID/Cotonou, CyberSonghai agreed to strive to achieve substantial results:

- > Establish three telecenters providing Internet access and multimedia production equipment to Songhai staff, student farmers, and the general public.
- > Market and provide outreach to community members and other NGOs.
- > Design and deliver training courses on ICT applications for community clients.
- > Design and produce multimedia products for development partners.
- > Develop a business plan leading to financial sustainability.

With project funding ending in October 2001, the CyberSonghai telecenters are expected to succeed because the Songhai Center has brought the necessary elements for success to its public ICT access task:

- > a firm institutional foundation;
- > credibility in the community;
- > effective outreach ability;
- > a competent, dynamic, and visionary leader (and ICT champion) able to articulate the benefits of ICT for development;
- > a willingness to change, grow, and take risks;
- > upper management support and involvement in the activity;
- > upper management modeling of ICT use for staff and clients;
- > openness to the new patterns of communication and work flow that accompany computerization;
- > interest in expansion; and
- > a willingness to provide institutional support, including equipment and funds, to help ensure the activity’s success.

Three Adoptions in Ghana

In Ghana, three NGOs in different parts of the country each established and assumed responsibility for operating a telecenter. Their stories illustrate lessons for public access efforts, including the importance of reaching out creatively to people and groups unfamiliar with ICT, achieving a balance between social service and commercial interests, and providing ICT training programs to build a firm client base.

Before opening their doors, Ghana’s telecenters wisely undertook a comprehensive outreach program to familiarize future clients with the possibilities, potential, and relevance of ICT. For example, special days (or weeks) were set aside for women, youth, entrepreneurs, medical practitioners, local officials, and other groups to visit the telecenters. Invitations were distributed widely, and when the groups arrived, they were presented with an orientation program designed specifically for them. Local celebrities, tribal leaders, and dignitaries from a variety of fields addressed the groups and cut the ribbons, and local radio and television stations covered the events. Each group left with a specially developed “take-away,” such as a floppy diskette containing information relevant to its work, which helped to make tangible the virtual world to which they were introduced. These events were followed by the launch of a seminar program that invited people back to explore topics of special interest, such as “The Computer as a Tool for Medicine.”

One of the NGOs operating a telecenter in Ghana faced a dilemma between its desire to serve its constituents—the poor—and its need to generate revenue from clients able to pay. In part, it was a moral issue for the telecenter. While its contractual obligation included achieving financial sustainability, the clients it was dedicated to serving did not have sufficient funds to pay the fees necessary for the telecenter to cover its costs. By the end of the project, the NGO managed to achieve a balance in three ways: first, by developing a sliding fee scale whereby higher-income groups subsidized lower-income groups; second, by building a popular training program for individuals and groups that generated substantial revenue; and, third, by bringing in large blocks of income through outside contracts. For example, through a British Council-sponsored program, the telecenter was paid to provide computer training to groups of secondary school students. In this way, the telecenter could bring in sufficient revenue without having to rely exclusively on individual fees from low-income users to support its operations.

One of the greatest strengths of the LearnLink-launched telecenters in Ghana is their focus on training. From a modest beginning, the telecenters became a significant skill-building force nationwide, supplementing and extending learning opportunities beyond those available in both public and private educational institutes, and providing more practical, hands-on training than some technical universities. In just two years, the training program not only provided more than 10,000 individuals—students, teachers, business people, even staff from the national telecom—with useful ICT skills, but it also contributed to the financial sustainability of the telecenters, which have relied on client fees to operate since external funding ended. Moreover, when the centers first

launched, clients required assistance for even the most basic functions. Due to effective marketing of the training program, 77% of telecenter users registered for training classes. As clients developed their own skills, staff were freed to attend to other functions.

A Municipal Model in Asunción

The vision was good: The Municipality of Asunción would provide less-advantaged communities in the city with the benefits of ICT for civic development purposes. People no longer would have to travel downtown and stand in long lines to register to vote, obtain licenses, or access databases of government information. Instead, they could do it all at neighborhood-based municipal centers. The telecenters would help devolve official functions to the neighborhood level, the public would be better informed and more engaged in democratic processes, and citizens in poor communities would be provided with access to improved communication facilities and opportunities for civic education and lifelong learning. According to Sergio Aranda, LearnLink resident advisor, “it became clear that...this project needed to be looked at in terms of social demand. It needed to be tied into the daily lives of the residents.”

Considering every person and group in town a potential partner, the local director of the municipal telecenter activity forged alliances with the potential to contribute greatly to its long-term sustainability:

- > In return for displaying marketing materials in the telecenters, the local Internet service provider gave them free Internet connectivity.
- > In exchange for free e-mails, Peace Corps volunteers provided free administrative assistance.
- > For use of the IT equipment, Catholic University instructors trained telecenter staff in facilitation skills.
- > College students designed Web pages for the municipality in exchange for discounted online time at the telecenters.
- > Police and prison officials, who used the telecenters to learn computer skills, provided security.
- > The mayor, an enthusiastic supporter, participated in teleconferences with local residents, attended telecenter launch celebrations, and found scarce municipal funds to help cover maintenance costs.

Informal contributions were elicited, too, with enthusiasm. Just for the chance to have a telecenter in its neighborhood, a local association of bricklayers, masons, and carpenters built the center, literally and voluntarily, from the ground up.

A Commercial Model: PC3s in Bulgaria

Nearly half of all Bulgarians live in small towns not yet reached by the economic progress underway in urban areas. The farther a community is from one of Bulgaria’s five largest cities, the greater is the gap in economic development.

This also holds true for access to ICT. While multiple Internet service providers (ISPs) compete with one another in urban centers, few operate in small towns and rural areas. Where Internet access is available, the average prices for service are almost twice as high as in the cities.

In Bulgaria’s cities, ICT is helping to drive development by:

- > stimulating economic competitiveness;
- > catalyzing spin-off businesses;
- > creating a platform for e-commerce;
- > contributing to higher levels of employment;
- > increasing education and training opportunities;
- > improving communication; and
- > facilitating the provision of government and social services for city dwellers.

Lacking infrastructure and access to ICT, small towns and rural areas are in danger of falling even further behind than they already are. To meet IT access needs in these areas, a Public Computer and Communication Center (PC3) program is underway to create viable telecenter businesses that combine for-profit and public good services within a sound business plan.

Essential elements of the business plan include:

- > launching PC3s with local entrepreneurs;
- > distributing prepaid computer access cards, redeemable for PC3 services, to groups throughout Bulgaria to stimulate use and reduce risk for operators;
- > developing local language resources on social and economic development for clients;
- > providing hardware, technical assistance, training, and Internet connectivity subsidies to operators;
- > promoting spin-off businesses, such as the sale of peripherals, desktop publishing, and equipment repair; and
- > providing local businesses with e-commerce assistance.

FACING FISCAL SUSTAINABILITY

Telecenters providing affordable IT access, training for disadvantaged communities, and access to resources and information for social development face fiscal sustainability issues.

Global telecenter experience indicates useful approaches for achieving sustainability. As demonstrated in the examples above, these include:

- > creative marketing to diverse groups to increase client use of ICT;
- > sliding fee scales to enable access by low-income groups;
- > subsidizing ICT use, at least initially, to create demand;
- > offering training programs to create client capacity;
- > launching creative alliances with public, private, and voluntary sector partners for inputs; and
- > working with the private sector to launch ancillary, spin-off businesses and engage in e-commerce.

THE GENDER DIVIDE

On the surface, there is no traditional, preconceived resistance to women using computers. Yet, research indicates that many factors mitigate against equitable access to ICT for women, and experience suggests that, even where access is available, the more sophisticated the technical task, the more men tend to dominate. In training courses, for example, women tend to enroll in word processing classes while men are more likely to take an introductory course in using the Internet.

Experience also indicates that gender equity in the use of ICT will be achieved more easily with specific interventions, beginning with outreach and social marketing, that demonstrate how higher-order ICT processes can benefit women.

Beyond that, larger issues related to “income, time, literacy, education, language, and culture affect access to facilities, training, and employment in the IT area.” Despite frequent claims to the contrary, information technology is not gender neutral.²

ACCESS WORKS

A telecenter volunteer in Ghana writes: “My life has completely changed from an unknown to a known world.” Ms.

Awuah, a volunteer at a telecenter in Kumasi, echoes the sentiments of many of the staff and patrons of the three telecenters established in Ghana through the LearnLink project.

Though marketing still is needed to reach disadvantaged groups, there is growing demand for ICT access, training, and use among all sectors of society. Experience indicates that, among low-income people, disadvantaged populations, ethnic minorities, and rural and remote communities, there is growing awareness that ICT provides new opportunities—and new hope for breaking the cycle of poverty.

In Ghana, for example, overall use at the three telecenters exceeded 10,000 over the duration of the pilot project, and 2,500 of these users were women. In Asunción, more than 3,000 people used the eight telecenters operating in 1999, and a year later, 360 children were visiting one telecenter each week after school to explore the science and geography CD-ROMs there. In Benin, hundreds of people each week are using Internet services at the telecenters in Porto Novo, Savalou, and Parakou, including students and teachers from secondary schools and colleges, NGO staff members, business people, co-op members and village groups, farmers, and individuals from all walks of life.

ENDNOTES

¹ This review of community telecenters is based on five years of experience with the LearnLink project, a “Global Communications and Learning Systems” program. LearnLink is an Indefinite Quantities Contract (No. HNE-I-00-96-00018-00) of the U.S. Agency for International Development (USAID). It is funded by the Human Capacity Development Center in the USAID Global Bureau and other USAID Bureaus, offices, and missions. LearnLink is implemented by the Academy for Educational Development.

² Hafkin, N., & Taggart, N. (June 2001). *Gender, Information Technology, and Developing Countries*. The LearnLink Project. Washington: Academy for Educational Development.