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Global Impact Study of Public Access to Information and Communication Technologies is a five-year, \$7.2 million international research project sponsored by the Bill & Melinda Gates Foundation and Canada's International Development Research Centre, and managed by telecentre.org in partnership with the Center for Information & Society at the University of Washington's Information School. Through telecentres, libraries, and other emerging models of public access to information and communication technologies, this project examines impact in a number of areas, including employment and income, education, civic engagement, democracy and governance, cultural and language preservation, and health.

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Research design breaks ground in investigating impact

By Araba Sey on August 20th, 2009



With support from the municipality and BiblioRedes, a network 387 public libraries dedicated to improving public access and community uses of ICTs, this library/telecenter in Puerto Saavedra, Chile, provides books and information resources, a space for kids to do homework, Internet training, and help accessing online government services. (photo courtesy of telecentre.org)

What difference does public access to information and communication technologies (ICT) make in the lives of poor or marginalized people? Years of research have yet to produce concrete evidence of impact — as found in libraries, telecenters, and cybercafés. After conducting a comprehensive review of the literature in this area, we now know that there is a pressing need for systematic and comprehensive research to identify the downstream impacts, and to provide empirical evidence about the precise link (if any) between public access ICT use and impacts in areas such as health, education, and governance. The Global Impact Study is designed to address this gap.

Based on a year of exploratory fieldwork, we have created a research design that delves deeper and wider into public access impact than other studies to date. Our main research goal is to identify the observable impacts of public access and to gauge the magnitude and costs of these impacts. Our [research design](#) highlights six areas of inquiry:

1. Geographic and social reach of public access
2. Usage patterns
3. Physical design and layout of public access venues
4. Venue services and operational conditions
5. The ecology of information and communication resources within communities
6. Policy and regulatory influences

We hypothesize that there is a relationship between each of these six areas and the impacts emerging from use of public access ICT.

Previous studies have focused on one or two of these areas at a time. The Global Impact Study aims to touch on all of them to some degree. Additionally, out of the numerous areas of potential impact, this project will focus on:

- employment and income
- education
- civic engagement
- health
- democracy and government transparency
- culture and language preservation

ICT impacts are complex and diverse, so our research design combines [multiple methods](#) to examine different types and levels of uses and impacts.

First, inventories of public access facilities in four to six countries will provide a baseline count and description of existing venues against which we can assess the magnitude of the public access phenomena, reach, and distribution. Based on these inventories, we will be able to make some basic statements about the contribution of public access to the availability of ICTs.

Second, broad-based surveys of public access venues, users, and non-users in these same countries will narrow in on issues at an intermediate level, such as why people use public access ICT venues, and how operational structures influence the outcomes venues are able to engender.

Finally, a series of in-depth studies in an expanded set of countries will investigate key impact mechanisms using different methods to provide richer data than can be collected with the general inventory and survey methodologies. Questions being investigated include:

- What is the value-added of knowledge workers such as librarians at public access venues?
- Does the ability to engage in playful uses of ICTs at public access venues contribute to public access impact?
- Do public access venues facilitate valuable forms of collaborative learning among users?

We have identified several other potential areas of research, a selection of which will be pursued over the remaining four years of the Global Impact Study. These include public access model life cycles, indirect impacts, non-users, willingness to pay, local content, employment, community information ecologies, and mobile telephony.

While this study will not exhaust these research areas, our broader goal is to lay out a research agenda that provides a common framework and vocabulary, highlights key elements, and demonstrates how researchers can build on our work to contribute findings that further develop and refine our understanding of the public access ICT puzzle. To this end, we are adopting an [open research approach](#) where our research processes, tools, data, and findings will be accessible to others.

Phase one findings from Bangladesh, Chile & Lithuania

By Michelle Fellows on August 18th, 2009

The Global Impact Study has wrapped up its [first phase](#), which consisted of a year of exploratory fieldwork in three pilot countries — Bangladesh, Chile, and Lithuania.

Country Research Teams collected data on several public access venues, looking at user groups and activities, venue characteristics, and the roles venues play in each community. This data provides a snapshot of regional information ecologies — community networks of trusted information sources. It will be used to refine the Global Impact Study's research design, and will be helpful in formulating research questions and hypotheses.

Each of the three Country Research Teams conducted individual interviews, group interviews, and non-participant observation at six to nine public access venues — including public libraries, cybercafes, and telecenters in rural and urban locations. What follows here are a few highlights.

Inconsistent usage trends

Usage trends for venues providing public access to ICT are not consistent across countries. In recent years, Bangladesh saw a growing number of users, most prominently among telecenters, while Lithuania experienced declines, due in part to rising home computers purchases. Staff in Lithuania, however, reported that the range of users — by age, occupation, and social status — has simultaneously grown. All three research teams, including the team in Chile, found that the user base in telecenters and libraries tends to be more diverse than in commercially-oriented cybercafes.

Public access venues often fulfill social functions

In Lithuania, where the majority of users have Internet access at home or school, supplemental access in telecenters and public libraries is often for social purposes. Older users may appreciate having a public space for communication and exchange. Children may visit public access venues to play

games or work on homework together. In such instances, the benefits of public access may be measured by the benefits of public use as opposed to private use.

In Chile, researchers noted differences in users' perceptions between the roles of community-oriented and commercially-oriented venues. Community-oriented venues are perceived to be in contact with the community, local mass media, churches, adults and youngsters associations — serving their information, communication, and leisure needs. Commercially oriented venues are perceived as a service provider that does not building bridges within the community.

In Bangladesh, free Internet services and a wider offering of activities in libraries and telecenters build bonds, strengthen values, and create awareness about social issues. Pilot findings show that low-income users make up one-half of telecenter users and one-third of library users, in contrast to one-sixth of cybercafe users.

The social function of community-oriented libraries and telecenters may be more pronounced in rural settings or in communities with clear geographic and socio-economic boundaries. Chile's Country Research Team found that

People living in these communities have shared feeling of belonging and therefore, public access venues also are perceived as part of this community. (Users refer to the venue as "our" venue). Commercially-oriented venues located in areas without defined socio-demographic boundaries, for example "downtown of the city", even if they are immersed in a community, declare themselves as providing a service. (Users refer to the venue as "the" venue.)

Similarly, rural residents in Lithuania using the Internet in public access venues are reportedly more likely to perceive themselves as local community members and be more active in community activities.

Public access innovations: Phone repair in Bangladesh

By François Bar on August 18th, 2009



Two Bangladeshi women and their mobile phone repair shop in Kathalia, Narsinghi district

A few months ago, these two Bangladeshi women opened a mobile phone repair shop in the small village of Kathalia, Narsinghi district, a two-hour drive north of Dhaka. They are among the 22 women who graduated from a training workshop on cell phone servicing and information technology in January 2008. Another woman has also set up shop in a nearby village, while the remaining 19 repair phones in their homes, advertising their services with a sign on the road.

This was the first time such training was offered. Funding came from the [Dhaka Ahsania Mission](#) (DAM), and the Kathalia Sukher Disha Community Resource Centre

organized the three-week course. Participants were selected from nearby villages (one per village). The goal was to provide poor women with skills that would allow them to make a living as technicians. Upon graduation, each received a basic toolkit, worth about Tk. 1,000 (\$15), including a set of screwdrivers, small pliers, soldering iron and solder, a cleaning brush, a Chinese-made multimeter ([Sunwa YX-360TR](#)), and a Bengla/English collection of mobile phone diagrams covering the handsets most commonly found in rural Bangladesh.

The pair decided to become business partners and rented a storefront in Kathalia for Tk. 3,000 (\$45) for the whole year. They work in the shop eight hours a day, five days a week. In addition to phone repairs, they also use their mobile to sell phone calls to villagers. Altogether since starting five months ago, they have earned on average Tk. 1,500 (\$23) per month, most of it from repairs. They say most phones can be fixed by opening and cleaning them, but they can also test individual components, order and install a replacement when needed.

They hope to expand their business soon by offering additional services. First, they plan to provide [flexi load](#) — Grameen's instant recharge for pre-paid phones. They would also like to sell mobile accessories. They looked into becoming participants in the [Grameen Village Phone Program](#), but found the start-up cost too high and decided against it.

Comprehensive literature review of the impact of public access to ICT

By Araba Sey on May 8th, 2009

We're pleased to announce the release of our literature review on the impact of public access to ICT ([download PDF](#)). This comprehensive review supersedes the [draft version](#). From the abstract:

Information and communication technologies (ICTs) are widely acknowledged as important resources for socio-economic development. Due to resource constraints, shared access forms the dominant mode of access to these technologies in most developing countries. Governments, non-governmental institutions and entrepreneurs have invested significant amounts of human and financial resources in public libraries, telecenters, internet cafés, and other forms of public access — without clear evidence on what the ultimate outcomes will be and the actual costs. This report presents a review of empirical research on the impacts of public access to ICTs in order to document what is known about this approach to ICT service delivery.

The results show that there is limited conclusive evidence on downstream impacts of public access to ICTs. The evidence that does exist suggests that the public access ICT model is not living up to the expectations placed on it. This is not necessarily because public access has had no impacts, but because its impact is particularly difficult to identify and measure. As a model, public access to ICTs has experienced success and failure, leading to both reinforcement of the belief that the model should be expanded and strengthened, as well as to claims that public access ICTs are ultimately ineffective or even counter-productive from a development perspective.

Four main types of evidence are identified: evidence on venue performance and sustainability, users, usage patterns, and downstream impacts. Assessment of this

evidence indicates that trends are most apparent in the first three areas, while evidence of downstream impacts remains elusive. Most studies show that sustainability is a critical challenge especially in low resource, low income environments where commercial services are not viable. They also show that users are primarily young males with relatively high socio-economic status and prior access to computers and the Internet. Users tend to engage mainly in social and personal activities as opposed to economic activities, for example. Findings on downstream impacts fall on both sides of the equation: some studies conclude that impacts are high in a variety of areas (development of ICT skills, job creation, civic engagement etc), while others find limited impacts.

There is as yet no definitive evidence-based statement on the impacts of public access to ICTs. A research agenda is required that shifts from individual case studies and nominal level impact claims, to lines of enquiry that not only cut across contexts, but also utilize methodologies that (whether quantitative or qualitative) enable some quantification of identified impacts.

CITATION

Sey, Araba, and M. Fellows. April 2009. [Literature Review on the Impact of Public Access to Information and Communication Technologies](#). CIS Working Paper No. 6, University of Washington Center for Information & Society, Seattle.

Compendium of ICTD project impact assessments

By Michelle Fellows on March 13th, 2009

The [Compendium on Impact Assessment of ICT-for-Development Projects](#), by Richard Heeks and Alemayehu Molla, helps is a valuable guide that facilitates choosing and applying ICTD impact assessment methods. It includes

- An overview of ICTD impact assessments methods, approaches, and frameworks
- Descriptions of eleven impact assessment frameworks
- A bibliography summarizing 150 works on ICTD impact assessment, many drawn from case studies

A bibliography summarizes 150 assessments, mostly drawn from case studies. Heeks is professor at the Institute for Development Policy and Management of the University of Manchester and a Global Impact Study partner.

Production of the 157-page compendium was sponsored by Canada's [International Development Research Centre](#) (IDRC). It is distributed under a [Creative Commons Attribution Share-Alike](#) license, so that it can be freely accessed, shared, and adapted.

Do local libraries help communities? Findings from the UK

By Michelle Fellows on August 6th, 2009

The United Kingdom's Department for Culture, Media, and Sport recently commissioned BOP Consulting to assess the impact of public libraries on local communities. The final report — [Capturing the Impact of Libraries](#) — was released in January, 2009.

They're grappling with some of the same issues and questions as we are — trying to identify the best types of data and research methods. The report illustrates how intrinsic benefits, such as users' increased knowledge and learning, contribute to extrinsic benefits like cognitive skills development (including literacy) and improved employability.

Like us, researchers conducting impact assessments for public libraries study places that offer a broad range of resources and services. So impacts may be milder (or just harder to assess) than other public institutions, such as schools and health or social services. Or it may be that libraries are part of a bigger picture where each component plays an important role in social and economic development: "evidence regarding impact should not claim one-to-one causative relationships, but should concentrate instead on showing how libraries can make a contribution toward a range of socio-economic priorities." The same can be said for public-access ICT venues.

Revitalizing libraries in India

By Michelle Fellows on August 6th, 2009

This past July, Ajit K. Pyati published an article — [Public Library Revitalization in India: Hopes, Challenges, and New Visions](#) — that discusses the potential for a new public library model in India to meet the country's growing need for a more expansive knowledge infrastructure.

The article responds to a report prepared for India's National Knowledge Commission, which recommends transforming libraries from "their current state of disuse and neglect" to community information centers that act as "local gateways to national and global knowledge."

Pyati applies lessons from public access ICT projects — including M.S. Swaminathan Research Foundation's village knowledge centers, Gyandoot telecenters, and Akshaya e-centers — to highlight the importance of community involvement in planning and implementing community technology projects.

This article was published in [First Monday](#) — an open access online journal that is gaining credibility in academic circles. [Open access](#) is one of our core project values.

Remembering Amy

By François Bar on August 19th, 2009

Amy Mahan (1961–2009) served on the Global Impact Study's Research Working Group since the project's inception a year and a half ago. She made key contributions to the conception and design of our research effort, helped shape its focus, hypotheses and methodology.

Throughout her work, most notably as a leader of the Learning Initiative on Reforms for Network Economies ([LIRNE.net](#)), Amy saw public access to information technology first and foremost as an instrument for social and economic inclusion. She dedicated her life and scholarship to understanding how information and communication technologies could best enable excluded people, women in particular, to improve their lives and strengthen their communities. In her passion for helping others, Amy believed that action had to go hand-in-hand with research and that effective programs could only be built upon solid understanding rooted in rigorous study. As it emerges from its formative first year, the Global Impact Study reflects Amy's commitment and owes a great debt to her insights.

Amy left us on March 5th, 2009, at age 47. She worked with us until the end and left suddenly, taking many of her friends and colleagues by surprise. Amy had told very few people about her cancer, refusing to let the illness define her and, we suspect, fearful this might have distracted us from focusing on a project she cared very much about. She wanted to be remembered instead by her ideas, her scholarship, her dedication to help others. As we move forward, we will do our best to honor her memory by making sure the Global Impact Study remains true to her beliefs and worthy of her high standards. Plans are also underway, in coordination with other IDRC research programs in which she played key roles, to create a research fellowship in Amy's name.
