



CHAPTER 9

THE AMIC@S IN THE MUNICIPALITY OF ASUNCIÓN, PARAGUAY

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LOCATION AND CONTEXT

Located in the heart of South America, the Republic of Paraguay has a population of 5 million people and covers 406,752 square kilometres. Its economy is based primarily on agriculture. The country is bordered by Argentina to the west and south, Brazil to the east, and Bolivia to the north. The Paraguay River divides the country into two sharply contrasting regions: the Paraguay Oriental, where 95% of the population lives; and, in the west, the Gran Chaco, or Paraguay Occidental, a vast arid area inhabited by the other 5%, most of whom are indigenous peoples.

Asunción, the country's capital and largest city, is home to almost 1 million inhabitants, not including the quarter million who commute daily from the greater metropolitan area to work and study in the city. In general, the capitals of Latin America are representative of the social, economic and political circumstances of their hinterlands, and Asunción is no exception. Underemployment, crowded and poorly resourced public schools, marginal zones without such basic services as trash collection or sewers, and oversized public monopolies providing such primary services as electricity, running water and telephony are characteristic of the nation as a whole.

Unlike the other capitals of the Mercosur (the South American common market), as far as the common citizen in Asunción is concerned, the Internet is almost non-existent. According to a survey conducted by the International Telecommunications Union in 2000, across the whole country there are only 20,000 people (0.36% of the population) connected to the Internet. Of the approximately 1.5 million inhabitants of the capital city and surrounding urban area, only about 12,000 (0.8%) are registered users of the six local Internet service providers. The technology and the access it yields are almost exclusively the preserve of the elite.

In 1999, Paraguay was between 78 and 109 on the World Ranking Scale of the Human Development Index, which assesses countries in terms of life expectancy, infant mortality, GNP per capita, daily caloric intake, education and so on. Unhappily, it was also recently ranked second (behind Nigeria) in the list of the world's most corrupt countries.

After 34 years under a dictatorial regime, followed by 11 years of an incipient democracy, Paraguay is still working to implement a real democratic system, reform its economy and enhance human rights.

HISTORY

The AMIC@ initiative was launched in late 1997 as part of a collaborative programme between the Municipality of Asunción and the United States Agency for International Development (USAID), implemented through the LearnLink project of the Academy for Educational Development in Washington, DC.

LearnLink was established in 1996 and is funded by the Human Capacity Development Centre of the USAID Global Bureau, African Bureau and other USAID bureaux, offices and missions. Known officially as the “Global Communications and Learning Systems initiative,” LearnLink is a five-year Indefinite Quantities Contract that has helped design and implement more than 15 projects in as many countries. The focus is on developing information, education, and information and communications technology (ICT) applications in virtually every sector. (For further information on LearnLink, see www.aed.org/learnlink.)

AMIC@ stands for *Aulas Municipales de Información, Comunicación y Aprendizaje*, which loosely translated into English means “municipal classrooms for information, communication and learning.” As an acronym, AMIC@ evokes the Spanish word *amiga* or “friend.” Located in the poor neighbourhoods of Asunción, the AMIC@s were conceived as community learning centres that could be used for:

- decentralising municipality of Asunción systems and services;
- strengthening municipal and democratic processes, improving communication between citizens and government, and strengthening popular participation in civic activities;
- providing disadvantaged individuals, groups and communities with access to computers, telecommunications, free e-mail accounts and the Internet;
- automating and simplifying civic activities such as registering to vote and applying for licences;
- accessing information and databases for business development; and
- generally ensuring transparency and access.

In short, through these centres, it was hoped that official functions could be devolved to the community level, that the public would be better informed and more engaged in democratic processes, and that poorer communities could share in the benefits of ICTs and have opportunities for lifelong learning.

On January 28, 1998, the first of the 12 projected AMIC@s, based in the central bus station of Asunción, was officially opened as a pilot project to demonstrate how the information and communication needs of a broad cross-section of the Paraguayan people could be met. Seven months later, the second AMIC@ opened in the Manzana de

la Rivera Cultural Centre. During the intervening period, the bus station AMIC@ experience was analysed. This resulted in the development of regulations for using the AMIC@s and the creation of a mechanism known as Management Commissions to ensure community participation in managing, maintaining and supervising the centres.

In 1999, a further eight AMIC@s opened their doors and, during the first half of 2000, the last two centres became operational. The result: a grand total of 12 AMIC@s in Asunción, exactly as originally projected. During its first three years of operation, the AMIC@ initiative has achieved significant results with limited resources and in the face of difficult circumstances. Not only have the telecentres functioned effectively from a management perspective, but they are starting to prove their worth by serving increasing numbers of disadvantaged citizens. As Dr. Martin Burt, Mayor of Asunción, said at an AMIC@ launching ceremony in January 1998: “Thank you for not bringing me more books. Thank you for giving me all the libraries in the world!”

AFFILIATIONS AND STRATEGIC ALLIANCES

Critical to the success of such an undertaking are affiliations and alliances with groups such as Internet service providers, computer warehouses, software developers, public and private schools, post-secondary institutions, libraries, museums, non-governmental organisations (NGOs), community-based and non-profit organisations, chambers of commerce, and local business and media organisations. The individual in the position of AMIC@ Co-ordinator and LearnLink Resident Advisor approached partnership development with the philosophy of “exciting everyone.” (The role of the LearnLink Resident Advisor is also described in Chapter 13 of this book.) His constant efforts to establish alliances with strategic partners resulted in the following:

- *Internet service providers* — Rieder Internet, Planet S.A. and NetVision S.A. provided wireless and dial-up access to the Internet, technical support and training in computer use for the AMIC@s’ staff.
- *Higher education* — In June 1999, during the official opening of the AMIC@ at Bañado Sur, an agreement was signed between Universidad Católica (Catholic University), Sede Regional de Asunción, and the Municipality of Asunción to support the AMIC@ programme. As a result of this agreement, instructors and senior students from the university have served as volunteers, training AMIC@ Facilitators and users in computer use and applications.
- *Radio and television stations* — Radio Ñandutí and FM Trinidad have advertised and covered the main events held at the AMIC@s and have broadcast news and details about their programmes. More recently, Sistema Nacional de Televisión has begun supporting activities in the AMIC@–Sajonia, which is close to their main broadcasting station.
- *US Peace Corps* — This agency provides volunteers to train street children in computer operations and applications and help the Facilitators with their managerial and operational tasks in the centres. In return for this work, the Peace Corps volunteers are granted free access to the equipment (which they use primarily for e-mail), an example of the barter relationships that can be developed through telecentres.

Another example of a flourishing alliance is the relationship that has developed between the AMIC@ at the central bus station and a nearby NGO that provides shelter for the homeless boys and girls who shine shoes and sell sundries at the station. The computers attracted the attention of these disadvantaged children, and they now visit the AMIC@

regularly, surfing the Web, learning how to design Web sites and, on one occasion, participating in a videoconference with the Mayor of Asunción.

FUNCTIONS

The AMIC@s have been set up to provide training and technical assistance for a wide variety of people so that they are able to:

- use computers and the Internet for research, information gathering and publishing through the Web and print; and
- communicate via the Internet, videoconferencing and other means with municipal authorities in order to find out more about taxes, public services and other aspects of their municipality, obtain documents, and comment on public issues.

In pursuit of these goals, the centres are:

- offering formal training programmes, open to anyone in the community and ranging from keyboarding skills for absolute beginners to more advanced training in word processing, electronic spreadsheets, presentational software, desktop publishing, image processing, Web page design and multimedia courseware development;
- providing job skills training, career development programmes and opportunities for employment searches;
- training Facilitators and municipal employees in computer applications and telecentre management;
- providing Internet access for Web browsing, e-mail, chat sessions and videoconferencing;
- providing access to civic and community services such as the National Voter Registration Database during electoral periods when citizens can enter their ID details and find out the location of their polling stations;
- co-sponsoring computer-based contests such as one in Web design involving NGOs;
- enabling students to use AMIC@ facilities for special projects such as entering the Junior Achievement competition, a highly regarded programme conducted throughout the Americas to engage young people in leadership-related activities;
- mounting guided tours of AMIC@ facilities to familiarise would-be users with the services, technologies and potential of ICTs; and
- providing open lab times when people involved in formal courses of study can practise what they've learned, using the AMIC@ facilities.

COSTS AND FUNDING

The start-up process was supported partly by funds from USAID and partly out of the Municipality of Asunción's budget. From the project's very outset, the Municipality had vowed to help support the initiative. However, by the time the project was actually launched in 1998, the country had been devastated by El Niño, and the Municipality found itself having to spend the funds earmarked for the AMIC@ project on emergency services and provisions. So, at first the AMIC@s had to survive without the full financial support of its primary local partner.

Affiliation with the Municipality and partnership with some private companies have been critical to sustaining AMIC@ operations. Affiliation with the former provides an

enormous advantage because the Municipality pays for electricity, telephones, running water and rent — all of which constitute 40% of the centres' operating costs. A further 30% of the costs is met through the partnerships with private companies, who generously provide for some of the equipment upgrades and replacements, telecommunication services and Internet access charges. The remaining 30% of the costs (office supplies and other general expenses) are met from fees charged to the users.

The user charges are set at rates low enough to encourage everyone in the community to participate. Moreover, in some cases, in lieu of paying for their computer training or online time, users have been given the option of donating relevant books to the centres. This creative barter arrangement worked particularly well with the launch of the AMIC@ at La Manzana de la Rivera, a popular public place housing a theatre, art gallery, museum and public library. The facility benefited greatly from receiving books in this way.

The standard AMIC@ fees are as follows (at the time of writing, 3507.00 Paraguay guaranis (G) = US\$1.00):

Computer use (including Internet use)	Gs. 1,000 per hour
One colour printed sheet	Gs. 500 per sheet
Multicoloured printed sheet	Gs. 1,000 per sheet
Photo-quality multicoloured printed sheet	Gs. 3,000 per sheet
Formal courses	Gs. 20,000 – 30,000/month

Special membership schemes are also available for public or private organisations wishing to use the AMIC@ resources to train their employees and for educational institutions needing to draw on the facilities for teaching or research purposes. The AMIC@s' local Management Commissions develop and implement a wide variety of creative plans to generate further income or attract additional sponsorship.

ACCOMMODATION

The AMIC@s are located in public spaces where the telecommunications equipment, computer access and Municipality's services can be available to all. They are most typically found in municipal centres and public schools, where they are fully integrated and use the same electricity source (albeit through separate circuits), and where security systems, restrooms and other basic services are already available. In one case, so enthusiastic were the potential beneficiaries of an AMIC@ that the bricklayers, masons and carpenters in one poor community volunteered their services and literally built the centre from the ground up. In general, the AMIC@s have their own separate entrances and, because of the subtropical weather, are protected from humidity and excessive heat by air-conditioning.



The locations of the AMIC@s in Asunción are given in Table 9.1.

The Mayor of Asunción with children at AMIC@.

Table 9.1: *The locations of the AMIC@s in Asunción.*

LOCATION OF AMIC@	NUMBER OF AMIC@S
Municipal centres <i>(Barrio Obrero, Trinidad, Sajonia and Marangatu)</i>	4
Other municipal facilities <i>(La Manzana de la Rivera Cultural Centre, Central Bus Station, and Municipal Market)</i>	3
Municipal elementary school <i>(Marangatu Rape)</i>	1
Public Park <i>(Isla de Capri)</i>	1
Community schools <i>(Tablada Nueva, Bañado Sur and Tacumbu)</i>	3

MANAGEMENT

The Municipality of Asunción is officially the owner of the AMIC@ project and is responsible for determining the programme's regulations and preserving its spirit. A special Co-ordination Unit was created inside the Municipality's structure to help plan, supervise and render technical assistance as necessary to the centres. However, the LearnLink Resident Advisor quickly became aware that the framework of this project needed to be looked at in terms of social demand and had to be integrated into the daily lives of the residents of the city. So, to assist the Municipality, each AMIC@ also has a Management Commission made up of community activists — for example, youth and church groups, local NGOs, community commissions, book clubs, voluntary fire fighters, local radio stations and others committed to serving the communities — and a representative of the Municipality. These Management Commissions assume local responsibility for implementing the programme's strategic objectives by:

- identifying community needs and planning and organising activities in accordance with these;
- setting realistic expectations of the outcomes (thus, for example, if a community had no prior knowledge or experience of computers or their capacity, the local Management Commission would first promote and launch activities related to such basics and later, when the time was right, introduce the community to the more advanced Internet/Web services, databases and so on);
- monitoring conditions to ensure that technical provision and services are appropriate and effective;
- reviewing costs and charges, seeking collaborative arrangements with other providers, setting pricing regimes that are well within the community's means and administering finances;
- promoting and encouraging alliances with private companies and non-profit organisations; and
- helping to co-ordinate the AMIC@ Facilitators' activities and relationships with those of other Facilitators.

These Management Commissions are empowered to act relatively independently. However, consistency and constancy in the project are assured by the Commissions

meeting regularly to exchange experiences and the Municipality's representative liaising with the Commissions.

STAFFING

The AMIC@s are hosted by Facilitators, thus named because they facilitate the process of integration between people and the technologies and services on offer. The Facilitators are mainly municipal employees or young volunteers who are required to assume responsibilities for the overall functioning and security of the centres. There are three Facilitators per centre. Municipal employees are directly paid by the Municipality and work in AMIC@s located in municipal dependencies. The volunteers are either recruited from the local communities and user groups, come through the Peace Corps, or are students from the Catholic University. Payment for the volunteers and student helpers depends on the policy of the local Management Commission, but is usually on the basis of time worked. Peace Corps volunteers and Catholic University students receive no payment for their assistance, but may use the centres' facilities in return for their services.

All of the Facilitators and volunteers live near the local community, so they know and understand the community needs and culture, and therefore are able to relate well to the users. The high quality of the staff and volunteers has been an important factor in the success of the AMIC@s. Friendly, helpful and reliable staff encourage people to pay a first visit to the centres and then, more importantly, to make return visits after that.

The main problem is that the young volunteers and students are transient, so it is necessary to have in place an effective transfer strategy to ensure that the new volunteers acquire the basic know-how.

The Resident Advisor is kept extremely busy working with the 12 AMIC@s. At the time of writing, he was also working hard on an electronic information voting system for the Vice-Presidential election in Paraguay — involving the use of touch-screen kiosks (the one in the Asunción main bus station has attracted more than 400 queries per day) — and finalising the Municipality's official Web site.

TRAINING THE AMIC@ MANAGERS, STAFF, AND END-USERS

Training has been a central feature of the various stages of the AMIC@ experience, both for developing an understanding of how to operate the telecentres and for familiarizing users in the technology. There are four strands to the training provision:

- *Technical training* — The Municipal Technical Unit focuses on the technical issues, providing advice to the Management Commissions, troubleshooting, planning software and hardware maintenance, and training the Facilitators in first-line technical procedures.
- *Management training* — The Management Commission members are strongly urged to participate in special introductory courses that cover management concepts, accounting procedures, and advice on how to plan and administrate AMIC@ resources and activities aimed at community capacity-building.
- *Training the trainers* — The Facilitators and volunteers are trained in basic pedagogy and how to provide first-line technical assistance and informal training for the users of the AMIC@s.

- *Training the AMIC@ users* — The users receive formal training by teachers and informal training by Facilitators and volunteers in the different computer applications and Internet applications. Each AMIC@ also offers additional multimedia, self-instructional programmes that users can work through in their own time and according to their particular needs.

From the very start, it was recognized that it would be difficult for the one Resident Advisor to provide adequate training across all of these technical, managerial and operational issues and in all 12 AMIC@s. To address this problem, two strategies were adopted.

First, four of the centres were established within educational institutions: Maragantu Rape in a municipal elementary school, and Tablada Nueva, Tacumbu and Bañado Sur in community schools. The teachers in these schools were able to provide the formal training programmes and technical assistance to the Facilitators and volunteers.

Second, alliances were established with higher educational institutions, in particular the Catholic University of Asunción, to provide:

- formal training in pedagogical and technological methods and content for the Facilitators and volunteers; and
- training for local teachers and final-year students in planning and providing computer courses for AMIC@ users.

While this system is rather complex to manage, it meets all of the AMIC@s' expectations, and there is good interaction between all the institutions and the centres.

PUBLICITY

The AMIC@s are becoming so popular that the launch of each new centre is a major community event, complete with music, dancing and speeches from local dignitaries, celebrities, government officials and representatives of the public, private and voluntary organisations and agencies associated with the centres. The entire neighbourhood celebrates at these occasions, with food and drink and dancing, and the local priest blesses the new centre. Such grand occasions are covered by the major newspapers and local television stations. The Sistema Nacional de Televisión, as well as the local radio stations such as Radio Ñandutí and FM Trinidad, have been particularly generous in covering these events and promoting some of the centres' activities and services. Through such means, people quickly get to know about the centres and become interested in all they have to offer. Following up on this, brochures describing the centres' services, activities and upcoming events are distributed throughout the community and displayed in shops, companies and affiliated organisations. The Municipality's Web site also promotes the AMIC@s, encouraging people to visit their local centres and take full advantage of their facilities and services.

ACCESS

The AMIC@s are open daily, Monday to Friday, from 8:00 a.m. to 6:00 p.m. However, depending on the community and the AMIC@'s location, it is possible to find a centre staying open until 9:00 p.m. or even later and opening on Saturdays or Sundays as well.

Before using any of the AMIC@'s resources, users must identify themselves with a valid ID or a parent's or tutor's ID and must complete the user profile form. Users can

reserve up to three “turns” (times to use the services) per week. The duration of these turns may vary according to a particular AMIC@’s regulations and local circumstances, but a typical turn for Web browsing or using computers is one hour and 30 minutes for chat sessions and videoconferencing, and 15 minutes for checking or sending out e-mails.

TECHNOLOGY

Each AMIC@ has a base technology configuration of:

- four to five personal computers, each with multimedia capabilities and capacity to send faxes and browse the Internet;
- one black-and-white and colour ink-jet printer, with copier and scanner capabilities;
- a LAN interconnecting the computers and printer using a 10/100 Mbps and HUB and UTP (cat. 5) cabling;
- various accessories such as a Web cam for videoconferencing, microphones, speakers, digital cameras; and
- software, including operating systems, word processing, spreadsheets, antiviral kits, back-up utilities, Spanish dictionaries and encyclopedias.

The Municipality of Asunción has signed agreements with the two main Internet service providers in Paraguay. They provide two types of Internet access for the AMIC@ programme: wireless and/or a dial-up connection. Currently, seven AMIC@s have wireless connections and five use a dial-up. Where there is wireless connection, the bandwidth is also used to provide internal communication (via the Municipality’s intranet) and to allow the interchange of administrative data and Municipality information/services. Thus, there are two virtual networks available: a public network, interconnecting the AMIC@s, and a private network, connecting the employees, supporting the decentralisation process and providing municipal services. Such an arrangement maximises the potential of the ICTs and provides the communities with the widest possible range of benefits. In all but three AMIC@s, the Internet can be accessed 24 hours a day.

Right from the start, the Municipality’s Co-ordination Unit has given invaluable technical assistance to the Management Commissions in regard to technological issues. It also trains the Facilitators, involves them in a capacity-building programme with all the other AMIC@ Facilitators, and monitors and evaluates their performance.



An AMIC@ kiosk.

RESEARCH AND EVALUATION

As of July 2000, the AMIC@ project had been extended by the major donor, USAID, in collaboration with the Municipality. After reviewing the experiences to date, some changes were being made to the operations to make the centres even more user-friendly and to offer and automate more of the Municipality’s services. New arrangements were also being explored for more equal sharing of responsibility between the public, private and voluntary sectors.

The bulk of the work to date has concentrated on constructing facilities, often from scratch. Procuring and installing equipment, experimenting with and promoting products

and services, informing and engaging the community, establishing strategic alliances, and training the Facilitators have been enormously time-consuming, leaving little time for any formal monitoring of processes and outcomes. While definitive evaluation data on project design and implementation conducted through LearnLink are not yet available for public distribution, usage data have been tracked. These indicate that in 1999, the last full year of operation, more than 3,000 citizens from disadvantaged communities used the AMIC@s' services. The data also indicate that the people using the AMIC@s come from all walks of life — from students and street children to teachers, merchants and prison guards.

The strongest indications of the AMIC@s' success are that all 12 centres are operating effectively despite difficult circumstances, that people are crowding in to use a wide range of services, and that the project has been extended by its two key sponsors. The ongoing involvement of the Mayor and other civic leaders and the citizen participation in the local governance of the AMIC@s provide further evidence of the centres' impact. One AMIC@ evaluator concludes, "The AMIC@s are slowly changing people's attitudes, not only due to the benefits of technology at their disposal, but also due to a growing confidence of the active forces of the community in their capacity to work and learn with the Municipality."

CONCLUSIONS

The AMIC@ initiative has had to cope with poor infrastructure, poverty and a lack of education in the target communities, a history of non-involvement of local citizens in civic affairs, and a complete lack of familiarity with ICTs. Nevertheless, it is meeting with success on numerous fronts. Several factors have emerged as being critical to that success:

- the well-planned, enthusiastically and effectively implemented outreach, which ensured the involvement of a wide range of stakeholders;
- the willingness of the Paraguayans to seize the opportunities available through ICTs, which, historically, they have not done for educational, political, social or economic gain;
- the role of the Facilitators and the volunteers in changing the people's mindsets and introducing them to the culture of democratic participation and modern communications;
- the provision of funding from the Municipality budget, which undoubtedly sustained the project;
- the recognition that there are dangers in long-term reliance on the Municipality for funding and that the AMIC@s must become more self-sustaining; and
- the support of the local Management Commissions and its role in developing and promoting new activities and encouraging new players to participate in the programme.

The main lessons to be learned from the AMIC@ experience about this model of telecentres can be summed up as follows:

- Do everything possible to promote genuine and widespread community participation. If the principal beneficiaries are not involved from the beginning and do not have a sense of ownership, it is unlikely that the initiative will be sustainable.

- Involve the active forces of the community in the centres' management through a structure similar to that of the local Management Commissions.
- Forge strategic alliances with the private sector. Such relationships can assist with launches and long-term sustainability and should be widely publicised to help raise the profiles of the companies involved and so encourage their continued participation. In return, they will help promote the value and usefulness of the centres and encourage other enterprises to partner with the scheme.
- Maintain a commitment to educational organisations. The students from the public schools and colleges were the first and most enthusiastic users of the AMIC@ resources, which complemented (and in some cases were preferred to) the resources in their own institutions. While this initially led to some problems with the teachers, who were less likely than their students to use these resources, careful nurturing of relationships with teachers, including special outreach and training, helped overcome the problem.
- Encourage participation by local NGOs and voluntary groups. The AMIC@ experience shows that such groups find it invaluable to have workspace in the telecentres and may be open to bartering for voluntary labour and services. The result is affordable and enriching experiences for both parties.
- Cultivate and involve the national and local media. Newspapers, radio and television go into everyone's homes and are an effective way to show what is being offered, where, and what the benefits are.
- Clearly determine the focus of each centre's programme and then let everyone know about it. To simply provide training in computing and ICTs without any ultimate goal in mind will only create false expectations among the users and the other stakeholders. From the very beginning, it is important for the user to be able to ask and answer the question, "Now I know how to use a computer, the Internet and the Web. What next?"



