



Strengthening Education
through Technology-
Enhanced
Partnerships

LearnLink

LTNet/ProInfo

*The vocation of Brazil and the
United States is to stand together.*

*President Fernando Henrique Cardoso
in a Speech on April 20, 1995*

*With our two great nations
cooperating as never before, we
stand at a moment of unparalleled
opportunity. We must seize it, and
we will seize it.*

*President William Jefferson Clinton
in a Speech on April 20, 1995*



LARGE

Large is key to understanding most things about Brazil. It is the fifth most populous country in the world. The Amazon basin is the largest rainforest in the world. The Amazon River has the largest volume of water and is the second longest river after the Nile River. The river system is extensive, boasting one of the largest waterfalls in the world, and the country's forests constitute 30 percent of the world's forest resources. As a high middle-income country, Brazil also stands out as an economic giant within South America, and it weighs in as the eighth largest economy in the world.

While the territory of Brazil spans almost half of the South American continent, most of the population lives in a wide band along the coastline and many areas are sparsely populated. However, road

construction is leading to increased migration in the interior. Brazil's population reflects a combination of descendants from 17th century Portuguese settlers, a considerable African population, native Indians that now number about 200,000, and other settlers from Europe, the Middle East, and Asia. Over the past two hundred years, governing bodies shifted from ruling elites to military rulers, and since 1989, to a democratically elected President. Over 62 percent of Brazil's population is under 29 years of age, and inequalities in wealth, population concentration, education, and culture are evident.

COMMON BONDS

A combination of history, geography, demography, and strong current economic interests links the United States to Brazil. The countries are the two largest in the hemisphere, and exchanges of trade, people, music, culture, intellect, and resources have occurred for many decades. After 1900, links between the two countries grew stronger, with American investment increasing after World War I. Recently, both the United States and Brazil have actively sought economic integration in the hemisphere.

Given Brazil's strong economy and growing middle class, it is not surprising

that Internet access and computer ownership has grown to be among the highest in the world. An estimated seven million Brazilians use the Internet today, and people in medium to large cities have increasingly easier access to free Internet services, in part due to offers for free or discounted access from banks and telecommunication service providers. At the same time, national and state programs designed to provide computer and communication technologies are fueling demand for Internet access at home.

In 1997, the Secretariat of Distance Education of the National Ministry of Education started ProInfo, the prominent, nationwide computers-in-schools initiative. This ambitious effort is committed to equipping public schools with computers and to providing teachers with innovative training to ensure that they know how to integrate computers effectively into classroom learning.

US-BRAZIL EDUCATIONAL PARTNERSHIP

In 1997, as ProInfo was being launched, Presidents Clinton and Cardoso met in Brasilia's Garden of Alvorada Palace and signed a bilateral partnership agreement for education. In the US, the partnership combined the resources of the US Department of Education, the US State Department, and the US Agency for International Development's (USAID) Latin American Caribbean Bureau and

Zoom in on Brazil

Geography

Location: Eastern South America (SA), borders with 10 out of 12 SA countries
Area: 8,511,965 sq km
Environment: drought, floods, loss of biodiversity, deforestation, air/water pollution

People

Population: 171,853,126
Age structure: 30% aged 0-14; 65% aged 15-64; and 5% aged over 65
Population growth rate: 1.16%
Fertility: 2.28 children born/woman
Infant mortality rate: 35.37 deaths/1,000 live births
Life expectancy at birth: total: 64.06 years; males: 59.35 years; females: 69.01 years
Ethnic groups: white 55%; mixed white and black 38%; black 6%; and other 1%
Religion: Roman Catholic 70%; Protestant 30%; other 10.8% (not mutually exclusive)
Languages: Portuguese (official), English, French, and Spanish
Net primary school enrollment: 97%
Net secondary school enrollment: 66%
Literacy: total: 83.3%; males: 83.3%; and females: 83.2%

Economy

GDP: \$6,100
Inflation rate: 2%
Labor force: 57 million
Unemployment rate: 8.5%
Budget: revenue: \$151 billion;
External debt: \$258.1 billion

Communications

Telephones: 14,426,673
Radio broadcast stations: AM 1627, FM 251, shortwave 114
Radios: 60 million
Television broadcast stations: 138
Televisions: 30 million
Internet hosts: 18.45/10,000
Personal computers: 30/1000

The World Factbook 1999

www.odci.gov/cia/publications/factbook/index.html

Human Capacity Development/Global Bureau. In Brazil, the partnership is coordinated by the Ministry of Education and its Secretariats, especially the Secretariat for Distance Education and the ProInfo program.

Early in the partnership, the Government of Brazil proposed that the US Department of Education establish a sister institution to the Brazilian Center for Educational Technology (CETE) so that state-of-the-art information on educational technology could be shared between countries. In response to this request, the US Department of Education and USAID agreed to support the development of a web-based clearinghouse to provide both US and Brazilian educators with easy access to the latest information on educational technologies. USAID contracted with the LearnLink program of the Academy of Educational Development (AED) to implement the project, which was called the US-Brazil Learning Technologies Network (LTNet). LTNet staff collaborated closely with professionals from Brazil's

Ministry of Education and the ProInfo program to ensure that the LTNet web site meets the needs of Brazilian educators.

THE US-BRAZIL LEARNING TECHNOLOGIES NETWORK

Initially, LTNet was conceived to be a simple, Internet-based clearinghouse of information on the ever-expanding role of computers and the Internet in education. Assuming a more active role in the bilateral partnership, LTNet's staff reformulated the design to ensure a more active role in the bilateral partnership and to enable the interactive exchange of information and experiences about using these technologies between educators in both countries. What evolved was dynamic, genuine, active input from both partners and collaborative activities between US and Brazilian educators. As the following examples demonstrate, the breadth and depth of possibilities offered via LTNet are limited only by the creativity of those who use this resource.

Equity among partners is reflected in the dialogues, collaborations, and exchanges that characterize the acquisition and sharing of information. Bilingual in Portuguese and English, LTNet's web site (<http://www.ltnet.org>) provides Brazilian educators with ready access to US experiences in computer-assisted learning and

LTNet (www.ltnet.org) offers:

- a bilingual WWW interface with high and low graphics;
- a Virtual Exchange Environment;
- a Virtual Library of over 30 resource topics on educational technologies;
- multiple online interactive tools;
- information about ProInfo, Brazil's national computers in schools program;
- membership in a listserv for LTNet subscribers; and
- membership for receiving free online English language instruction.

US teachers and researchers with new, exciting experiences and data on Brazil's bold effort. With access to LTNet's Virtual Library, users can locate reports, case studies, and other computer links on educational technology.

While the Virtual Library is proving to be a useful resource; it is LTNet's interactive communication tools that offer the most exciting avenues for exchange. Teacher experiences are presented in different places on the web site, and discussion fora, listservs, digital whiteboards, and text and voice chat rooms are available for visitors to use. LTNet consistently strives to encourage and enable networking, sharing, learning, collaborating, partnering, resource accessibility, and cross-cultural understanding.

Though the LTNet web site is the most visible part of LTNet's activities, LTNet also works face-to-face linking Brazilian educators, many of whom are involved in the ProInfo program, with their counterparts in the US. In this way, both US and Brazilian educators can participate in parallel activities to improve their use of technologies in education and to develop their own creative strategies and methods. During trips to Brazil, LTNet and



- communicating
- collaborating
- virtual library
- learning
- partners
- about LTNet
- about ProInfo

Talk with Chat, LTNet Staff!

Low Graphics Version

Internship & Volunteer Opportunities!

Download a PDF copy of the LTNet Brochure

Contribute your pictures

US/Brazil Learning Technologies Network

LTNet collaborating with Fulbright Program!

Under the bilateral U.S./Brazil Educational Partnership Fulbright supporting teacher exchange program for E.S.L.



Brazilian educators improving teaching and learning by integrating computers and the Internet into education! [click to enlarge \(~25kb\)](#)

LTNet's Periodic Essay

Can Computers Make a Difference in Education? A Case from Brazil's ProInfo Program.

This is a difficult question to answer and the "answers" are usually hotly debated by people on both sides of the issue. However, as governments, schools, communities, families and donors invest millions of dollars into equipment, facilities, training and software, the pressure to *PROVE* that computers improve teaching and learning, in ways that are better than conventional alternatives, grows.

One way to approach the challenge of addressing this question is by using examples to demonstrate how teachers are integrating technology into their teaching that result in substantive and important change in student learning. One example of effective computer integration into education, which will be discussed here, comes from a public school in São Paulo that is participating in Brazil's ProInfo program.

continued ➤

LTNet web site

Subscribe to LTNet's Listserv (enter e-mail address)

Subscribe

Join LTNet!

NEW!

ENTER! Educators' Discussion Forum

NEW!

SPECIAL OPPORTUNITY for Brazilian schools

NEW!

Brazilian Public School Principals collaborating for Change

NEW!

Lesson Plans! Download and Contribute

NEW!

Brazil's Ministry of Education Pledges Funding for LTNet!

NEW!

ProInfo staff collaborate to make presentations at conferences and participate in teachers' meetings.

The integration of a strong web site that is responsive to the needs of ProInfo and Brazilian educators, with ongoing formal and informal relationships among LTNet staff and a spectrum of Brazilian educators, has resulted in a mix of innovative activities. These range from enhancing conventional exchange programs funded by other partnership agencies for US and Brazilian educators to LTNet's *School Links* program that enables Brazilian teachers and students in different cities to use the web site to carry out online collaborative activities. Future growth possibilities emerge as word of this facility spreads, and the potential for piloting this model throughout the hemisphere is



Master Brazilian language teacher

enormous.

Enhancing Teacher Exchanges

To achieve the greatest possible impact on helping Brazilian and US educators improve teaching and learning, LTNet focuses on supporting teachers. A key part of this effort is directed toward enhancing conventional exchange activities involving US and Brazilian educators. For example, in early 2000, LTNet contributed to an exchange program organized by the Fulbright Commission at the US State Department for 24 teachers of English as a



Two Fulbright Exchange teachers

second and foreign language (ESL/EFL), 12 each from Brazil and the US. At the orientation session for the Brazilian participants, LTNet staff introduced the Virtual Exchange Environment (VEE), a part of LTNet's web site that enables participants to communicate among themselves and share information. Later at AED's National Training Laboratory (NDL), LTNet held an intense training activity for all 24 participants that introduced a variety of computer and Internet technology options. The group engaged in hands-on learning with multiple, interactive computer tools and learned how to create basic web pages, manipulate digital images, and plan Internet research strategies. Using the electronic tools available through the VEE, teachers are learning how to communicate and collaborate across international borders with each other by e-mail, threaded discussions, and live "chat sessions."

MultiRio

Another collaborative activity is the media exchange with MultiRio, a government funded organization in the municipality of Rio de Janeiro that produces and delivers educational television programs and multimedia products. In Fall 1999, LTNet hosted four members of MultiRio's staff and a senior professional from the Ministry of Education's TV Escola program for a study tour of a mix of educational television and multimedia programs in Washington, DC and New York City. The theme of the visit was the merging of new electronic media with educational television.



Teachers in Belém, Pará

This exchange, which was funded by the US State Department, resulted in new partnerships between MultiRio and US organizations as well as opportunities for collaboration between MultiRio and TV Escola. Feedback from MultiRio also showed that the direction of their program changed as a result of this visit. In addition, the visit created the opportunity for LTNNet to produce and air three to five minute TV spots highlighting different aspects and resources of LTNNet on Brazilian educational television.

More Collaboration

In July 2000, LTNNet officially launched a new collaboration with GlobalEnglish.com, a young Internet company in the US that

offers online English language instruction. Through the LTNNet website, Brazilian schools will be able to subscribe for free to GlobalEnglish's online resource for English language teaching and learning. With these new tools and school membership access, teachers, administrators, and students can increase their language skills.

FORGING DURABLE PARTNERSHIPS

The LTNNet project is an example of the positive results that are possible when Internet technologies are effectively integrated with conventional, face-to-face, collaborative activities. Also, LTNNet's web site illustrates the benefit of developing an attractive, user-friendly, and interactive web site to provide inexpensive access to quality information and to enable people across the globe to share experiences and learn from one another. Finally, LTNNet shows that effective, lasting partnerships built on mutual respect, equity, and a willingness to learn and share can foster educational change and enhance important social and development programs.



ProInfo students at computers



ProInfo, An Ambitious National Computers-in-Schools Program

ProInfo, a federally funded Brazilian program, is implemented via a partnership between the Ministry of Education and state and municipal Secretaries of Education to integrate computers and communication technology into teaching and learning. The official program sponsor is the Ministry of Education Secretariat of Distance Education (SEED). ProInfo aims to distribute computers or labs in public schools across the country, to establish a network of teacher training and computer resource centers—referred to as NTEs—in each of Brazil’s 27 states, and to train a professional group of “Multipliers,” lab coordinators, and teachers.

Over the past three years, training has reached over 25,000 teachers, 2 million students, and 1,400 Multipliers, who provide training and support to classroom teachers. Teachers are trained to integrate the use of computers into daily teaching and learning and to work in interdisciplinary teams. As of June 2000, there were 229 NTEs distributed throughout the states and municipalities. Local officials and ProInfo staff collaborate in the selection of school sites to receive sophisticated computer labs, which are staffed by trained teachers and technicians. At the end of Phase I, public schools had received over 30,000 computers.

CETE is the ProInfo center that establishes computer laboratories in schools and NTEs, provides technical support to NTEs and schools, and establishes listservs and discussion groups to further educational efforts.



LTNet/ProInfo