

JUNE 21, 2006  
LATIN BEAT  
By Geri Smith

## For Brazil's Poor, a Digital Deliverance?

**The Committee for Democracy in Information Technology helps the unempowered use computers to reboot themselves and their communities**

Ronaldo Monteiro was halfway through a 13-year prison sentence for kidnapping when his life took a turn for the better. That's when a nonprofit group delivered a bunch of personal computers to the rough Lemos Brito prison in Rio de Janeiro and taught inmates how to use them. Within months, Monteiro had become an instructor, and then he helped start a prison recycling program that today sells paper products, from calendars to notebooks, whose proceeds help support inmates' families.

Freed two years ago, Monteiro has just launched his own nonprofit group that provides seed capital and business advice to 25 former prisoners starting their own businesses, from small garment factories to ship soldering outfits. "The computer project changed my life," says Monteiro. "It taught me skills that empowered me, and that led me to think about doing things to help others."

The prison computer-education school is just one of 951 such centers created in Brazil and eight other countries over the past 11 years by the Committee for Democracy in Information Technology (CDI), a Rio de Janeiro-based nonprofit group. But these are not run-of-the-mill "telecenters" that offer rudimentary training and an Internet connection. Their name—Information Technology and Citizens Rights Schools—suggests a broader purpose. According to Rodrigo Baggio, the 37-year-old tech whiz who created the program in 1995, the idea is to teach the underprivileged basic concepts of self-esteem, citizenship, and their rights as individuals—essential building blocks for a fairer society.

After sub-Saharan Africa, Brazil has the worst distribution of wealth in the world. "People don't die of hunger in our cities—they die from lack of opportunities, and that leads them into a life of crime, violence, drug trafficking, and death," says Baggio. "People need more than just food. They also want fun, art, and technology in their lives."

**CORPORATE BACKING.** Call it Digital Democracy or Digital Inclusion. It means spreading technology to the masses so they will not be left behind as the rest of the world becomes interconnected. In the U.S., two-thirds of the population is connected to the Internet, but in Latin America as a whole the rate is a low 15%. "There is a kind of 'digital apartheid' in developing countries that must be overcome so they can progress, not just economically but socially," Baggio says.

CDI has won international recognition for its unique approach of combining digital and civic education. With backing from such multinationals as Microsoft ([MSFT](#)) and AOL ([TWX](#)) and from Ashoka, a Virginia-based organization that encourages grass-roots social entrepreneurship worldwide, CDI has trained 600,000 underprivileged youths in computer and Internet skills. It does this with an annual budget of about \$5 million in cash and donated services.

Baggio opened the first center in a Rio de Janeiro hillside shantytown in 1995, in space provided by a church and with computers donated by a retail chain. He was soon bombarded by requests to open centers throughout the country. Although most equipment is donated, all the centers are self-sustaining, charging students \$5 to \$10 a month for a three-month course. Students who cannot afford to pay are expected to contribute by helping out around the center. For many, the school is an oasis from the violence of the urban slums that are dominated by gun-wielding drug dealers. And the instructors, as well as the computer-repair specialists trained by the centers, serve as positive role models for kids.

**EMPOWERING COMMUNITIES.** I visited one center, in Morro da Providencia, a century-old slum in Rio de Janeiro where gun battles between police and traffickers recently shut down schools and businesses for two weeks. There, students ages 9 to 17 work on 15 computers donated by British Petroleum ([BP](#)). They're learning how to use the Internet for their schoolwork, but embedded in the lesson plans are exercises in building self-esteem and strengthening the community. "We're trying to show students that they have other options in life besides working for drug traffickers," says Mario Chagas, 48, the center's director.

Young people are not the only students. In some centers, the physically and mentally disabled, prostitutes, and housemaids learn skills that may enable them to open home-based businesses. But CDI aims to improve not just individual lives but that of the community as a whole. Slum residents are encouraged to discuss possible solutions for everything that's plaguing their neighborhoods. In one shantytown, where a trash-choked river frequently flooded streets, students printed and distributed flyers explaining to residents why it was important to refrain from throwing garbage into the waterway. After four months, flooding ceased to be a problem.

In another community, residents were frustrated when the city moved a bus stop far away, requiring residents to take an extra bus to get to work. Students in a CDI class calculated how much the extra bus fare affected family budgets and presented the

information in spreadsheet format to city officials, who promptly moved the bus stop back to its original location. "These are molecular-sized revolutions that truly empower people, converting them into people capable of using technology and ideas to achieve change," says Baggio.

**FREE LAPTOPS FOR KIDS.** There are other computer initiatives percolating in Brazil, whose 188 million inhabitants make it Latin America's most populous country. It's an interesting testing ground for computer and Internet use because Brazilians are eager technology adopters. Brazil has 22 million computers in use and boasts one of the highest numbers of Internet users in the world—around 26 million. It was the first country to introduce electronic voting, and it long has had one of the world's most computerized banking systems.

Yet, half of all Brazilians are poor, with little hope of ever learning to use a computer—much less owning one. The Brazilian government plans to install 6,000 community computer telecenters around the country by 2007. But that won't train enough of the workforce in computer use to make the country competitive.

So Brazilian President Luiz Inácio Lula da Silva has agreed to distribute 1 million low-cost laptops to poor schoolchildren starting next year. Brazil will be one of the pioneer countries in a program called One Laptop Per Child, created by MIT's Media Lab (see BusinessWeek.com, 12/20/05, "[Quanta's \\$100 Laptop Challenge](#)"). It aims to hand out millions of \$100 laptops equipped with open-source software to children around the world as part of the effort to bridge the digital divide between rich and poor countries. By allowing children to take the laptops home from school, the hope is that parents born before the digital age began will learn to use them as well.

**INDIA, CHINA NEXT.** The laptops, now in the final stages of design, will be distributed for free by governments starting next year, first in Nigeria and Brazil, and then in Argentina, Thailand, and perhaps Egypt (see BusinessWeek.com, 10/4/05, "[Help for Info Age Have-Nots](#)"). Ultimately, says Walter Bender, One Laptop Per Child's president, the idea is to reach India and China, home to one-third of the world's children.

Granted, the 1 million laptops to be distributed initially in Brazil will barely scratch the surface: Brazil has 55 million school-age children. But it's an important first step. "It's inevitable that kids are going to have access to modern communications and to laptops eventually," says Bender. "We just want to make it happen faster, so that we don't lose another generation of kids in the developing world."

Already, the future looks clearer to Wanderley Canhedo, 13, a student at the CDI center in the Morro da Providencia slum, whose father is a bartender. Wanderley aspires to join the Brazilian Navy to use his new computer skills as a communications officer. "That's my dream now," he says, smiling.

With around half of Latin America's 560 million people living below the poverty line, dreams are in short supply. "Digital inclusion" is a necessary first step to equip young Latin Americans with the knowledge, skills, and self-confidence they need to succeed in the global workplace.

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**Nickname:** wayan

**Review:** Do note that unlike what you report, Brazil has not committed to buying OLPC laptops. From OLPC itself: "We have not signed any agreements for orders, but we are in communication with the countries mentioned. OLPC has asked that all interested parties wait to see a working machine before placing their orders." For more info, see:

[http://www.olpcnews.com/sales\\_talk/countries/woops\\_did\\_we\\_say\\_ord.html](http://www.olpcnews.com/sales_talk/countries/woops_did_we_say_ord.html)

**Date reviewed:** Aug 11, 2006 3:40 AM

**Nickname:** FLYFMERLIN

**Review:** Thank you for such a wonderful and enlightening report!

**Date reviewed:** Jun 25, 2006 12:34 AM

**Nickname:** Mike

**Review:** The real deliverance for people in Brazil's rural areas will come when "Luz para Todos" is a reality, when there is light for all from locally-generated, clean electricity. The Biomass Energy Foundation is doing research in Golden, Colorado, that will allow villages in Brazil to use biomass from their cash crops for fuel to power dependable, environmentally clean, safe, generators. When delivered later this year, the equipment will use local fuel to provide clean power for the people.

**Date reviewed:** Jun 22, 2006 3:40 PM

**Nickname:** Scott

**Review:** The U.S. society upgrades computers to keep up with the top of the line in gaming, multimedia and other software that tries to push hardware performance, making perfectly useable computers obsolete. Offices and individuals get rid of these things, hoping to maybe receive some kind of return on their product. These older machines could do a lot of good to people in almost complete digital exclusion. This would also help continue the life of something that would otherwise end up in a landfill.

**Date reviewed:** Jun 21, 2006 10:39 PM

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[Smith](#), *BusinessWeek's* Latin America correspondent, lived in Brazil for eight years

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