

The largest digital inclusion project in the world.

As the technology gap between schools and the real world narrows, educators across the globe are realizing the importance of digital and online learning. However, even as the tech gap closes, an ever widening economic rift in Brazil has brought special attention to this fact.

To better prepare their students for the reality of a post-industrial 21st century workplace, the Brazilian Ministry of Education (Ministério da Educação - MEC) took bold steps. Drafting a project to offer digital access to students from public schools in all 5,564 municipalities in the country, the Ministry strove to maintain the lowest possible cost, while ensuring that teachers and students make the most out of this infrastructure.

The challenges

In a country as massive as Brazil, with many schools located in remote and difficult to reach areas, the project's success faced a long list of potential pitfalls and hurdles:

- Desktop management and deployment in a comprehensive geographical area;
- Insufficient, often nonexistent infrastructure;
- Limited budget;
- Unstable power grids;
- Limited space in schools;
- Difficult access to schools due to ill-maintained roads;
- Remote location of schools (e.g.: indigenous and rural areas).



The solution

In order to have any hope of achieving success, the Brazilian Ministry of Education discovered an innovative possible solution, Shared Resource Computing (SRC). Rather than relying on the familiar one PC per seat approach, SRC divides the resources of a single PC between several users. This set up allows for a streamlined approach to providing the digital education framework required by the project:

- Lower volume of equipment, resulting in less volume and weight, therefore reducing the associated logistics costs;
- Reduced energy consumption and maintenance costs, a critical piece of the puzzle in rural areas;
- Less upfront investment, enabling schools across the country to acquire the needed equipment.

It is possible for up to nine users to share the resources of a single machine (word processor, Internet, spreadsheets, etc.) independently and simultaneously. By bringing together the Useful Multiplier virtualization software, the SRC hardware developed and manufactured by ThinGlobal, and the delivery provided by large system builders (Daruma, CCE, Itautec, and Positivo), the project was a massive success.

The Results

At the conclusion of the first phase of the project, there were more than **400,000** desktops installed in both urban and rural public schools across the country. By the end of 2014, that number had increased to **over 1,000,000** unique terminals. Using ThinGlobal's sharing hardware, the Brazilian Ministry of Education is saving nearly 60% in associated hardware acquisition expenses, and 80% in electricity costs, in addition to saving money on support and maintenance.

"Thanks to this project we will be able to provide information technology access to almost every single Brazilian student. But the scope of the project goes beyond that: it's only the beginning of a cycle for children, teenagers and adults that will be socially integrated from now on," says Luiz Cláudio Ferreira, President of ThinGlobal.