Despite notable achievements in the past decade, Panama's education sector has been facing several challenges. Significant disparities exist between urban and rural schools and the number of enrolled students has increased in Panama, adding pressure to the country's already limited educational infrastructure.

In many schools conditions are less than ideal: access to potable water and electricity is a concern, especially in rural areas. Electricity is available at 67% of primary schools and 84% of pre-middle and middle schools. Although the percentage of students with access to a computer is relatively high (MEDUCA – Education Ministry - distributed 183,000 laptops to students) internet access is lower (20% and 27%, respectively). Aware of this reality, a large number of improvements have been made: books, technological equipment and potable water were distributed to schools in rural environments, and a curriculum reform was introduced, contributing to the standardization of education across the country.

The inclusion of digital technologies in teaching and learning processes was also a priority. MEDUCA and Edupan have developed a project in partnership with Critical Links with the goal of improving digital resource for the educational community in Panama.

**PROJECT GOALS:**

- Contribute to the standardization of education across the country
- Improve digital literacy
- Provide quality e-Learning in challenging environments

www.critical-links.com
EDUPAN helps teachers and instructors to transform traditional pedagogical methods through the inclusion of technology, giving their students the ability to face the challenges of the 21st century, while MEDUCA has outlined their purpose to ensure an educational system of excellence, that leverages technology, improving knowledge, learning, and outcomes.

This project was implemented in schools that are located in remote zones (rural areas or coastal zones) where internet access is only possible using satellite. The long trip that needs to be made to reach those schools is a constraint to both teachers and students and it makes the implementation of technological projects in those areas very difficult. Many of those schools only have power through solar panels, making the installation of communication equipment a challenge. The C3 Micro-Cloud and its low energy consumption gave the opportunity to offer educational resources without having to change underlying infrastructures in the schools.

We spent some time with Ariel Medina from Edupan, Panama, who gave us an overview of our project with MEDUCA and how it changed people’s lives in Panama. He told us that the main benefit C3 Micro-Cloud brought to those people was the fact that it enabled the access to updated educational content, research resources and the experience of having local access to things that people only find in internet sites. “Teachers across Panama are working so hard to allow their students to have a better education. Some of them walk for hours to school, travel rural roads where cars can only go to a certain point and follow the rest of the path by horse, or even reach the school by boat. Imagine how difficult it is for those teachers to have time to prepare their classes, or find ways to motivate students.” said Ariel Medina. “Many of these Panama schools have fluctuating internet connection, while others don’t even have that level of service. The solution that those schools needed was a simple, fast platform that could be easily installed, and to provide an internet-based learning experience even without a stable, live connection to the internet. Now they have that,” he said. The optional C3 battery guarantees the operation of the equipment itself in places without power.

With C3 Micro-Cloud students and teachers have now access to digital curriculum, lessons and other resources according to their profile. They can easily connect directly to the C3’s Wi-Fi from any smart device and from the LMS, teachers can go deeper into learning features monitoring student’s progress.

This project (with Edupan and Critical Links) is helping teachers give their students access to more interactive classes with richer content/resources. It also enables students in remote or rural areas to access high-quality content and resources that might not be available otherwise.

Teachers had the opportunity to do C3 training, learning how to use the C3 Micro-Cloud to better share knowledge not only with students but also with other school colleagues.

Students can now research, create, communicate, and collaborate in ways that better prepare them for the world, the workforce, or higher education.

Together with MEDUCA and Edupan, we are allowing schools and teachers to improve the educational process. We also are leading the way to enable access to global knowledge and helping to create a better future to the Panama’s students.

500 schools were impacted by this project. Some of them can only be reached by boat, while others by walking for more than four hours to get there.