

C3 AROUND THE WORLD: COSTA RICA CASE STUDY

C3 MICRO-CLOUD IS BUILDING THE NEXT GENERATION OF LEARNING IN COSTA RICA

CONNECTING STUDENTS TO KNOWLEDGE



VALUE PROPOSITION:

- Integrated Wi-Fi, easy to use
- Local content repository with centralized management/update (C3 Cloud)
- Internet management
- Internet access gateway

PROVIDING QUALITY E-LEARNING IN CHALLENGING ENVIRONMENTS

Costa Rica has most of its population centered in San Jose, its capital. One-fourth of the total population live in poverty. For rural populations, connectivity is scarce or non-existent. Internet penetration is 41 percent lower in rural regions when compared to urban areas and there is a widening gap between the wealthiest and poorest citizens. Even when connectivity is available, speeds are slow, and no area of Costa Rica has at least 5 percent of its connections with speeds over 15 megabits per second (Mbps).

The National Telecommunications Fund (FONATEL) is part of Telecommunications Superintendence (SUTEL), the Costa Rican telecommunications regulator. FONATEL is mainly financed by mandated contributions from telecommunications operators and develops and executes a variety of programs to reduce the digital divide and universalize access to Internet connectivity in Costa Rica.

To improve education quality, an initiative called Tecno@prender was launched, aimed at the development of Costa Rican education, through the inclusion of digital technologies in teaching and learning processes. It favours the access and the use of digital technologies in the educational community and also stimulates the development of cognitive and social skills through the promotion of teaching methods innovation.

The project was developed with the aim of funding several types of technology (including C3 Micro-Cloud) for Ministerio de Educación Pública (MEP), Ministerio de Ciencia Tecnología y Telecomunicaciones (MICITT), Centros de Educación y Nutrición y de Centros Infantiles de Atención Integral (CEN-CINAI) and Caja Costarricense de Seguro Social (CCSS).

CONNECTING (ALL AGE) STUDENTS TO KNOWLEDGE

The CINDEA (Centro Integrado de Educación de Adultos) is a group of schools aimed at young people and adults, who have not finished primary or secondary education or who want some technical training to enter the workforce. They were one of the schools that received technological endowment, on November 14, 2017, thanks to FONATEL funds and through the Tecno@prender program. It included computers, interactive modules document viewers and the C3 Micro-Cloud.

The Lic. Edwin Ramírez Zúñiga, CINDEA's IT teacher, was given the task of exploring the device donated by the Directorate of Technological Resources, because it was a totally new device in their educational environment.

We had the opportunity to speak with him, and he gave us an overview of the C3 Micro-Cloud implementation and how it is changing the next generation of learning in Costa Rica.

"The C3 has made it possible for teachers to leave old textbooks behind and implement the use of a virtual textbook platform", said Lic. Edwin Ramírez Zúñiga.

He also commented that the platform offers the possibility for teachers to have new content develop from classroom interaction, and if the students miss a class they can access it later without missing out on what was done in class.

With Critical Links' support, the IT teacher was able to get more out of the C3 Micro-Cloud and customize it:

- Teachers can now keep the attendance record digitally and students can see their own attendance record
- Chat: allows an interaction between teachers, students and workgroups in real time
- Teachers can place a discussion topic in a forum and students comment on the topic
- GeoGebra: teachers can place their exercises in the common GeoGebra program and upload it to the platform; activities can be executed by the students without having to download the file
- They can now assign a static IP address so that it could be accessed from home without requiring the students to physically be in the school.

"This has been possible thanks to the unconditional help of Critical Links' support team", said Lic. Edwin Ramírez Zúñiga.

Teachers in Costa Rica conclude that, with C3 Micro-Cloud, their students are more motivated in class and their results improved progressively. All thanks to this new way of learning!

In 2017 600+ C3 Micro-Clouds units were sent to Costa Rica. Approximately 520 schools (mostly in rural environments) were provided with Internet connectivity and with the C3 Micro-Cloud. Schools report that the capabilities of the Internet have not only simplified and organised their administrative capacities, but also provided additional materials and methods that have improved the way in which knowledge is transmitted in the classroom and consequent motivation of the students.

CEN-CINAI received several C3-Micro-Clouds as a donation from FONATEL. The impact of its implementation was so positive that CEN-CINAI acquired more units directly to Critical Links.



In many schools, students learn now with micro-cloud enabled classrooms and they can use resources like YouTube and Wikipedia even if the school's internet is down. They get the chance to experience the world without leaving the classrooms and we are pleased to be part of it!