

ENABLING QUALITY EDUCATION THROUGH TECHNOLOGY IN KENYA WITH THE C3 MICRO-CLOUD

CONNECTING STUDENTS TO KNOWLEDGE



VALUE PROPOSITION:

- Local content repository for immediate access to information
- Integrated Wi-Fi for easy connectivity for any device
- Access to a wide array of cloud based educational content

C3 MICRO-CLOUDS ARE BEING USED TO REVOLUTIONIZE KENYA'S EDUCATION SECTOR

The Republic of Kenya is the 29th most populous country in the world with 50.2 million of people. The country's economy is the largest in eastern and central Africa with Nairobi (its capital and largest city) serving as a major regional commercial hub. However, according to UNESCO, in 2017, the country has an adult literacy rate under 80% overall, and further is a significant gap between male and female: the literacy rate for females is under 75%. In some regions, a large percentage of girls are not even enrolled in schools.

Recognizing education as the primary means of sustainable economic and social development, the Government of Kenya has, in recent years, implemented programs resulting in rapid expansion of the education sector. The main goal of the ministry of education is to provide best quality of education, with particular emphasis on science, innovation and technology. For that reason, new measures and initiatives were needed. Aware of the fact that technology is indeed a powerful tool that can transform education in many ways, Kenya's government has also made a remarkable progress putting in place a technology implementation strategy in schools.

The project introduces the use of technology in the classroom to ensure students can exercise their right to quality education and provide them the opportunity to develop the skills, knowledge and confidence they will need in the future. As a part of this initiative, a number of schools in Kenya have received smart devices, supported by C3 Micro-Clouds, that allow students to benefit from a 21st century education.

The C3 Micro-Cloud creates a rich learning environment that provides a local content repository and powerful e-Learning tools. Teachers and students connect via Wi-Fi to the local micro-cloud and they have access to a complete cloud-based learning environment. If content such as texts, subject media, guides, tests, and other resources are cached on the micro-cloud, they are always available regardless of 'upstream' network connectivity. It also has battery backup which means students can learn without interruption, even when power is unstable or momentarily non-existent. Updated and approved educational content which can be curated centrally by approved administrators, is available at any time through the C3 Cloud Control portal.

St. Aloysius Gonzaga Secondary School is a mixed school, located in Nairobi. The C3 Micro-Cloud has already improved education quality for its 110 students. For these students, lessons are not based on outdated textbooks anymore - books are only one of many possible resources for students now, complimented by video, podcasts, games, websites, etc.

"The C3 Micro-Cloud has been a very helpful and admirable tool here at St. Aloysius Gonzaga School, stated one teacher. The caching and high bandwidth provided by C3 Micro-Cloud have made me admire the project." He also commented that students are more engaged and better understand the content taught. "Technology fostered an increase in quality of student's thinking and writing and in the ability to solve complex problem. With e-books, videos and learning games learning has become fun and they are all very motivated".

Another teacher highlighted, "Students can learn now at their own speed, go back to lessons and get online instructions to support the learning process".

The importance of using technology in the classroom is also recognized by students - "Now I love attend to school. It is easier for me to retain information and consequently, I have better grades now and I'm excited for what the future holds", - said one student.

The access to technology, and the C3 Micro-Cloud has immensely changed the way teachers teach in Kenya. Classroom walls are no longer a barrier to a technology based future and teachers become mentors while students are taking more responsibility for their learning.

At Critical Links, we believe that is possible to encourage new and better forms of learning and reasoning.

Together, we are reshaping education for the future!

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