



Kamarandi Solar Powered Internet School (SPIS)-



Solar powered internet school-A digital classroom

The solar powered internet school funded by ChildFund aim at enhancing digital literacy skills and academic performance of 600 children and youth of Kamarandi primary and secondary school by ensuring access to information and learning materials through the internet. Kamarandi school is located in Tharaka South district of Tharaka Nithi county. The school serves children from Tharaka community

The SPIS is built on the basis of a 40 ft. shipping container fitted with

- A Smartboard –E board technology - allowing for interactive teaching
- One laptop for the teacher and 24 tablets for use by pupils/students
- Batteries in the back
- Solar panels on the roof. The Container is fully powered by Solar Panels making it ideal for locations with limited infrastructure like electricity
- Internet connection -Wi-Fi

Education & Software

- The server in each SPIS contains the complete school curriculum spanning from grade 0 to grade 12
- . The tablets are equipped with digital textbooks in all subjects including supplementary books
- This allows the school to teach any subject at a flick of a switch

- With an online curriculum there is a reduced need for textbooks. This eliminates a large expense for the community and the curriculum is easily updated wirelessly, always keeping the teachers and students up to date

- The optional E-Board technology
- Student monitoring software - allowing full visibility of each student's notebook activities

The Internet School also has a software that enables the teacher manage the students in a way that the teacher can even control what they view on their individual tablets or laptops. This

essentially gives them some form of control when teaching. Central storage of data is enabled; thus, the students can do assignments and submit them to a central location for the teacher to go through. The tablets are also loaded with digital textbooks(eBooks) in all subject from grade 3 to grade 8 and from 1 to 4.

All this is geared towards providing the students with a unique and exciting digital learning experience thus enhancing their concentration in class which will subsequently lead to improved performance.



Children being taught inside the SPIS unit



Teachers training on SPIS

KEY ACHIEVEMENT AND SUCCESS

Over the period of the last three years, the following are the achievements made from the facility: -

1. Enhancing learning through digital literacy that offers the learners a chance to interact with real-life concepts from a practical approach using the electronic devices
2. Enhancing understanding of lesson concepts since demonstrations can be done hence reducing the abstract nature of the content.

3. Making the teaching and learning outcomes more easily achievable by applying the 21st century skills that are more exploratory and learner-centered.
4. Equipping learners with computer literacy skills who hitherto had little or no knowledge and skills in digital literacy
5. Enhancing better interaction among the learners and between the learners and the teachers.
6. Boosting the students' morale and affinity for education as they feel part of the global society where various concepts are outsourced from various parts of the world and brought digitally into the classroom setting.