HOW WEBCONVERGER IS SUPPORTING KIDS IN RURAL CAMBODIA

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Webconverger has changed the way students of Sustainable Cambodia can perform research online.



– Who is Sustainable Cambodia?

Sustainable Cambodia (SC) is a nonprofit empowerment organization working with the families of rural Cambodian villages to help them achieve sustainability and self-sufficiency through a quality education, schools, water and sanitation projects, training and empowerment.

The children of rural Cambodia (with low income or social background) now have access to Government funded schools, however state school teachers often teach only half of the curriculum in class and the other half in private classes. Many students cannot afford private classes so they don't receive the quality education they need and deserve.

SC provides free education to Cambodian children to supplement state school and by offering these supplementary classes, they ensure that students receive the education they deserve. SC has 3 different schools (one in Pursat town, one in Kravanh, and one in Kandieng) and all of them have a library and a computer lab.

Enrichment in education is a fundamental part of SC's strategic plan. But this requires teachers to think of practical research exercises to motivate students to get more and more used to searching the internet to get related information and learn from different sources.

– What are SC challenges?

As a nonprofit organization, SC always seeks for funds to keep on running its programs. Lack of resources are also a challenge for the organization, as there are not enough computers and hardware to satisfy the needs of all the students in the different schools. The existing hardware cannot be replaced as often as needed, so some of it is not working or running very slow.

– How is Webconverger helping?

Webconverger plays a major role in enhancing the new ways of teaching at SC. The platform provides a clean and easy workspace which gives students the opportunity to find information in the world wide web. The browser only platform enables SC to use aging hardware to provide an easy manageable environment.



– How does it work?

As a first stage Webconverger was set up on a trail base for a pilot research machine (web kiosk) and a presentation laptop.

For the piloting purposes, the USB bootable Operation System has been used to run on a laptop with existing Microsoft Windows installation. The independent boot made it possible to set up an account with Webconverger and run an initial evaluation. At this point we tested the stability and end user friendliness of the system. With the latest Firefox version running on a debian Linux distribution the end user does not have to adapt to any new user interface, as just the browser is accessible for him/her.

For administrators an online access portal is provided which enables to change settings independently from the location of the actual kiosk. Hence the setup time via API commands the Administrator needs a basic understanding of API coding. The API library provides a good source for the different settings.

As second step we prepared an un-used older generation x86 PC to install the Webconverger instance onto the machine.

For this step we used the bootable CD of Webconverger to boot the PC. We have prepared an empty hard drive to install the debian linux system and made sure the machine is connected to the internet. After the installation we just had to sign in with the existing webconverger account and all settings made for our first machine automatically got established in this machine. That means there are a range of pre-selected taps that will be shown after booting the machine (Search engine, Translator, Encyclopedia, Navigator, email).



This pilot was carried out by SC's IT Manager who learnt how to use and install Webconverger in new machines.

These research Kiosk was installed in the campus library, which students can access outside their computer classes. Teachers received a training on how to use the research Kiosk and how they can teach their students about online research. Teachers will have to learn further how to create effective research exercises in which student have to utilize the research places at the library.

The future vision

SC sees at least two research kiosks per library for each of their schools (in total 6 kiosks). This means that at least five more machines need to be set up, installed and distributed. The vision is that teachers can empower students to use the kiosks to learn to access information from the world wide web, compare it with different sources and come up with their own conclusions to complete their homework or class assignments. We also hope that teachers can encourage students to use the kiosks for group activities so the students can exchange experiences and knowledge while conducting research online.

Challenges to overcome

With the current lack of Hardware the targeted amount of research kiosks cannot be installed and provided to the campuses of SC. Therefore, the organization is continuously looking for funding and technology donations to extend the current footprint of the research kiosks to give all SC students the chance of learning about internet research.



To learn more about Sustainable Cambodia, please visit: www.sustainablecambodia.org