World sensation: the Bible OL Pi3 App is here!

By software engineer and PhD candidate Judith Gottschalk, December 17, 2017

„Our biggest problem here in Madagascar are the almost daily blackouts and the sudden power strokes, when the energy comes back. This destroys computers, smartphones and other electric devices", says Jean de Dieu Rafalimanana, who is the Greek teacher at the Lutheran Graduate School (SALT) in Fianarantsoa, Madagascar.

We now have the optimal solution!

Bible OL Pi3 is a Raspberry Pi 3, a credit card sized mini-computer, which can be used as a small server and access point. It hosts Bible Online Learner developed over a decade and accessible through the internet. The new Bible OL Pi3 offers cheap, yet fast server support, with or without internet access, and it can support a dozen students at the same time.

In Madagascar, Judith Gottschalk and Nicolai Winther-Nielsen in 2015 worked for the Global Learning Initiative and Danmission to set up an independent e-learning computer network for the graduate school and at a remote seminary in Atsiminovoko in the rural countryside on the island of Madagascar together. In 2017 Judith Gottschalk and Karsten Lund from Danmission went on an evaluation trip and learned a lot about the limitations of using laptop servers in these hard to reach areas on the African continent. What they learned was:

> To support theologians in their daily work as exegetes and as language learners of Koine Greek and Biblical Hebrew, a special approach is needed. Users with little or no IT experience need a very easy login mechanism based on pictures or Google and Facebook Login and the system must work for people who are no trained system administrators. Also this system must overcome blackouts and the resulting power strokes.

This goal is now reached with Bible OL Pi3. The server runs an operating system on a micro-SD card, which is flashed in Europe and works as a mobile access point. It supports an independent computer network by just connecting the Raspberry Pi 3 to solar power or to an ordinary power bank which can be loaded with solar power. This server solution offers a mobile seminary for theological education and costs less than 100 Euro. It can serve a class of approx. 12 students at the same time and is very robust for African settings.

The system offers a learner-friendly front-end persuasive technology through little boxes of the size of a credit card with a single slot to connect them with any kind of power supply. It works with the open source PHP-framework CodeIgniter and the JavaScript framework TypeScript. Working offline, once accessed via the browser of a smartphone, it can work outside the institution and without internet connection. The Bible OL Pi3 App has a used-friendly login-screen which is designed for the needs of African students with picture and- and emoji-based login. We hope to start new pilot projects soon!

For more information, see http://global-learning.org/ and http://bh.3bmoodle.dk/.

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