Mauritania: Overview

Cornell OLPC proposes to introduce laptop computing to Mauritania with the goal of improving childrens' literacy. We plan to partner with the Peace Corps and the Girls Mentoring Center (GMC) in the rural "city" of Tidjikja.

The Islamic Republic of Mauritania, located north of Senegal, borders the Sahara. Mauritania is a crossroads between Black and Arabic Africa, sub Saharan and Northern Africa, with an unusual culture that blends elements of both regions.

Mauritania's Unique Literacy Problem

In Mauritania, school subjects are taught in Arabic or French, rather than the local language. If a student does not have a firm grasp of either language, their performance suffers. To compound the problem, Arabic presents a diglossic situation as described in Mohamed Maamouri's paper. *Fusha*, Modern Standard Arabic, is the formal written and spoken language, and although it shares roots with the local dialect, *Hassaniya*, there are many differences which can be confusing for students. This impedes language instruction because children cannot connect the words on the page to the words they are speaking. The overall literacy rate in Mauritania is only **51.2%**, compared to **99%** in developed countries.

How the XO Laptops Can Help

The *Cornell OLPC* team proposes to emphasize use of the <u>Speak</u> program on the XO as a tool to solidify students' language skills in Arabic, English and French. Pen-pal programs with speakers in America will be initiated by *Cornell OLPC*, which will expose Mauritanian students to different ideas and strengthen their language skills. (See the section below on the instructional program.)

NGO Support

Cornell OLPC will partner with Peace Corps Volunteers (PCVs) working in Mauritania. PCVs have been serving communities in Mauritania since 1967. Their mastery of local languages, cultural training, and community based service will provide access and presence within the country. President Clinton's Education for Development and Democracy Initiative of 2000 allowed Peace Corps to create Girls' Mentoring Centers (GMCs) to support girls' education and empowerment. The city of Tidjikja, in the Tagant region, is one of the poorer, more isolated areas of Mauritania. The Tidjikja GMC is the site of the proposed Cornell OLPC project deployment. Every student at the GMC will be given their own laptop.

Cornell OLPC Instructional Program

Research suggests that student learning outside the classroom when integrated with computer technology surpasses that of the traditional classroom. As seen in the U.S., teachers struggle to keep pace with student learning in digital environments (NMC 2009). Students become active learners and knowledge producers when they are able to "own" their learning environment (Jenkins 2007). Informal education is a perfect space for literacy development that relies on laptop computers to promote student engagement.

A series of inquiry-based learning projects will introduce students to their laptops and help instructors map learning trajectories and objectives. For example, the team is interested in

partnering with <u>ELP, Inc</u>, creators of *TUNEin To Reading*, to support their development of a "sing to read" literacy approach to learning Arabic. We hope to support students to record their own voices in song and transcribe the written words. Sharing songs and transcriptions across <u>Mauritanian OLPC projects</u> so that students are contributing to the inquiry projects of other teams is an ideal goal.

In nomadic Tidjikja, citizens return to outlying villages or vacation in the capital during summer. However, Tidjikjan parents are committed to their children's education and will stay if offered this opportunity, according to PCVs. The Tidjikja GMC will be open during summer 2009 to deploy the *Cornell OLPC* project, and recruiting 100 elementary school students for this program is a reasonable expectation.

Deployment

The *Cornell OLPC* team will load <u>Sugar-OpenMSX</u> onto each computer to utilize the Arabic educational programs developed for the platform. All team members are technically competent, proficient in programming, with majors in computing-related fields.

Laptops will be shipped to Nouakchott, the capital, and received by the Peace Corps. *Cornell OLPC* will transport the computers to Tidjikja by hired taxi. The laptops will be locked in the Tidjikja GMC until the program launch.

Our budget is here.

Sustainability

22 GMCs exist across Mauritania. Computer labs have been in select Mauritanian GMCs since 2005. These labs are maintained by PCVs. A full-time PCV is dedicated to the GMC in Tidjikja, the site of the proposed *Cornell OLPC* deployment. The Peace Corps and the Tidjikja GMC provide the infrastructure for long term sustainability. *Cornell OLPC* will reach out to the Cornell community and beyond to <u>fundraise</u> to further assist the deployment.