

**A Computer Lab in the 'Bush'
Linking Up a Transitional Tanzanian Community to Bridge the Digital Divide**

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Big picture/framework

As an organization, Terrawatu has as its mission to build bridges between indigenous and modern worlds. We are currently working with transitional Maasai communities in northern Tanzania and with communities in the West (Seattle, Denmark, San Francisco) to share resources and strengthen both sides of the bridge.

One of the projects that operationalizes this concept is our "Linking Lands" project that connects some Seattle Public Schools in the United States with some Arumeru District Schools in Tanzania. The Tanzanian side of the project includes three main components: 1) send 6 Tanzanian primary school teachers to Seattle for two weeks of computer training, learning about the Pacific Northwest, and homestays with American teachers (March 2003), followed by hosting the same American partner teachers in Arusha, Tanzania for two weeks of learning about Tanzania, Maasai and Chagga culture, computer training, and homestays in the villages (August 2003); 2) establishment of a 32 desktop internet-capable computer lab in Siwandeti Village, Arumeru District, Tanzania to allow teachers and students to communicate with their counterparts in Seattle; 3) development of curriculum units on "USA/Pacific Northwest" facilitated by computer technology to be shared with other Tanzanian school teachers (end of 2003).

The original grant proposal had the following as the main goals of the project:

- To give primary school students (grades 4-8) in Seattle and Arusha first-hand experience with another culture using technology-mediated communication in order to build a deeper understanding of culture;
- To give teachers in Seattle and Arusha first-hand experience in another culture in order to develop content knowledge and build a deeper understanding of culture;
- To create curriculum that enriches current resources and create collaborative tele-curricula between two regions to build upon school-to-school partnerships;
- To establish a web-based communication model that utilizes relevant software for classroom-to-classroom, student-to-student exchange.

Partners: Terrawatu (Tanzania/Seattle), World Affairs Council (Seattle), Digital Partners (Seattle), WITAG (Denmark)

Initial Funds: EDDI (Education for Development and Democracy Initiative) within USAID, DANIDA (refurbished computers and shipping).

The leadership and membership of Terrawatu view "Linking Lands" as a pilot project to see if/how the computer lab, the teacher exchanges, and the curricula activities serve to improve education in the community in Tanzania (initiate computer literacy, provide access to new useful information, cross-cultural learning), while simultaneously strengthening and enhancing the indigenous knowledge system (re-evaluating the strengths and weaknesses of Maasai and Chagga traditional lifestyles, connecting to other indigenous communities around the globe).

Challenges

- *Initial challenges during lab set-up:* finding available space to house lab, extending electricity poles to school, struggles with customs

- officials at port of Dar es Salaam when computers arrived days before the war in Iraq.
- *Sustainability of lab*: finding good security (*askari*-watchman), paying electricity bills, computer repair, ISP fees.
 - *Introduction of new technology into community*: envy of school district who have only one computer at district office, village elders needed education about what computers are and what they can do (without undermining elders' influence in community).
 - *Communication with counterparts in Seattle/ultimate project goal*: computer education not yet part of national curriculum in Tanzania, language barrier, skill gap, lack of clarity about ultimate goal as Tanzanian teachers have almost no control over what they teach and how they teach it.

Terrawatu (NGO) is taking responsibility for capacity-training lab teachers, continued education of teachers beyond project scope, and negotiating with district education office to allow teachers and students to use lab during school hours. We have also developed a computer school program to raise funds for electricity bills, lab teacher salaries, watchman, paper, etc. after USAID project cycle ends. A computer repair room is currently being renovated nearby the lab and will be used as a teaching-center.

Lab as a tool/Development of Mixed-Use Tele-center

To be honest, this project happened very quickly (in academic-time). Terrawatu was unable to spend a great deal of effort in preparing the community and creating a plan that would bring stakeholders into the team at an early stage. Yet, the way that everything worked out was probably for the best as Siwandeti Village (as so many other villages in the Third World) has been promised things by NGOs for years, yet nothing ever seemed to

come to fruition. It was good to wait until funds were available before opening up the conversation.

Within five months of project launch, 6 Tanzanian primary school teachers (who had previously never left northern Tanzania) had returned from a two-week visit to Seattle, Washington. The largest internet-capable computer lab in a government school community in Tanzania (and most likely, all of East Africa) was up and running. Now, what did this all mean?

We are now two-thirds into the project and looking forward to the US teacher visit. This will help with answering some questions about what computers can be used for. We have some donated educational software on the topics of learning to read basic English and HIV prevention and access to an on-line Swahili/English dictionary.

Terrawatu understands that this lab is a tool. And, we are developing ways to connect it to other of our NGO initiatives. For example, a year ago, Terrawatu initiated organic school gardens at the same schools served by the lab. Classes will now be able to do on-line research on growing techniques, nutritional information, and recipes for the vegetables and medicines they are growing. All of which are important in these traditionally pastoral communities. Also, our traditional medicine clinic is located nearby the lab. Staff and patients will be able to do on-line healthcare research to enhance their indigenous healing knowledge system. We are also beginning conversations about how to use the computer center in micro-enterprise development.

Evaluation

The Worlds Affairs Council and Terrawatu will be evaluating how the teacher exchange and curriculum design process has affected the teaching of both

Tanzanian and American teachers. Terrawatu is working with the Arumeru District education officer to establish a “pre-computer lab” and “post-computer lab” measure and effect (e.g. national exam test scores, computer literacy).