

Technology and Language: Learning to Say Mouse in K'iche'



(IDRC Photo: Yves Beaulieu)

2005-08



by Louise Guénette and Rowena Beamish

When children as young as kindergarten sit down for their first experience with computers using software in their native Mayan language, K'iche', the lessons learned go far beyond mastering basic computer skills. Students are learning that their indigenous language and culture are a vital part of their society.

It wasn't always so. Marleny Tzicap, a teacher and linguist working with the Guatemalan nongovernmental organization (NGO) Enlace Quiché, describes how attitudes have changed regarding the use of Guatemala's 22 native languages.

"Our father had many difficult experiences when he was growing up and only spoke K'iche'. People discriminated against him and treated him as though he was stupid. He did not want his children to experience the same thing, so he and my mother only spoke to us in Spanish," she recalls.

Growing up in Momostenango, a small town in western Guatemala, Tzicap was exposed to K'iche' in the homes of her neighbours and that of her grandfather, who refused to speak Spanish in his home.

The conflicts over language and cultural identity that Tzicap experienced were mirrored in homes throughout Guatemala, perpetuated by the civil war and a school system that, until the late 1990s, actively discouraged the use of Indigenous languages in the classroom. (See box, "[Bilingual, intercultural education in Guatemala](#)")

"As a person, you faced the dilemma between what is spoken at home but is wrong at school," says Tzicap. The result was a culture, language, and people held in low esteem.

Changing attitudes

Tzicap became a teacher and her aptitude for grammar won her a place in a two-year course on Mayan linguistics. She now works for Enlace Quiché, an NGO that pioneered the use of information communication technologies (ICTs) to strengthen the training of intercultural, bilingual educators in Guatemala.

Evolving from project to organizational status, Enlace Quiché is part of a nascent, worldwide movement that harnesses the potential of ICTs to preserve and revitalize Indigenous languages and cultures while providing quality computer and Internet training for rural Indigenous communities. Enlace Quiché shows the potential ICTs hold as a tool for improving the quality of education and of life in rural Guatemala, while revitalizing the Mayan language and culture. It has made education technology an important element in the country's reconciliation process.

The department of Quiché, where Enlace Quiché is based, was one of the most affected regions during the civil war and people are still recovering from the psychological and socioeconomic scars left by the "scorched earth campaign" of murder and torture.

Building a virtual community

The Institute for Connectivity in the Americas (ICA) [[see link below](#)] is supporting Enlace Quiché's efforts to develop training materials for a variety of courses that combine ICT-skills building with other practical, real-life applications to meet the needs of rural, Indigenous populations. The ICA, housed at the International Development Research Centre (IDRC), is a forum for hemispheric innovation to strengthen democracy, create prosperity, and help realize the region's human potential.

Enlace Quiché will develop an official ICT vocabulary in K'iche', making it available online, in print, and through interactive learning games; compile an online resource bank of existing resources for ICT training centers; design a series of courses that combines ICT- skills building with practical skills; and share the project's resources with other Indigenous organizations in Guatemala and the region.

Enlace Quiché runs 28 bilingual and intercultural education technology centres known as CETEBIs (Centros de tecnología educativa bilingüe intercultural), accessible to 6,000 students in towns and mountain villages in the eastern part of Guatemala. Nine of the satellite-linked centres are located in teacher-training schools, helping future educators create their own resource materials in K'iche'.

Celso Chacón, Guatemala's deputy minister responsible for bilingual and intercultural education, is interested in the successes of Enlace Quiché's interactive methodology. "For me educational technology means modifying methods, improving the quality of learning of the students. It is not only teaching computer skills," he says.

Through its programs and CETEBIs, Enlace Quiché has built a bilingual virtual learning community for Mayan language teachers, community members, and partners. "We want people to be proud, to identify with their community," says Tzicap. The NGO has a library of some 15 resource CDs and in 2003 launched a bilingual web portal (<http://www.ebiguatemala.org/>) to enhance classroom teaching and learning.

K'iche' is also making the jump to film. The NGO, and Tzicap in particular, provided linguistic and cultural advice to a Costa Rican film company, which is producing an animated film based on the

Popul Vuh, the Mayan story of creation. Many of Enlace Quiché's staff provided the K'iche' voices.

Enlace Quiché has shown that digital technology and Internet connections offer efficient and cost-effective ways to develop culturally relevant materials in a number of languages while sharing expertise. It is opening the doors to a world of information and technology by providing appropriate technology that preserves and revitalizes Indigenous cultures and communities.

For more information:

Marleny Tzicap, Enlace Quiché, 5a. Calle 3-42, Zona 5, Santa Cruz del Quiché, El Quiché, Guatemala; Phone: (+502) 7550810 / 7554801, Email: info@enlacequiche.org.gt
Luis Barnola, Senior Program Specialist, Institute for Connectivity in the Americas, 250 Albert Street, PO Box 8500, Ottawa, Ontario, Canada, K1G 3H9.

The Institute for Connectivity in the Americas

The [Institute for Connectivity in the Americas](#) (ICA) emerged from the 2001 Summit of the Americas held in Quebec City in 2001. It is a hemispheric organization that promotes the implementation of innovative uses of information and communication technologies (ICTs) for development. The Institute seeks to facilitate the development of domestic and regional connectivity strategies by adapting and implementing proven models, and promoting the exchange of information and expertise. ICA's work is based on the support of innovative ideas that focus on the use of ICTs to solve traditional problems, and that offer practical solutions to overcome barriers that have hindered the socioeconomic development of the region. The Institute is incubated at the International Development Research Centre (IDRC).

Bilingual, intercultural education in Guatemala

Enlace Quiché's work is set to play a key role in the government's efforts to place Mayan languages front and centre in the formal education of Guatemala's Indigenous people. The peace agreements of 1996 established the right of all Guatemalans to receive an education in their native language and appropriate to their culture. While the Bilingual and Intercultural Education Program was adopted in 1997, the Ministry of Education has a limited budget to accomplish this daunting task. Implementation is gradual, as bilingualism is not the simple case of educating in two official languages but Spanish and one of 22 Mayan languages spoken by about 30% of a population of 11 million. According to Celso Chacón, deputy minister responsible for bilingual and intercultural education, only 23% of the current 1 million Indigenous school children are registered under the program, which only applies to eight of the 22 linguistic groups so far.

The government's Future Schools Initiative involves getting computers and broadband Internet connection to at least 500 of Guatemala's 17,000 schools by 2007.