



TIS developed an interactive, multi-lingual, game-based solution for the UNICEF-administered Voices of Youth Web site. Through a 'learning by doing' approach, it introduced decision-making processes around WES at the home, school, and community levels.

Multi-lingual, game-based e-learning solution to improve environmental awareness

Game-based learning program for UNICEF, aimed at spreading environmental awareness globally amongst the youth. Delivered in multiple languages over the Web and on CD-ROMs.

Voices of Youth (VoY) is a unique Web site administered by UNICEF that provides a global platform for the youth to explore, discuss, and act on issues that affect them. This initiative recognizes the invaluable role that they can play as "change agents" and "action agents" of social, economic, and environmental improvement in their communities around the world.

THE NEED FOR E-LEARNING

UNICEF wanted to develop an interactive online game as well as a CD-ROM version to help youngsters, especially girls and children in developing countries, explore issues related to Water, Environment, and Sanitation (WES) at the home, school, and community levels in an engaging, visually exciting, and thought-provoking manner.

HOW OUR SOLUTION HELPED

Tata Interactive Systems (TIS) developed an interactive CD-ROM and Web-based program that focused on a "learning by doing" approach, utilizing the educational potential and participatory nature of technology. This game-based approach introduced decision-making processes around WES at the home, school and community levels.

As the target population was the youth, particularly girls in the age group of 13–19 years in developing countries, the module necessarily catered for both individual players and teams or groups of players.

The program stressed on the following features:

Content appropriateness

The TIS program was gender-sensitive, youth-friendly and engaging—with a game-based approach appropriate for a young global audience. The content emphasized critical thinking and analytical skills, by placing the user in control of their learning experience. The game, split at multiple levels, offered decision-making opportunities at each juncture to facilitate critical thinking and community leadership.

Visual relevance

The interface has been designed as a camera, to enhance the role-play of the learner as a participant in the various adventures. Within the



on-screen ‘camera’ the realistic rural African setting with life-like illustrations were created. The application was built using Flash to enable rich and exciting animation and design options. Vector-based characters, developed in Flash, were functional even on low bandwidths, while animations were limited to simple lip movements, blinks, hand gestures, and movement of interface elements, e.g., voice bubbles.

Global appeal

The application took into consideration the variable levels of education, literacy, and knowledge of the global audience; and was delivered in multiple languages—English, French, and Spanish. The visual style was universal in appeal.

Technological innovation

The multi-lingual content was managed through XML templates, to allow for easy conversion and to incorporate other languages in the future. Since the product was designed to be localizable in different languages, all the text was dynamic. The technical solution ensured that the end-user machine specifications and plug-in requirements were standard, without entailing extra investment of money or effort. The solution also allowed for easy integration of audio files and synchronization of sound with multi-lingual text content. Other features included Shared Components to minimize file size, PHP server script-based user tracking (for the online version) using cookies (shared objects), and Bookmarking.

Interactivity

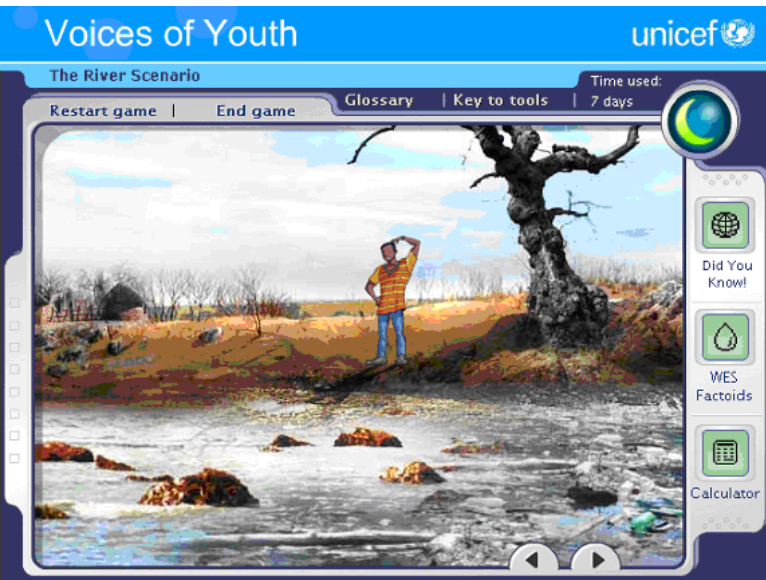
The program avoided ‘next/back’ interactivity in favor of a more involved, drill-down approach where the learner interacted with the characters more closely by clicking on the conversation to explore a thread. The number of decision options was not restricted to just two, just as there are few ‘Yes/No’ situations in real life itself. The user navigated the application through an interactive visual and animated interface, with clickable images that provided information or acted as decision-making tools that impacted the game.

TECHNOLOGY USED

The application was created using shared components technology of Flash MX.

SOME SAMPLE SCREENSHOTS

The screenshots offer a brief glimpse of the game-based learning program developed for UNICEF. To experience some of our products at work, you may view our demos by registering online at www.tatainteractive.com.



The game-based approach with realistic illustrations and interactive icons enhanced learner participation.



The program was targeted at global youth, and delivered in multiple languages.



It created greater awareness of environmental issues and, at the same time, put the fun back in learning.

