EDC develops groundbreaking education technology

When technology is paired with proven education methods to increase quality and the numbers of youth reached, amazing things can happen. "Shagodoon (Somali for 'Job Seekers'), a project funded by USAID and implemented by Education Development Center, has developed three groundbreaking new products to reach youth using mobile phones. These products use SMS (Short Messaging Service, or texting) and touch-tone navigation to provide youth with the information and interaction they need to identify opportunities and reach their goals.

1. InfoMatch

"Shagodoon InfoMatch is an SMS and Web-based application that links people with a variety of opportunities. Employers post job and internship opportunities on InfoMatch. Via SMS, Shagodoon youth can create and save a text mini-CV that contains their skill sets and contact information, search these opportunities using a variety of parameters (location, specialty, etc), and contact employers to pursue available positions. Employers can search mini-CVs (and web-uploaded complete CVs) for youth who are qualified and available for work.

InfoMatch is not limited to employers and job seekers; youth are linked to youth-serving organizations in their area, and can find out about training opportunities and other livelihood-enhancing activities to participate in. In short, InfoMatch enables Somali youth to find opportunities wherever they have a cell signal.

2. InfoMatch Voice

The InfoMatch SMS system requires a minimum literacy level to navigate menus, upload information, and read search results. A new feature is being developed to allow low literacy youth participants to use keypad numbers only to gain access to InfoMatch. How it works: Youth dial a special 3-digit short code. High quality voice prompts guide the youth through menu options and they use keypad numbers indicate their touch-tone responses. The youth will register, create mini-CVs and request a job match search in this manner.

The project will provide very poor youth with cell phones and telecom company-provided SIM cards. Charges for InfoMatch-related airtime are reversed, allowing youth to make the calls for free.

3. IAI Cellular Interactivity

"Shagodoon provides two Interactive Audio Instruction (IAI) series, one each on Financial Literacy and Entrepreneurship, to selected youth.
training partners. Each series is preloaded onto a micro-SD memory card and played for learner listening groups on an MP3-enabled cell phone with an associated speaker dock. Students listen to 20-minute episodes on Financial Literacy and Entrepreneurship topics, much as they would if they were listening to Interactive Radio Instruction (IRI) programs on a radio.

Somali education presents unique challenges for monitoring. EDC wanted to preserve high levels of student interaction and increase real time accurate monitoring. To these ends, an interactive cellular audio component was designed to follow each day’s MP3 program. After the MP3 audio program is delivered, the group facilitator calls into the EDC cellular server using a predetermined shortcode number. The familiar drama characters are again amplified for the listening group, this time streaming from the server. The characters ask students to answer questions about the day’s lesson. Facilitators help the students decide on an answer to each question as a group, and enter the answer using the phone’s touch-tone keypad. Students immediately learn if their response was right or wrong, and receive encouragement and additional instruction as appropriate.

Facilitators also input attendance data during each cellular session.

EDC tracks all inputs in a central, web-accessible database-- this provides real-time information about partner participation and learner progress, even in the hardest to reach areas. Phones are distributed with SIM cards that are pre-configured to provide exclusive, free access to cellular content.

EDC’s work on cellular interactivity is paving the way for expansion in this area. The Somali cellular server as installed and configured is ready for additional uses, such as a one student-one call cellular learning center, collection of assessment data and polling.

**An Integrated Solution**

Shaqodoon staff conducted extensive testing of audio delivery devices and identified the Nokia 5310 cell phone, which is specifically designed for audio playback, and the JBL 5310 speaker dock. Streamlined without compromising audio quality, this system is capable of supporting a listening group of 30 students. It is likely that the interactive audio programs are the clearest quality audio Somali youth have ever heard.

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**IAI**

Interactive Audio Instruction (IAI) is like Interactive Radio Instruction (IRI), except that it reaches listeners via MP3 or other digital devices with preloaded content rather than radio. Unlike radio, IAI allows class facilitators to pause and replay lessons; IAI devices also provide uniform audio clarity regardless of how close a classroom is to a transmitter. IAI devices also allow for listening groups in areas where radio stations are given broadcasting restrictions and are subject to being shut down.