Mobile Education Driven by Smart Ideas

The simple text message — the chatting channel of choice among young people around the world — could be ideal for taking a math test.

Latin American education leaders who gathered at a TechCamp workshop in Montevideo, Uruguay, late in 2011 learned this and much more from technology experts who demonstrated ways they could use cellphones to extend education to almost anywhere.

TechCamp is part of Civil Society 2.0, an initiative aimed at helping communities around the world gain access to practical and affordable technology to solve local problems. The needs of the communities determine the types of technology presented.

Simple but Substantial

Because mobile access far exceeds Internet access in many developing countries, governments, nongovernmental organizations and communities are eager for effective ways to use cellphones to reach underserved areas on a large scale.

“You have this enormous communications platform, but the question is, what do you do with it, and how is it that people are interpreting it,” Sean McDonald, operations director for FrontlineSMS, said. Students, many of whom already use the technology, provide a promising opportunity for determining what works.

“After you’ve taught something, how do you know after the student has gone back to their environment that the student has absorbed the information and it is making an impact?” he asked. “You can create questions and quizzes. The system will automatically grade the quizzes, and then map them to the contact, which you are able to track over time.”

FrontlineSMS is an open-source group messaging software platform that has multiple applications. In Montevideo, McDonald presented a version of the software called FrontlineSMS: Learn...
that is tailored for use in remote or
distributed education settings.

Using an SMS technology plat-
form, school administrators can
manage communications, auto-
mate processes, reduce paper pro-
cessing and easily update informa-
tion to track trends.

Outside the learning environment,
McDonald said, administrators
can use the software to manage
inventory of geographically dis-
persed schools, communicate with
parents, schedule conference calls
and measure the effectiveness
of outreach efforts, among many
other possibilities.

Another presenter, Eric Gundersen,
walked the participants through a
process of using cellphones to gather
education data that could be visu-
ally displayed on maps to provide
a greater understanding of trends
and patterns over time. Gundersen
represented Development Seed,
a creative data visualization and
mapping organization.

**Smartphones Not Required**

Text messaging, also known as SMS
for “short messaging service,” is a
feature on nearly every cellphone
ever produced, creating a practical
platform for what McDonald called
“locally appropriate technologies”
that work within the constraints of
the local environment.

The relative privacy of texting also
increases the chance that those
who might not otherwise partici-
pate in a process — such as voting
in a poll asking students what they
want to study — will join.

It is important to “think about
the local appropriateness of the
interactions you want to have,”
McDonald said. Students who are
not comfortable interacting with
the teacher via SMS may need
some incentive to participate. It
could be as simple as the teacher
letting the students know he or she
has received their votes and appre-
ciates their input.

Because SMS is not free, “the ways
in which you adopt and use the
technology have to be attuned to
making things easier or in some
way less expensive for the people
who are adopting it.”

McDonald said one appropriate
use of SMS is English language
training, such as a program being
offered in Tunisia. Because this
type of training involves sending
discrete pieces of information, “it
lends itself to short form commu-
nication,” he said. “If you’re trying
to teach philosophy via SMS, it’s a
little more difficult exchange.”