



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.

Top: A North High School student uses a cellphone for a pretest in Eldridge, Iowa. © AP Images

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

North High School sophomores Jesse Moreland, left, and Hannah Lindaman use their cellphones for a pretest in Eldridge, Iowa. The science class taught by Jason Guerin and Mark Anderson at the Eldridge, Iowa, school has begun to use the phones for practice tests. Guerin and Anderson project multiple-choice questions onto a whiteboard. Using a website called PollEverywhere.com, students text their choice for an answer to the site. © AP Images

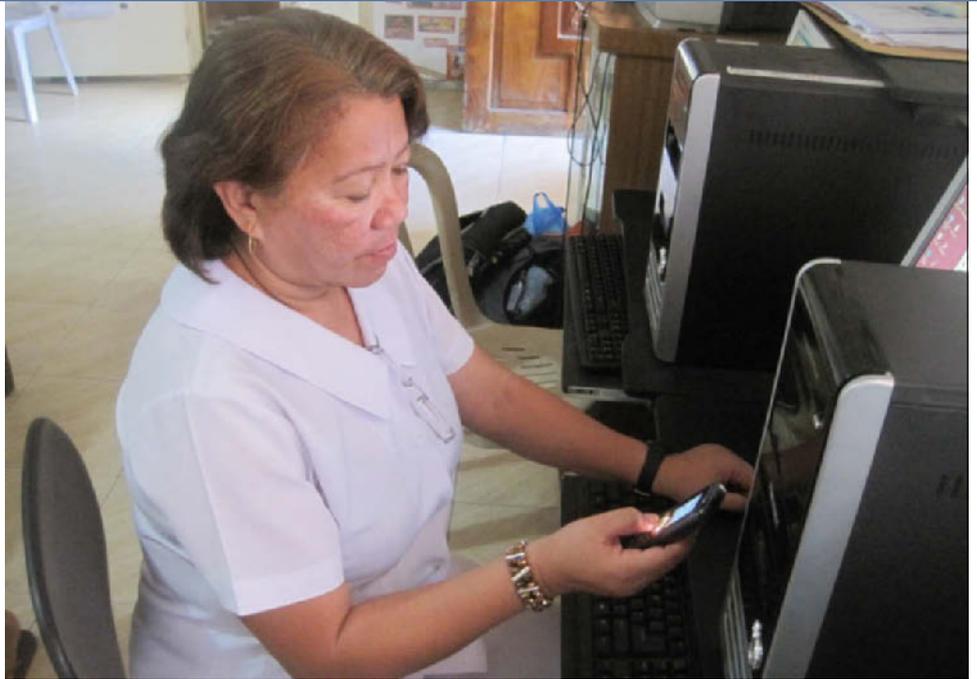


that is tailored for use in remote or distributed education settings.

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Outside the learning environment, McDonald said, administrators can use the software to manage inventory of geographically dispersed 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 visually displayed on maps to provide



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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 participate 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 appreciates 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 communication,” he said. “If you’re trying to teach philosophy via SMS, it’s a little more difficult exchange.”

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