

INSIDE TECHNOLOGY

\$50 computers spark learning

Hand-held device developed by a Chicago-based non-profit teaches students reading and math and lets teachers program tools, track their progress



Cristian Washington (left) and Ana Jimenez play on their TeacherMates. Grants from the JPMorgan Chase Foundation and the Chicago Community Trust will put the hand-held computers into classrooms in 500 Chicago public elementary schools over the next two years. (Tribune photo by Alex Garcia / April 14, 2008)

By Jon Van

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A Chicago-based non-profit organization has found a way to put a computer into the hands of Chicago's youngest learners for just \$50.

"Everything we did was driven by need," said Seth Weinberger, executive director of Innovations for Learning Inc., which was formed in 1993 to improve early education in inner-city public schools.

"We started with the need to provide individualized instruction in reading and math," he said. "To satisfy that need we came up with software. Then we needed to get to the children. That's what drove us to this device."

The result is a hand-held computer about the size of an iPod that comes with a screen, earphones and eight control buttons. Games invite children to read words on the screen into a built-in microphone. They can listen as the computer reads the same simple sentence and plays back their own voice reading the sentence. Other games require use of spelling and math skills to win.

Called Teachermate, the compact mobile learning tool resembles a hand-held game, a device familiar to many young children.

"Children learn every day using hand-held games, but what they learn—how to avoid a monster—has no value," he said. "Here what they learn has value."

Grants from the JPMorgan Chase Foundation and the Chicago Community Trust will put the hand-held computers into classrooms in 500 Chicago public elementary schools over the next two years. Pilot programs using the devices are starting in New York City, Detroit, New Orleans, San Antonio, Phoenix and Denver.

"Educational software in the primary grades is nearly defunct," Weinberger said.

"Inner-city classrooms have hand-me-down computers that are usually old, mismatched and broken. Teachers don't use them for basic education."

That a non-profit outfit with just seven staffers could launch a new product is an example of globalization at work, said Weinberger. Much of the programming was done in India, graphics in Argentina and the hardware was designed and manufactured in China.

"There's plenty of great educational software written for laptops, but not enough hardware," said Weinberger. "There's lots of game hardware, but almost no educational software. We wanted to bridge that gap. So after 15 years strictly in software, we got into hardware."

Teachermate can be programmed by a teacher using a personal computer. One connection from the PC to a storage case that holds all the hand-held devices enables the teacher to reprogram them at once and recharge their batteries. It also enables the teacher to download information about the progress each student makes during his or her time playing educational games.

"This comes from a need as well," said Weinberger. "Teachermate only works for the kids if it's simple enough for the teacher too."