

## No Excuses: The Power of Knowledge

by Jonathon Levy

Every once in awhile, one of my colleagues would complain that it is hard to use technology for certain purposes due to lack of bandwidth. In response, I would tell the story of the time that Cornell University needed to provide knowledge for the tiny village of El Limon in the mountains of the Dominican Republic. A project that was designed to help the people of that village become self-sufficient ran out of funding and the faculty

had to leave, but they wanted to continue the project via distance learning. The problem in that case wasn't lack of bandwidth; the problem was that El Limon had no electricity at all. But they did have a mountain stream. Using a small hydroelectric generator, a computer, and a low-power satellite uplink, the people of El Limon were connected to faculty at Cornell's upstate New York campus and the project continued.

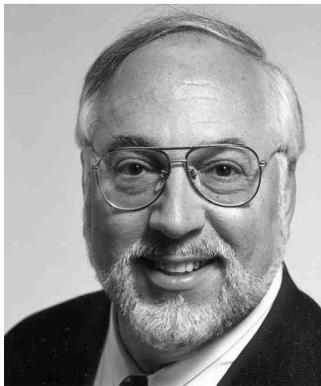
But I don't tell that story any more; I have a better one since I've been to South Africa, where the students of Myeka High School outside Durban quietly made history one day not long ago. The students, highly motivated to end generations of poverty under apartheid, desperately needed computers. Local business donated machines, but there was no electricity in the town, nor was there a river nearby. Solar power was too expensive. All they had was themselves and their creativity. A group of students and teachers conceived of a unique solution: they rerouted the school's 16 toilets to a large tank that generates methane gas. The gas supplies fuel to a generator that powers the school's 20 computers. Their computer lab operates for five hours every day. They also

use the resultant clean compost in the school's vegetable patch, where spinach and carrots are cultivated to help feed scores of AIDS orphans at the school.

No excuses, no whining. Just solutions. For those who comprehend the liberating power of knowledge, lack of infrastructure is no match for a powerful driving desire and a little creativity.

Closer to home, a new corporate learning idea is beginning to challenge the pedagogical underpinnings of the traditional academic model. A growing chorus of visionaries in our field touts the merits of just-in-time personalized performance-support knowledge systems that allow the learner to drive the process. While the vision of integrated enterprise knowledge systems seems to be gaining new adherents daily, there is no obvious driving force in the U.S. or Europe to feed the fires of this promising next step. Just as a more sustainable and predictable model comes into view, it may turn out that less-developed nations take the lead in finding the high ground.

Why? Interestingly, while much of the thinking around just-in-time learning is aimed at knowledge workers in industrialized nations, such integrated knowledge systems



Jonathon David Levy, Senior Learning Strategist, Monitor Company Group LP, 2 Canal Park, Cambridge, MA 02141. Telephone: (617) 252-2201. E-mail: [Jonathon\\_Levy@Monitor.com](mailto:Jonathon_Levy@Monitor.com) Web: [www.jonathonlevy.com](http://www.jonathonlevy.com)

have profound application in less-developed nations as well. There, the need is great and the traditional academic infrastructure cannot move quickly enough to keep up with the demand. An entirely new “disruptive model” of learning—just-in-time learning—can help those nations leapfrog past the industrialized nations, where corporations have huge sunk costs in older technologies that mitigate against imaginative futuristic solutions. China did just that with cell phones, leaping past the wired infrastructure of the west, directly to mobile telecommunications.

Government, education, and

business can work together in this new model to create national taxonomies—South Africa has already begun this process—and thereby national standards for learning objects and transferable competency maps. National knowledge infrastructures can provide each country with a measure of competitive advantage. Such can be the case in China, in South Africa, and perhaps in Latin America as well. But probably not in the U.S.

When Gutenberg invented the printing press, the illustrations were still done by hand, creating an artificial bottleneck that gated the *innovation* within the invention. It took

only a change in thinking for the illustrations to also be printed and the innovation allowed to soar, resulting in massive social transformation.

That may be where we are right now. Who will lead us past our own mental barriers, our fixation on courses and the academic model? The big technology companies? Content vendors? Corporate universities? Or third world nations? As was the case in El Limon and Myeka High, it may simply come down to whoever has the more powerful driving desire.