How Khan Academy Is Changing the Rules of Education

Clive Thomson - 07.15.11

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"THIS," SAYS MATTHEW Carpenter, "is my favorite exercise." I peer over his shoulder at his laptop screen to see the math problem the fifth grader is pondering. It's an inverse trigonometric function: cos-1(1) = ?

Carpenter, a serious-faced 10-year-old wearing a gray T-shirt and an impressive black digital watch, pauses for a second, fidgets, then clicks on "0 degrees." Presto: The computer tells him that he's correct. The software then generates another problem, followed by another, and yet another, until he's nailed 10 in a row in just a few minutes. All told, he's done an insane 642 inverse trig problems. "It took a while for me to get it," he admits sheepishly.

As his teacher, Kami Thordarson, explains, students don't normally tackle inverse trig until high school, and sometimes not even then.

But last November, Thordarson began using Khan Academy in her class. Khan Academy is an educational website that, as its tagline puts it, aims to let anyone "learn almost anything—for free." Students, or anyone interested enough to surf by, can watch some 2,400 videos in which the site's founder, Salman Khan, chattily discusses principles of math, science, and economics (with a smattering of social science topics thrown in). The videos are decidedly lo-fi, even crude: Generally seven to 14 minutes long, they consist of a voice-over by Khan describing a mathematical concept or explaining how to solve a problem while his hand-scribbled formulas and diagrams appear onscreen.

Initially, Thordarson thought Khan Academy would merely be a helpful supplement to her normal instruction. But it quickly become far more than that. She's now on her way to "flipping" the way her class works. This involves replacing some of her lectures with Khan's videos, which students can watch at home.
Bill Gates [...] has invested $1.5 million in Khan's site. "I'd been looking for something like this—it's so important," Gates says. Khan's approach, he argues, shows that education can truly be customized, with each student getting individualized help when needed.

Not everyone agrees. Critics argue that Khan's videos and software encourage uncreative, repetitive drilling—and leave kids staring at screens instead of interacting with real live teachers.

(Source : http://www.wired.com/2011/07/ff_khan/)