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Christensen's Classroom Coup

By Clayton M. Christensen, Michael B. Horn, and Curtis W. Johnson, Electronically reprinted from June 10, 2008

Disrupting Class, *a new book by Clayton M. Christensen, Michael B. Horn and Curtis W. Johnson, applies Christensen's now famous theories of "disruptive" change to the field of education.*

In the book, the authors explain that disruptive innovation is not a always a breakthrough improvement like ***Nintendo****'s (other-otc: NTDOY.PK) Wii video game console. Sometimes, seemingly inferior products or services become disruptive because they are simpler to use and more affordable. Often the disruptive innovation benefits people previously unable to consume the existing product or service in the first place. Clayton Christensen calls these people non-consumers.*

In Disrupting Class, *the authors explain how computer-based learning can actually take root in schools by focusing on these so-called non-consumers or students who had no access to specific coursework in the past because it may not have existed in their school.*

Traditionally, computers, for example, have had little effect on how teachers teach and students learn. Schools have employed computers in a perfectly predictable, perfectly logical—and perfectly wrong—way. Schools have crammed them into classrooms to sustain and marginally improve the way they already teach and run their schools.

If school administrators change course, however, and implement computer-based learning for courses that have no teachers, then computer-based learning is likely to become highly disruptive, but potentially very effective. Intelligent software can be customized so that students learn in ways that their brains are wired to learn. It also allows teachers to give students more individual attention.

Following is an excerpt from Disrupting Class *($32.95, McGraw Hill, 2008).*

Looking at the class level within U.S. schools reveals many areas of non-consumption where computer-based solutions can take root. Some of the opportunities where the alternative is nothing at all include: Advanced Placement (AP) and other specialized courses; small, rural, and urban schools that are unable to offer breadth; "credit recovery" for students who must retake courses in order to graduate; home-schooled students and those who can't keep up with the schedule of regular school; students needing special tutoring; and pre-kindergartners.

Together, these venues of non-consumption constitute a booming market in which school districts can welcome computers as the primary delivery platform for learning—in contrast to the way they are now deployed in mainstream classrooms.

Some evidence: Apex Learning, founded by **Microsoft** (nasdaq: MSFT) co-founder Paul Allen, is a for-profit company. Apex began by developing a product that allows secondary schools to offer more AP courses to more students by placing the courses online. So Apex's strategy was to market courses that schools cannot offer. In 2003-2004, enrollments in Apex AP classes were 8,400; by 2006-2007 that number was 30,200—a compounded annual growth rate of over 50%. Apex allows school systems to aggregate the demand for AP courses over an entire school district where there is insufficient demand in individual schools to merit having a dedicated teacher—or where budget cuts have slashed these offerings. Over its history, Apex has had more than 1 million student enrollments and has served over 4,000 school districts. It has expanded well beyond AP courses by offering core classes for secondary

schools as well. These often target students needing to make up credits or needing remediation in certain subjects, as well as students who are home-schooled. This has fueled Apex's growth.

Apex is far from the only online AP course provider. For example, at UC College Prep, a postsecondary provider of online courses for high schools, AP course enrollments more than doubled, from 797 in 2005-2006 to 1,872 within one year. The state of Florida's virtual school, Florida Virtual School, offered only one AP course in 1997; it now offers 11, and enrollments have doubled in the last two years. At Virginia's virtual school, Virtual Virginia, enrollments have quadrupled in the last two years.

More than 25 states have supplementary virtual schools. The Florida Virtual School is perhaps the best-known of these. Begun in 1997 as a pilot project with two school districts, FLVS has had wide appeal. Under the motto "any time, any place, any path, any pace," FLVS today offers over 90 courses, which span traditional staples like algebra and English to non-core ones like AP and business technology courses. Under this guiding light, FLVS has attracted students who otherwise would be non-consumers of various classes for a variety of reasons, from not being able to be in school during certain hours to having difficulty completing their full course load. By the 2006-2007 school year, FLVS was serving 52,000 students in 92,000 individual course enrollments throughout and outside Florida.

A darkening budget picture could make this focus on the core even more dramatic.

The good news for managing the transition to student-centric learning is that as schools stop teaching certain courses, they create a vacuum of non-consumption—the ideal place for student-centric online technology to be deployed. Schools should greet these pressures as opportunities to implement a long-range plan to shift the instructional job to student-centric technology step by step and course by course. Disruptive innovation does not require targeting those courses that the public schools want to teach in-house. It must instead focus on courses that the public schools would be relieved not to have to teach but do feel the need to offer. If officials target computer-based courses at the core curriculum, however, they will elicit intense opposition from the teachers unions.

The growth path for computer-based learning providers, such as Apex, is to figure out how to teach more courses more effectively. As schools face more budget pressures and the need to ax another course that lacks enrollment, computer-based-learning providers want to say, "Hey, that previous course you outsourced worked so well. Let us do this one for you too." The online providers would be motivated to add the very course the school would be motivated to drop. And these courses will keep improving as districts cut more offerings.

Through a rational and incremental process, schools would outsource more and more of the instructional job to virtual providers. One day, schools will find themselves using most of their resources to do the non-instructional jobs that cannot be done online and find themselves teaching fewer and fewer courses through traditional monolithic instruction.

Excerpted from the book Disrupting Class *by Clayton M. Christensen, Michael B. Horn and Curtis W. Johnson. Clayton Christensen is founder of consulting company Innosight, professor of business administration at Harvard and author or co-author of five other books, including* The Innovator's Dilemma.

Michael B. Horn is co-founder of Innosight Institute, a non-profit think tank whose mission is to apply Harvard Business School Professor Clayton Christensen's theories of disruptive innovation to develop and promote solutions to the most vexing problems in the social sector.

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For more information on Clayton Christensen and his company's monthly newsletter Strategy & Innovation, visit www.forbes.com/strategy&innovation.