

Online Learning

Seems to be

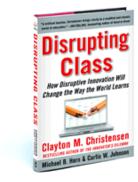
"Disrupting Class"

Is This the Future of Education?

July 2009

ARCADY BAY PARTNERS Confidential

A System in Need of Change



- ☐ Online learning continues to grow across all segments of education.
- ☐ According to a recent Department of Education sponsored study:
 - "The studies of more recent online instruction included in this meta-analysis found that, on average, online learning, at the post-secondary level, is not just as good as **but more effective** than conventional face-to-face instruction."
- ☐ There is a growing awareness that we need to reinvigorate the U.S. education system and reverse the U.S.'s declining international rankings.
- ☐ Secretary of Education, Arne Duncan, recently reaffirmed the dilemma facing our schools and challenged unions and teachers, as well as public, private and charter schools to work toward fixing under-performing schools and implementing accountability based processes.
- Many believe that technology as well as coordinated national standards among the states are a key part of the solution.
- ☐ It seems that online and blended education models will play a key role in addressing current systems shortcomings.

Addressing the Problem Head On



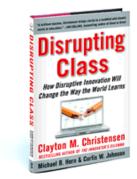
☐ Quotes from recent speeches given by Secretary of Education, Arne Duncan

"States and districts need to step up and have the political courage to close failing schools and let others try."

"Data may not tell us the whole truth, but it certainly doesn't lie. So what is the data telling us today? It tells us that something like 30 percent of our children or students are not finishing high school. It tells us that many adults who do graduate go on to college, but need remedial education. They're receiving high school diplomas, but they are not ready for college."

"States need to have a plan to turn around their lowest-performing schools. I'm an advocate of using whatever model works for children and I want charter schools to join that work. But they won't be able to get into the turnaround business in states that restrict the growth of charters. States that slow innovation are limiting opportunities for students and placing themselves at a competitive disadvantage for \$4 billion in Race to the Top Fund grants."

Is This the Future of Education?



- ☐ Clayton Christensen's recent book "**Disrupting Class**" sees technology as a key driver in improving our education system.
- ☐ It estimates that as much as 50% of all high school classes could be taught online by 2019.
- ☐ The book discusses the "Education Malaise" that afflicts the U.S.
- ☐ Key drivers of this include:
 - Prosperity (current generations not motivated the same as past generations)
 - ➤ Monolithic teacher-led content delivery
 - ➤ Learning style variations among students
 - Changing family and social dynamics
 - A lack of focus, driven by too many stakeholders (teachers, taxpayers, politicians, administrators, students and parents), all with differing views on the goal
- ☐ Christensen believes that "disruptive innovation" will be the change agent to improve the system.

Is This the Future of Education?

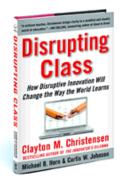


*Disruptive Innovation** – Wikipedia definition

- A disruptive technology or disruptive innovation is an innovation that improves a product or service in ways that the market does not expect, typically by being lower priced or designed for a different set of consumers.
- Disruptive innovations can be broadly classified into low-end and new-market disruptive innovations. A new-market disruptive innovation is often aimed at non-consumption (i.e., consumers who would not have used the products already on the market), whereas a lower-end disruptive innovation is aimed at mainstream customers for whom price is more important than quality.

^{*} The term *disruptive technology* was coined by Clayton M. Christensen and introduced in his 1995 article *Disruptive Technologies: Catching the Wave*, which he co-wrote with Joseph Bower.

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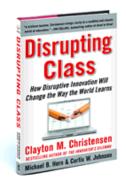


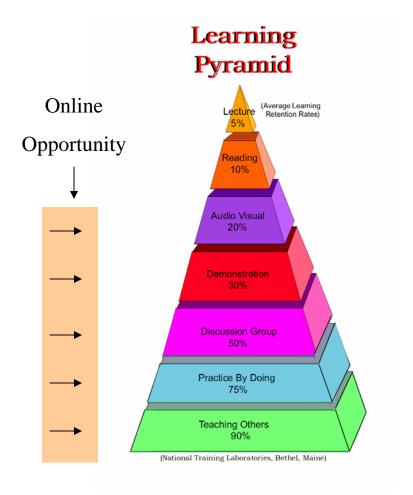
"A disruptive innovation is a technology, process, or business model that brings to a market a much more affordable product or service that is much simpler to use. It enables more consumers in that market to afford and/or have the skill to use the product or service. The change caused by such an innovation is so big that it eventually replaces, or disrupts, the established approach to providing that product or service"

The book suggests the following:

- ☐ Promotion of student centric independent computer learning.
- Develop technology to serve different learning styles (see www.cognitiveprofile.com to take a quiz to determine yours).
- ☐ Better understanding of how we learn and what we retain:
 - ➤ The first 36 months of a child's life are critical in determining intellectual capacity (Risley & Hart)
 - > The depth and type of family interaction is critical
 - ➤ Lectures seem to be the least effective method of retaining knowledge
- ☐ Educators need help and direction.

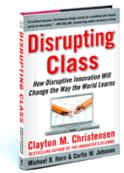
How Will Education Evolve?





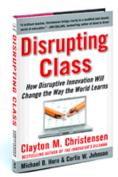
- ☐ It seems clear that lecture style content delivery leaves much to be desired.
- ☐ There is a growing repository of studies evaluating alternative education delivery methods.
- ☐ The traditional lecture model seems outdated and in many cases ineffective.
- ☐ Recently, schools like San Juan College and The University of Pennsylvania have been experimenting with "60 second lectures".
- ☐ Online technologies will enable superior delivery methods.

What Will it Take to Foster Change?



- ☐ The combination of the current government challenge to the status quo of the education system when combined with the billions of dollars in the "Race to the Top Fund" grants could create a unique opportunity for innovation and improvement.
- ☐ It will take a combination of changing embedded practices, focusing on accountability, learning how to better train capable teachers and identifying and removing under-performing teachers to foster innovation and change.
- ☐ The growth of online education and the growing acknowledgement of its efficacy and value make it one of the more interesting initiatives in improving the education system.
- ☐ It is also critical to understand that technology to enable online education and online student interaction with teachers and schools will be a key enabler of future learning tools and advancement.

Online Adoption Continues



☐ Higher Education:

- ➤ 1 in 5 undergraduate and graduate student enrolls in an online course in higher education in the U.S.; in 2007, there were 3.94 million online learning enrollments in higher education (Sloan-C, 2008)
- ➤ 81% percent of all institutions offer online courses (Sloan 2007)
- The 12.9 percent growth rate for online enrollments far exceeds the 1.2 percent growth of the overall higher education student population. (Sloan 2008)

□ K-12

- ➤ 70% of school districts in the United States had one or more students enrolled in a fully online course (Sloan-C 2008)
- ➤ 44 states have significant policies and/or programs for online learning (Keeping Pace with K-12 Online Learning, Watson 2008)
- ➤ 32 states have statewide virtual schools offering supplemental courses (Watson 2008)
- ➤ 18 states allow for 173 full-time virtual schools (CER 2008)
- ➤ More universities are offering K-12 courses online
 - Stanford, John Hopkins, University of Miami, etc.
- ➤ K-12 online learning enrollments growing 30% annually nationwide

Source: the International Association for K-12 Online Learning (iNACOL)

Technology Opportunities



- ☐ Technology will play a growing role in fostering change and improvement in the education system.
- ☐ Online teaching initiatives as well as online access and tools for students, faculty and schools will create a powerful new education paradigm.
- □ Where may the technology innovation come from?
 - ➤ Open source initiatives like Moodle, the Apple App Store
 - Social networking applications and communities
 - > eBooks
 - ➤ Learning environments like Epsilen
 - ➤ Big Community College systems saddled with an increasing mandate to retrain workers
 - ➤ Online for-profit Colleges like Capella and American Public University
 - Dual degree focused programs
 - ➤ Players outside of the education sector such as Google, Intel, Cisco or innovative start-ups that disrupt the system

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