Online Learning and the Implications for School Design

CEFPI Australasia
Regional Conference
June 15, 2011

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Students Learn Differently
Students Learn Differently

Source: You Tube / MTV
The System

A Monolithic System
Monolithic Learning

Source: You Tube / MTV
The System

Value Chain Business Model
Results

Testing and Punishment
The System

Unmet Needs and Non-Consumption
Microcomputer Example
Computers in the Classroom

“The way schools have employed computers has been perfectly predictable, perfectly logical – and perfectly wrong”....

- **Personal computers around for 3 decades...**
  Classrooms look largely the same

- **Teaching and learning similar to days before computers...**

- **$60 Billion spent on computers with little effect on teaching and learning**

  “Schools have crammed them into classrooms to sustain and marginally improve the way they already teach...”
Computers in the Classroom

System Disruption by Online Learning
On-line Learning

Choice
Pace
Modularity
The First Stage

Computer Based Learning
The Second Stage

Student Centered Learning
The Substitution Curve

Copyright: Clayton M. Christensen
The Substitution Curve

Enrollments up from 45,000 in 2000 to 1,000,000 in 2007

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The Substitution Curve

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The Results

50% of high school courses will be online by 2019
The Results

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Is this a Threat or an Opportunity?
The Results

What’s Happening Today?
What’s Happening Today?

• 45 of 50 states have a state virtual school
• 24 states have statewide full-time online schools
• Students taking online courses increased 47% from 2006 to 2008
• Students perform equally or better with online courses
• 88% of dropouts have passing grades
• 47% drop out because school is boring

Source: iNACOL
Are the Predictions Correct?

• **Classroom Management Systems:**
  BrainHoney, Moodle, Catalyst, Blackboard and Global Scholar

• **Social Learning Networks:**
  eduFire, Learn Hub, Nuvvo, Grockit, edmondo

• **Tool Trading:**
  MERLOT, Curriki, Free Reading

• **Tutor Services:**
  Tutor Vista, Tutor.com

• **Commercial Grade Technologies:**
  mCLASS Immersive Education suite
Objections
Objections

• “You can’t replace the hands-on learning of a science lab”
• “What about PE”?
• “Surely you can’t replace Music”?
• “You can’t replace the social aspects of school”
“You can’t replace the hands-on learning of a science lab”
“You can’t replace the hands-on learning of a science lab”
“You can’t replace the hands-on learning of a science lab”

Intellitar – virtual teacher using artificial intelligence

http://www.intellitar.com/chemteach.php
“What about PE”? 

Reasons for online PE classes

• Demanding course loads
• Body-image issues
• Physical or emotional impairments

MPS offers two online P.E. options for credit

Classes developed using Blackboard

District switched to Moodle.

Blackboard cost $20,000 annually; Moodle costs $0
Maybe we think about PE differently

Source: Insight Schools
“Surely you can’t replace Music”? Source: You Tube
“Surely you can’t replace Music”?  

Source: You Tube
“Surely you can’t replace Music”?

Source: You Tube
“You can’t replace the social aspects”

Source: You Tube
Virtual Socializing

Source: You Tube
But what’s the Status of the Predictions in Disrupting Class?
Computer Based Learning
Computer Based Learning

- Proprietary Software
- Relatively Expensive
- Still Monolithic
- Instruction Mirrors Dominant Intelligences
- Accommodates Pace
- Some Pathway Selection
Florida Virtual School
Insight Virtual High School

Advanced Students

Source: Insight Schools
Insight Virtual High School

Bullying

Source: Insight Schools
Student Centered Learning
Student Centered Learning

• Matches Intelligence Type and Learning Styles
• Occurs at the Pace Preferred by Students
• Combines Content in Customized Sequences
• Affordable, Convenient, and Simple Customization

• Occurs in Places Preferred by Students
A New Business Model

Facilitated User Networks
Facilitated User Networks

Source: You Tube
Facilitated User Networks

Source: You Tube
Facilitated User Networks

Khan Academy

Source: You Tube
Facilitated User Networks

• Video
• Mega Convenient
• Learn Anywhere
• Choice
• World Class Experts
• Time Flexibility
• Try Before you Buy

eduFire

Seven Reasons to Learn on eduFire

1. Video
   You’ll love learning with live video. Not only can you learn from the comfort of your own home, but you can learn at your own pace. Additionally, your teacher can see that look of confusion when you’re tasked with a difficult concept and can help you with the topics that are difficult for you. Try one lesson with eduFire and you’ll see just how much fun learning via video can be.

2. Mega Convenient
   No need to waste valuable time and gas money driving to a class or to a tutor’s home. All you need to do is log on to eduFire.com and you’ll find your tutor waiting to teach you. Now you can spend less time traveling and more time learning.

   Because you’re learning from your tutor over the Internet, it doesn’t matter whether you’re at home or on the road. You can learn from your tutor anywhere.

4. More selection means you’ll get a better tutor
   You’re no longer limited to just tutors in your hometown. Because eduFire has a wide variety of tutors from around the world, it’s easier to find someone who’s perfectly suited to you.

5. Find a world class expert
   Ever get the feeling that the tutors near you just aren’t all that great? Well with eduFire you can find world class tutors whether you’re preparing for your exams or learning languages.

6. Tutors in different time zones means a ton of flexibility
   Live in New York City and want someone to tutor you at 6 AMP. For the first time in history this is possible. Because eduFire tutors are spread out all over the globe you’re more likely to find a tutor when you need one.

7. Try before you buy
   Before eduFire, finding a tutor was a little like Russian Roulette. You weren’t really sure what you were getting. But with our service you can view sample video lessons, talk to your prospective teacher’s students, and more.

Who are you guys anyway? ;)
Facilitated User Networks

eduFire

Source: You Tube
Austin Blair
Teacher/Student - Ohio

About Me

The Basics
I am a 15-year old who is currently attending high school as a sophomore. When I was about 11, I decided to look online a bit to find out what was going on. At around the age of 12, I found the fascinating industry of online learning and found that this interested me greatly.

I spent the next couple of years getting acquainted with online learning, but it wasn't until about I was 13 that I took a look at EduFire.

I scrolled to the bottom of a page on Google and found this search result called EduFire and thought to myself, "PLEASE be a good community." I explored it a little and when I finally came to the forums, I knew that it was the place where I would teach forever.

My Passion
Teaching has always been something that I will always enjoy at any point in time. I love to enlighten others and help students achieve their goals. I believe that this is the greatest accomplishment that I can get from another person and I love the feeling of completeness whenever a student passes a test or completes a hard course or just simply solves a hard problem.

History
The subject of history has always been quite a marvel to me and I believe that I am the most excellent instructor that you will find in this subject on EduFire. I have achieved much success in this field and have received some of the highest grades in my classes throughout the years and I even got awarded a President's Award back in about 2007.
What Next?

How can we design school environments that might attract online learners?
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Museums?
How can we design school environments that might attract online learners?

Social Connection
How can we design school environments that might attract online learners?

Social Connection