

Welcome to the Webinar: Disruptive Innovation—Should it Change Your School?

Featured Presenter:
Michael Horn

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Agenda

- Welcome and Agenda
 - *By John Rotheray*
- Opening Prayer and Introductions
 - *By Dr. R. Mark Beadle*
- Presentation
 - *By Michael Horn*
- Question and Answer
 - *By Michael Horn, Dr. R. Mark Beadle, and Sponsors*

Opening Prayer



Dr. R. Mark Beadle
EDified Online
Sevenstar

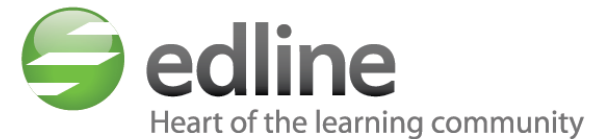
Thank You to Sponsors



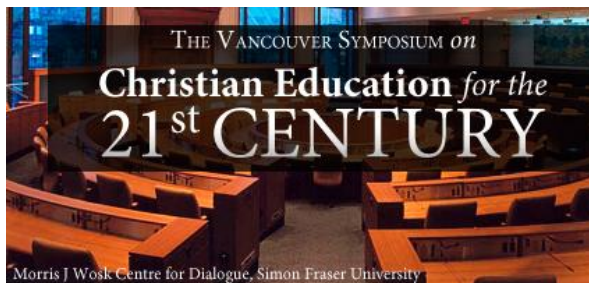
Derek Keenan



Philip Robey



Sanjeev Ahuja



**Vancouver Symposium
on Christian Education for the 21st Century**



Dr. R. Mark Beadle

About Michael



Michael B. Horn is the co-founder and Executive Director, Education of Innosight Institute, a not-for-profit think tank devoted to applying the theories of disruptive innovation to problems in the social sector.

- Book: [Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns](#)
- Website: <http://www.innosightinstitute.org>
- Twitter: <http://twitter.com/#!/InnosightInstit>

Disruptive Innovation—Should it Change Your School?

Michael Horn

Disruptive Innovation



Mainframe computer
\$2,000,000



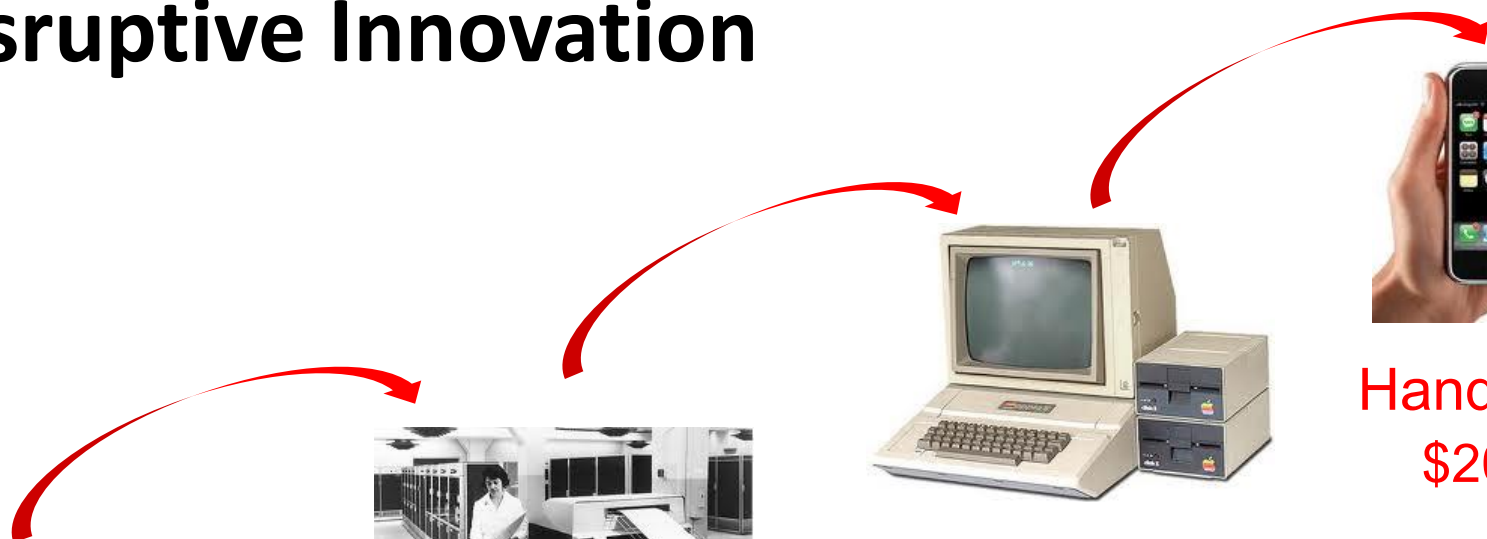
Minicomputer
\$200,000



Personal computer
\$2,000



Handheld
\$200



Complicated, integrated, expensive



Simple, modular, less expensive

Disruption in business models has been the dominant historical mechanism for making things more affordable and accessible

Yesterday

- GM
- Dept. Stores
- Digital Eqpt.
- Delta
- JP Morgan
- Xerox
- IBM
- Cullinet
- AT&T
- State universities
- Sony DiskMan

Today

- Toyota
- Wal-Mart
- Dell
- Southwest Airlines
- Fidelity
- Canon
- Microsoft
- Oracle
- Cingular
- Community colleges
- Apple iPod

Disruption of Toyota

Think About It

ISN'T IT TIME SOMEONE DID TO LEXUS WHAT LEXUS DID TO MERCEDES?

Narrower gaps between body panels; better mileage³ and roomier than the Lexus LS 460.¹

The new Hyundai Genesis is our first luxury car, and believe it or not, it's about to give the market its biggest shake-up since 1989.


The Genesis will take you from zero to 60 in a head-spinning 5.7 seconds³—and has more horsepower per liter than a Lexus GS 460.⁴ Imagine producing that much power while still getting better mileage than any car in its class.²


Impeccable details abound. Example: gaps between body panels are tighter than those found on the standard-bearer for tight tolerances, the Lexus LS 460.¹

And the Genesis cabin is among the quietest and most spacious available. It's equipped with a Lexicon[®] 7.1 discrete surround sound system⁵ (shared only with the Rolls-Royce Phantom). And puts you in a driver's seat that is cooled for summertime, heated for winter.

In a luxury car, there's no such thing as getting too comfortable. Although—don't say anything, but some of our competitors may just have found themselves doing that very thing.

> CONTINUED at HyundaiGenesis.com



Introducing the 375-horsepower Genesis  HYUNDAI

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Tomorrow

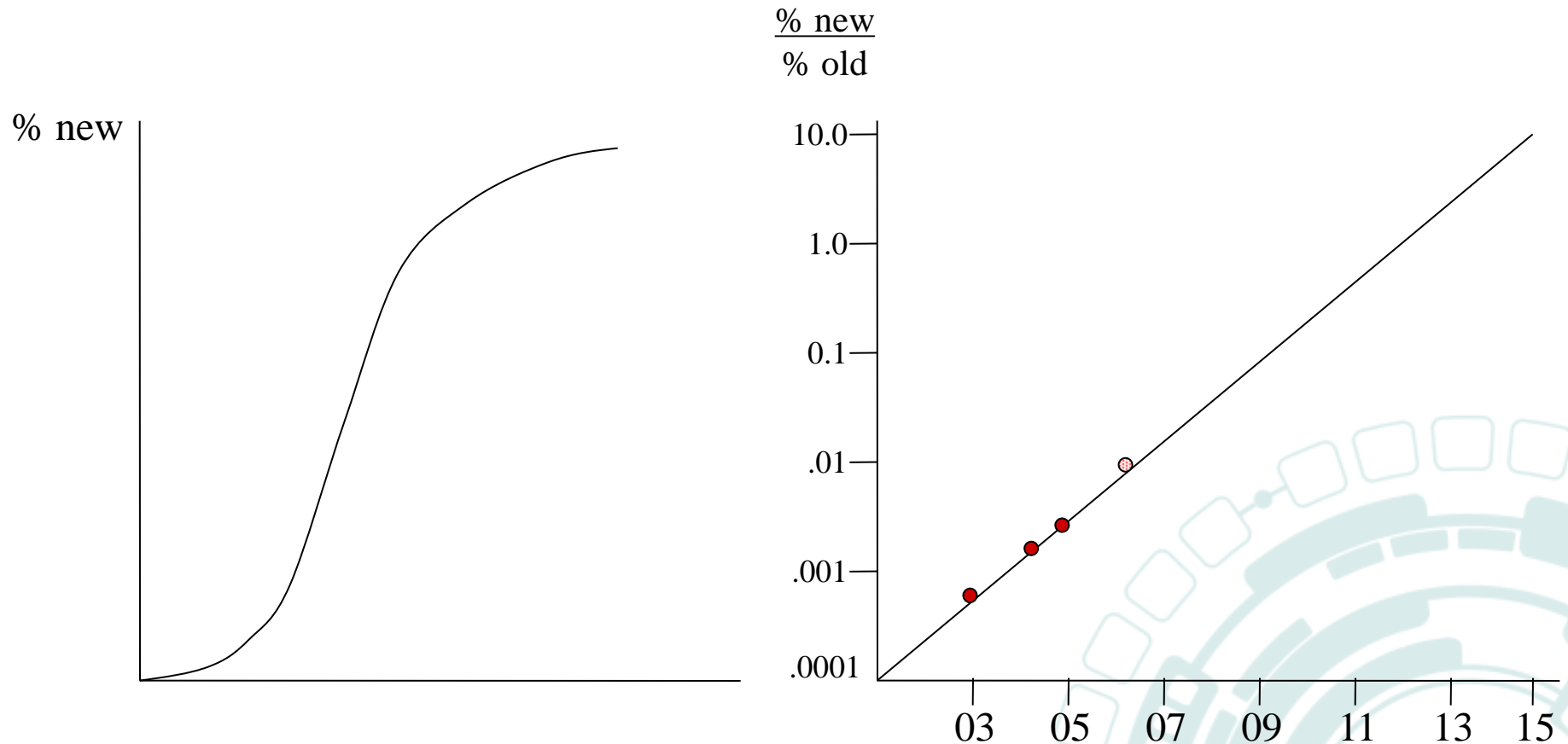
- Chery
- Internet retail
- RIM Blackberry
- Air taxis
- ETFs
- Zink
- Linux
- Salesforce.com
- Skype
- Online universities
- Cell Phones

Prime examples of non-consumption

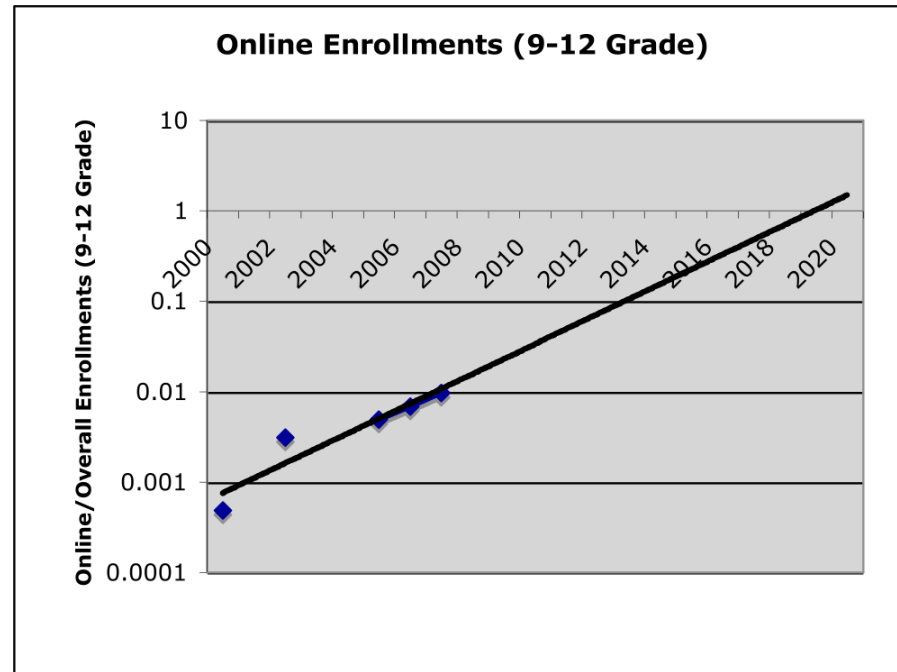
- AP/advanced courses
- Credit recovery
- Drop outs
- Scheduling conflicts
- Home-schooled and homebound students
- Small, rural, urban schools
- Unit recovery
- Disaster preparedness
- Tutoring
- Professional development
- Pre-K
- After school
- In the home
- Incarcerated youth
- In-school suspension
- School bus commute
- Summer school
- Teacher absenteeism

Looming financial and teacher shortages are an opportunity, not a threat

The substitution of one thing for another always follows an S-curve pattern



Online learning gaining adoption



- Over 4M K-12 students doing online learning now, according to Ambient Insight
- 30% of high school students took online course in 2010

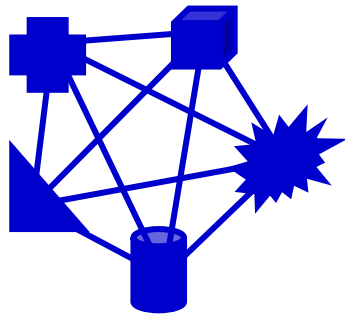
We all have different learning needs and goals at different times

- Multiple intelligences
 - Linguistic, Mathematical, Kinesthetic
 - Motivations/interests
 - Learning Styles
 - Visual, aural, playful
 - Depends on subject/domain
 - Research in practice
 - Scientific Learning
 - CAST/Universal Design for Learning
- Research in practice (Cont.)
 - K12, Inc.
 - All Kinds of Minds
 - Renzulli Learning
 - Talents
 - “Giftedness” is fluid
 - Aptitudes
 - Different paces
 - Fast, medium, slow
 - Ongoing neuroscience research
 - fMRI scans

Conflicting mandates in the way we must teach vs. The way students must learn

Interdependencies in the
teaching infrastructure

Temporal
Lateral
Physical
Hierarchical



Standardization !!



Customization !!

Need for customization for
differences in how we learn

Multiple Intelligences

Learning Styles

Paces of Learning

Predictably improving



Definition of blended learning

Any time a student learns in part in a supervised brick-and-mortar place away from home

and

At least in part through online delivery, with some element of student control over time, place, path and/or pace



**Blended
learning**

Blended learning is not...

- Where teacher uses electronic white board with online curriculum to lecture
- Where student uses online textbooks instead of hardcopy ones

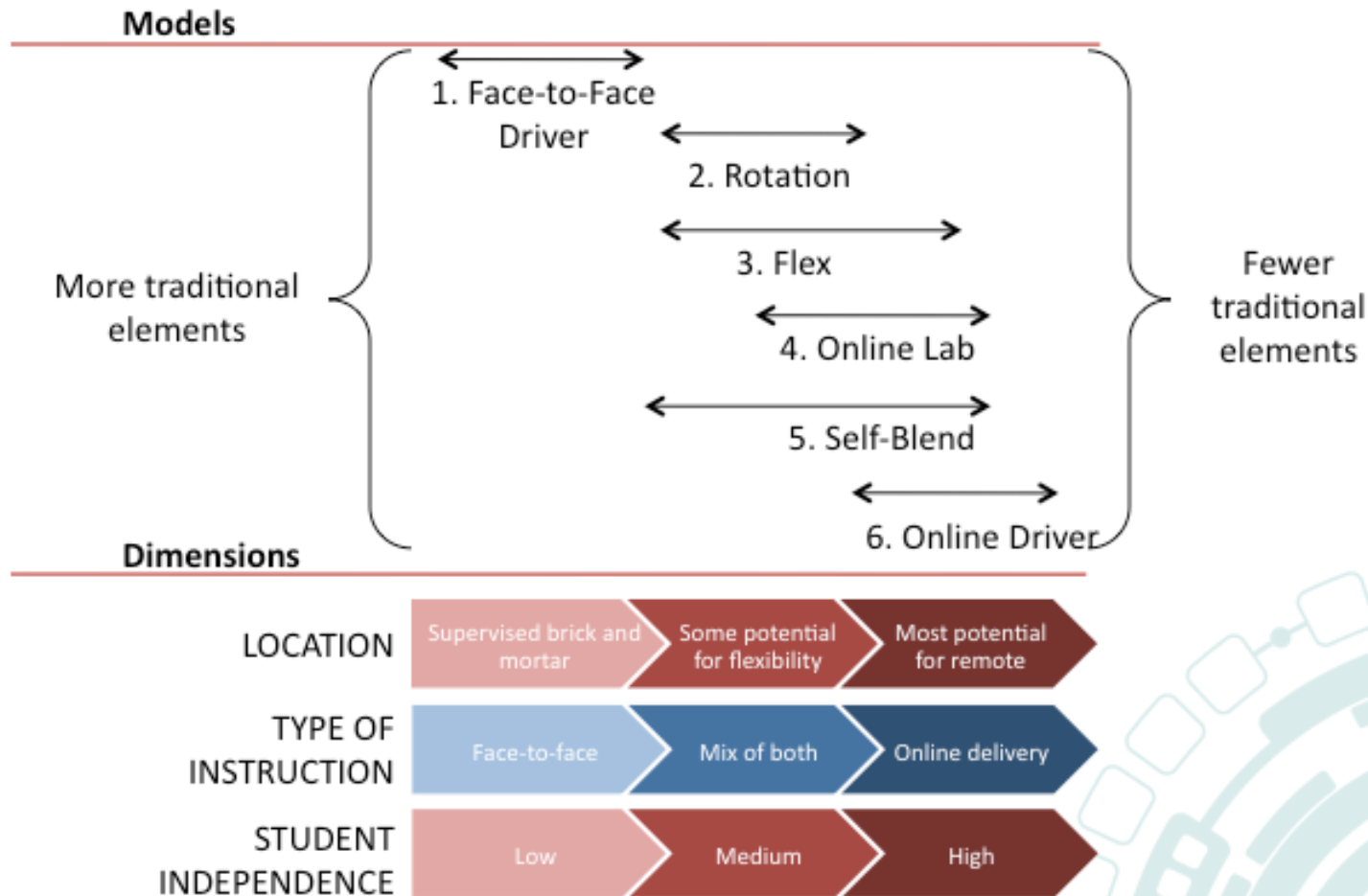
Interactive Poll

What percent of your school's instruction is blended learning?

- 1. 0%**
- 2. 10%**
- 3. 25%**
- 4. 50%**
- 5. 100%**

*Results from the poll will be displayed in chat and emailed after the event.

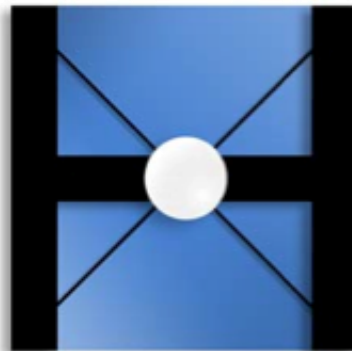
Six models of blended learning



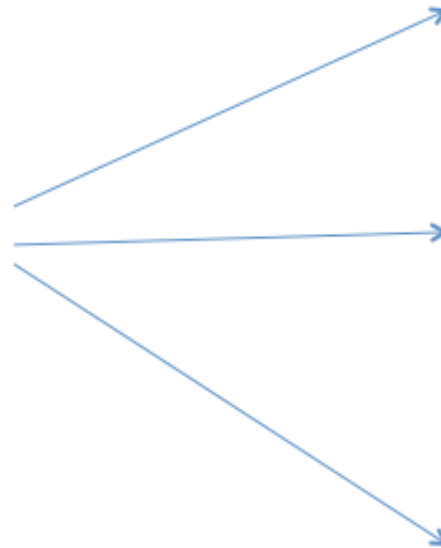
Model #1: Face-to-Face Driver

- Face-to-face teachers deliver most of the curricula
- They use online resources to supplement or remediate
- Often in the back of the classroom or a lab

Case Study: High Tech High



HIGH TECH HIGH



ALEKS®



Very skeptical about
online for writing

Model #2: Rotation

- For each course, students rotate on a fixed schedule between online and f2f
- “In between”
- Sometimes online part is remote
- Often same teacher for online and f2f

Case Study: Carpe Diem Collegiate High School



Model #2: Case Study



Dr. R. Mark Beadle

Model #3: Flex

- Online platform delivers most curricula
- F2F teachers provide flexible, as-needed support
- Individual tutoring, small group discussion

Case Study: Advance Path Academics



Model #4: Online Lab

- Online platform delivers entire course, but in brick-and-mortar lab or classroom
- Usually online teachers
- Paraprofessionals supervise

Serves students with online courses



Model #5: Self-Blend

- Individual student takes online classes *a la carte*
- The online learning is remote
- The traditional learning is brick-and-mortar

Case Study: Alison Johnson



At school:

- AP English
- Calculus
- Spanish 3
- Chemistry
- Drill team



At home:

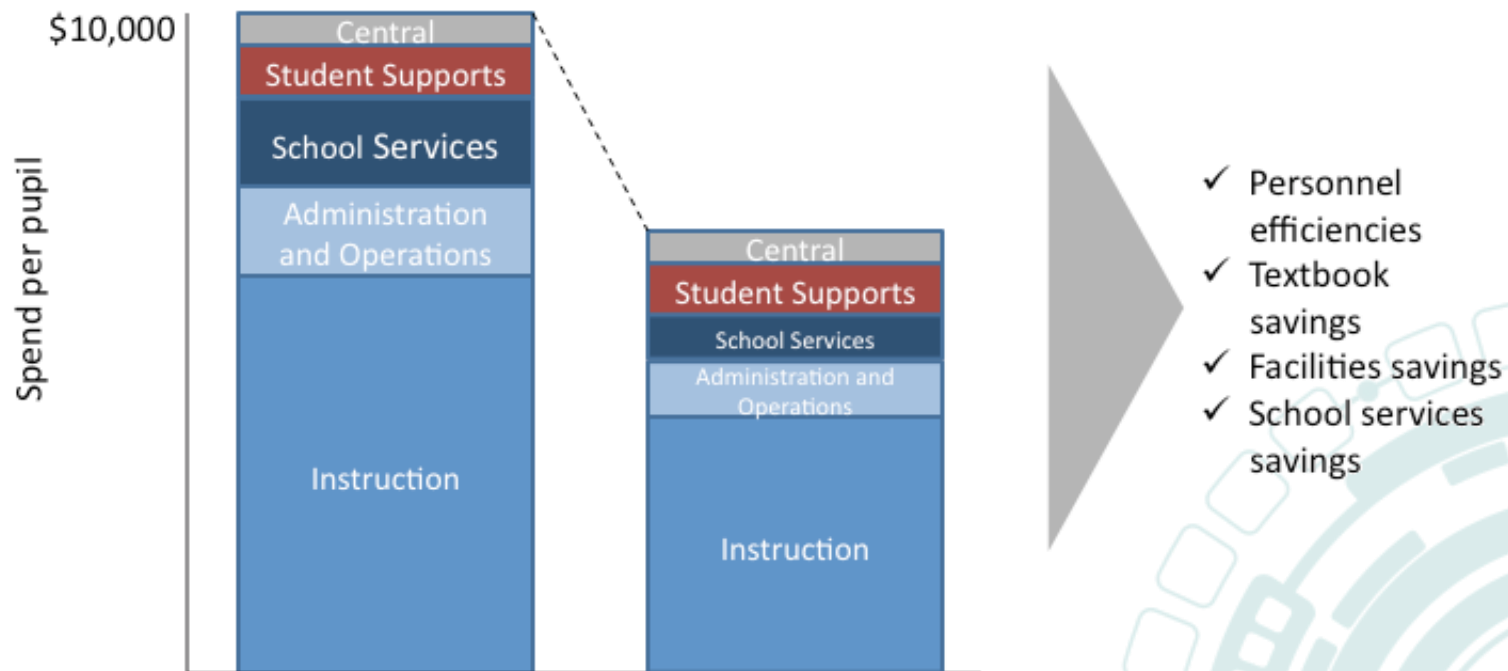
- AP Macroeconomics



Model #6: Online Driver

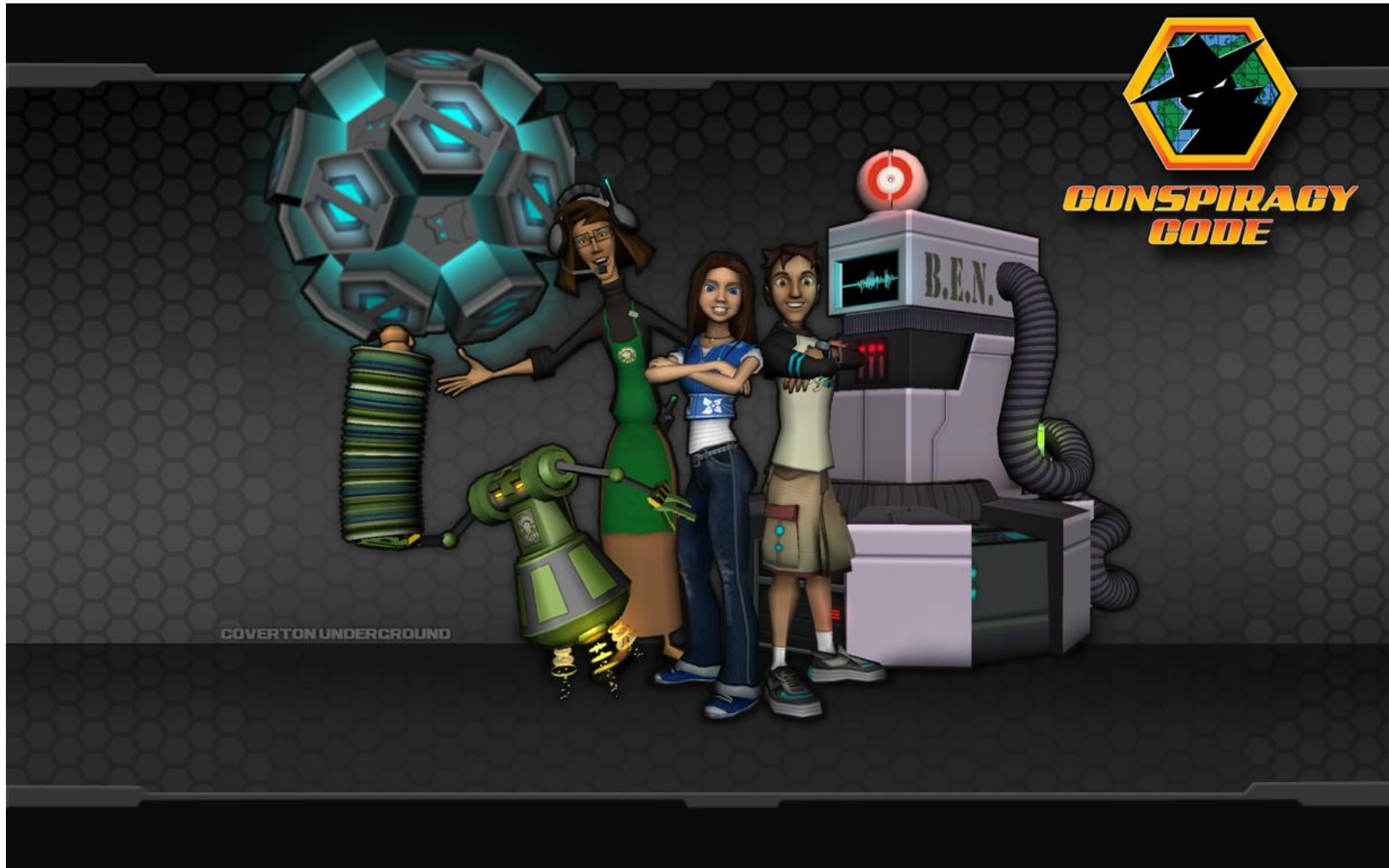
- Online platform and teacher deliver all curricula
- Students work mostly remotely
- F2F check-ins are optional or required

Case Study: Albuquerque eCADEMY Alternative School



Source: Parthenon Group

Predictably improving



Practical implications

- Not beholden by the old metrics
 - Seat time → Competency-based
 - Student-to-teacher ratio
 - In general, move beyond focus on inputs/processes
- Self-sustaining funding
- Autonomous
- Human resources pipeline & PD
- Broadband/wireless infrastructure
- Portal/Based on usage and what works
- Treatment and use of data

Thank you!



Arlington County Board Organizational Meeting Jan 1, 2011 by cliff1066. Available:
<http://www.flickr.com/photos/nostri-imago/5318859039/>

Q&A

**Please Chat Your Questions
to the Moderator Now**