



**RED BALLOON PROJECT**

*aaascu*

# Peril and Promise in a New Age

**Society for College and  
University Planning  
(SCUP)**

**George L. Mehaffy  
San Diego, California**



**In fifty years, if not much sooner, half of the roughly 4,500 colleges and universities now operating in the United States will have ceased to exist.**

**“The End of the University as We Know It.” Nathan Harden.  
The American Interest. January/February 2013.  
<http://www.the-american-interest.com/article.cfm?piece=1352>**



# RED BALLOON PROJECT

*aaacu*





# **A Presentation in Three Parts**

**1.The Challenges**

**2.What' s Changing**

**3.What Disruption Looks Like**



**We are confronting massive  
change and great uncertainty.**

**Our institutions are challenged  
as never before.**



# The Overarching Theme of This New Age: Shifting Power

- The loss of power by traditional institutions
- The increased power of individual students
- The power of new organizations and groups to enter and compete in the marketplace



## **The Great Unbundling, when we can:**

- **Separate course elements from a course**
- **Separate courses from a degree**
- **Separate students from a specific college or university**
- **Separate faculty from a specific college or university**
- **Separate support services from the rest of the college or university**



## **7 Critical Challenges**

- 1. Core Concept**
- 2. Structural Model**
- 3. Funding Model**
- 4. Cost Model**
- 5. Business Model**
- 6. Evidence of Success**
- 7. Public Opinion**





# 1. Our University Model

Was created in the 11<sup>th</sup> century



Operates on a 19<sup>th</sup> century agrarian calendar

To prepare students for life in the 21<sup>st</sup> century



## 2. Structural Model

In The Innovative University, authors argue that higher education has a common DNA:

Face-to-face instruction, self-governance, departmentalization, summer recess, athletics, general education, majors, tenure, externally-supported research.

(and a very unhealthy aspirational culture)

Their conclusion... We have created

- confused, multiple-purpose missions...and
- unsustainable institutions
- As a result, we are vulnerable to disruption.



## **3. Funding Model**

**National Governors Association (NGA):**

**“...state budgets will not be balanced until the latter part of the decade.”**

**“Health, criminal justice, and the K-12 schools will consume an increasingly larger share of the state’s resources.”**

**“Many states have structural deficits...”**

<http://www.cbpp.org/cms/?fa=view&id=711>



## **State Expenditures for Higher Education (as a percentage of all expenditures: local, state, federal, personal)**

**1975: 60%**

**2010: 34%**

**But huge variations in states: From 1980 to 2011-**

<b>Colorado</b>	<b>69 % decline</b>
<b>Minnesota</b>	<b>56 % decline</b>
<b>North Dakota</b>	<b>1 % increase</b>
<b>Wyoming</b>	<b>3 % increase</b>

**Based on the trends since 1980, average state fiscal support for higher education will reach zero by 2059.**

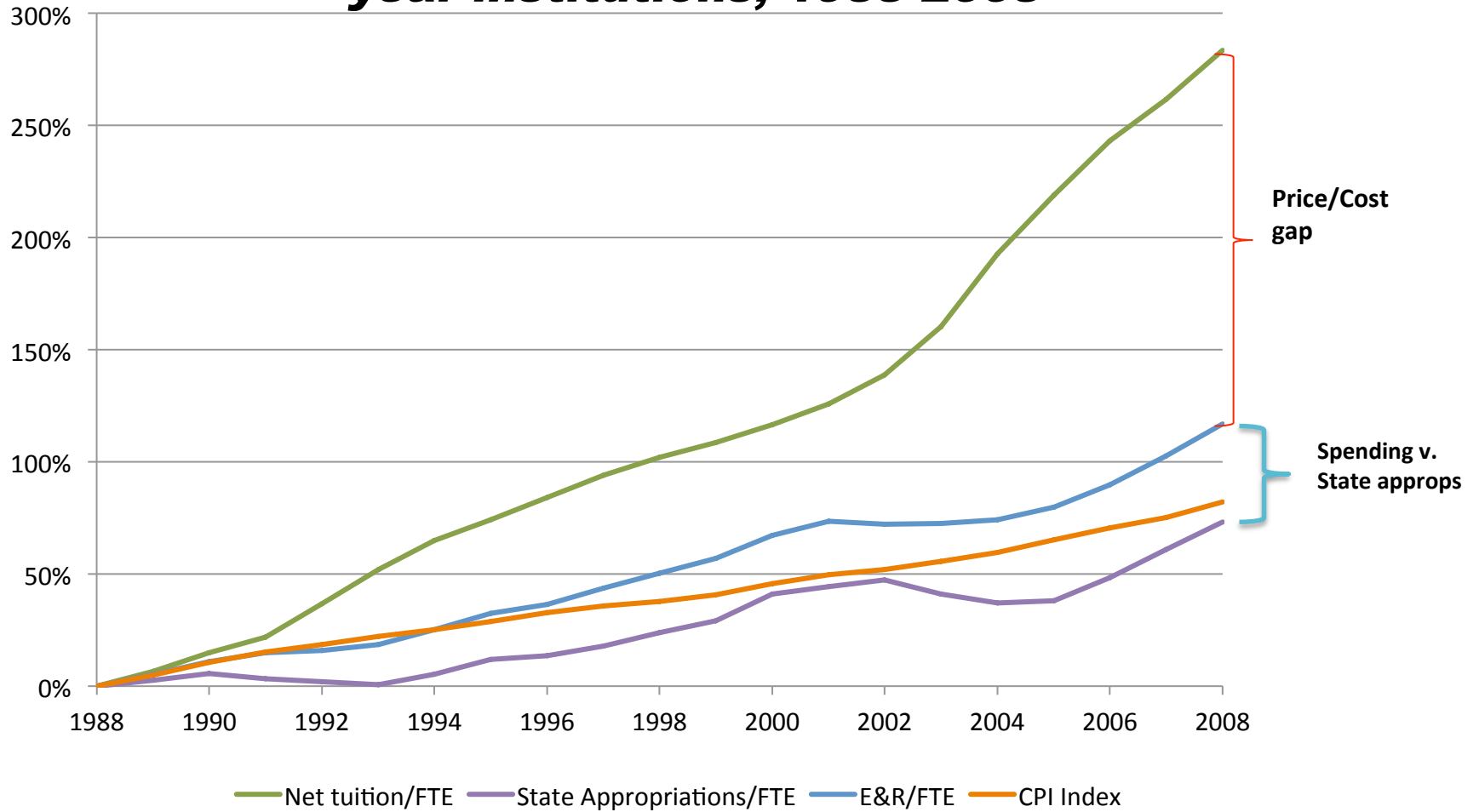
State Funding: A Race to the Bottom. Thomas G. Mortenson

<http://www.acenet.edu/the-presidency/columns-and-features/Pages/state-funding-a-race-to-the-bottom.aspx>



# 4. Cost Model

## *The unsustainable funding trends at public 4-year institutions, 1988-2008*



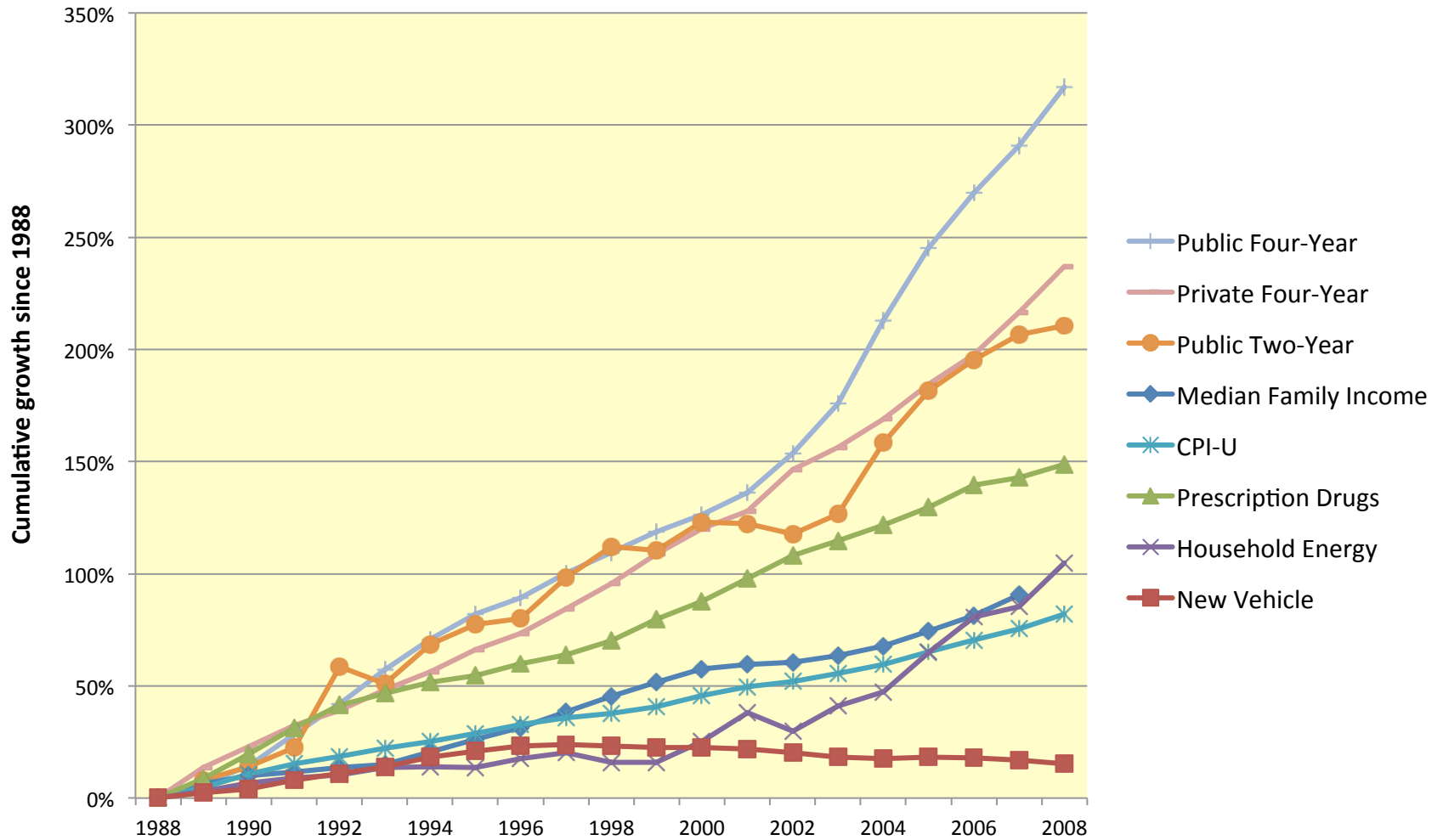
Source: Delta Cost Project IPEDS database, 1987-2008, 22-year matched set. Notes: Percent change since 1988 based on unadjusted dollar amounts. From the Delta project. Courtesy Jane Wellman



# RED BALLOON PROJECT

*aascc*

## The Rising Cost of College, 1988-2008 (based on increases in current dollar amounts)



Sources: College Board, "Trends in College Pricing, 2008"; Bureau of Labor Statistics, 2009, [www.bls.gov](http://www.bls.gov); U.S. Census, Current Population Study-ASEC, 2008. From the Delta Project. Courtesy Jane Wellman



## Simple Numbers:

**Median inflation-adjusted household income, 2006 – 2011**



**7%**

**Tuition at public four year Institutions, 2006 – 2011**



**18%**

[http://www.nytimes.com/2013/02/01/opinion/my-valuable-cheap-college-degree.html?\\_r=0](http://www.nytimes.com/2013/02/01/opinion/my-valuable-cheap-college-degree.html?_r=0)

**Public higher education – an historic threshold: Students about to pay a higher percentage than the state. 2012 – net tuition 47% of public colleges' costs.**

<http://chronicle.com/article/StudentsStates-Near-a/137709/>



## **5. Business Model**

**Higher education is a set of cross-subsidies:  
graduate education subsidized by undergraduate;  
upper division subsidized by lower division**

**Jane Wellman, Delta Project  
<http://www.deltacostproject.org/>**

**We also have cross-subsidies by disciplines.**





## **Credit Hour Distribution and Average Instructional Costs**

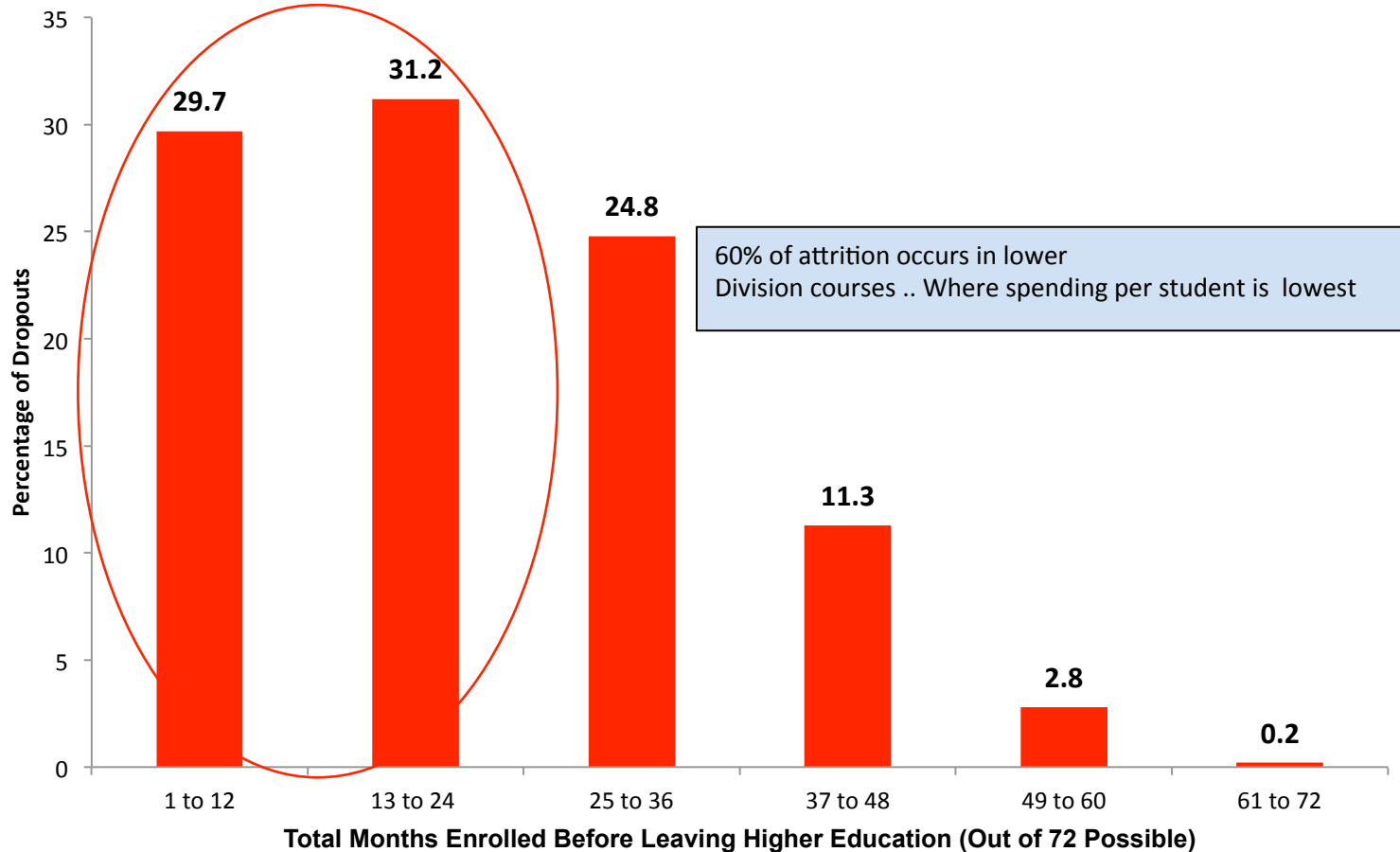
### **Public-four Year Averages, 4-state cost study (SUNY, Florida, Ohio, Illinois)**

	<b>% of all credits taken</b>	<b>% of total spending on instruction</b>	<b>Avg weighted cost/credit</b>
<b>Lower Division</b>	<b>36%</b>	<b>23%</b>	<b>1.00</b>
<b>Upper Division</b>	<b>48%</b>	<b>44%</b>	<b>1.42</b>
<b>Grad 1</b>	<b>12%</b>	<b>23%</b>	<b>2.88</b>
<b>Grad 2</b>	<b>4%</b>	<b>9%</b>	<b>4.00</b>
	<b>100%</b>	<b>100%</b>	<b>1.55</b>

**SHEEO, 2010  
Courtesy Jane Wellman**



## Percentage of All Dropouts by Cumulative Months Enrolled, Beginning Postsecondary Students 2003-04



**NCES, BPS, undergraduates only  
Courtesy Jane Wellman**



## **Moody's Inventor Services Report January 23, 2012**

**“Tuition levels are at a tipping point”**

**Higher education must innovate to remain viable**

- **Collaborations between colleges**
- **More centralized management**
- **More efficient use of facilities**
- **Reduction in number of tenured faculty**
- **Geographic and demographic expansion of course offerings**

<http://chronicle.com/article/article-content/130434/>



## **6. Evidence of Success**

### **2006 American Institutes of Research (AIR)**

**20% of U.S. college graduates only have basic quantitative literacy skills...**

**...unable to estimate if their car has enough gasoline to get to the next gas station.**

**More than 50% of students at 4-yr colleges lack the skills to perform complex literacy tasks, such as comparing credit card offers or summarizing the arguments of newspaper editorials.**

[http://www.air.org/news/index.cfm?fa=viewContent&content\\_id=445](http://www.air.org/news/index.cfm?fa=viewContent&content_id=445)



***Academically Adrift***  
**R. Arum & J. Roksa**



**45% of students did not demonstrate any statistically significant improvement in Collegiate Learning Assessment (CLA) performance during the first two years of college.**

**A further study has indicated that 36% of students did not show any significant improvement in Collegiate Learning Assessment (CLA) performance over four years.**



## Graduation Rate, 2010 Study

**63.2% of 2003 students who began at a 4 -year college earned bachelor' s degree by 2009.**

Beginning Postsecondary Survey, National Center for Education Statistics, U.S. Department of Education.

<http://www.quickanded.com/2010/12/u-s-college-graduation-rate-stays-pretty-much-exactly-the-same.html>

## New Study 2012

**Full time students: 75% in 6 years**

**Part time students: 32% in 6 years**

New National Tally of College Completion Tries to Count All Students.

<http://chronicle.com/article/New-National-Tally-of-College/135792/>



## Student Debt

**Student loan debt outpaced credit card debt for the first time last year.**

**\$ one trillion dollars this year**

**Average debt for those with loans is now \$ 24,000.**

[http://www.nytimes.com/2011/04/12/education/12college.html?\\_r=2](http://www.nytimes.com/2011/04/12/education/12college.html?_r=2)

**Americans aged 50 and older owe \$ 139 billion in student loans.**

College (Unbound). Jeffrey J. Selingo. 2013



## 7. Public Opinion

**\*\*\* 60% (six out of ten) of Americans in 2010 said that colleges today ... focused more on the bottom line than on the educational experience of students.**

[http://www.highereducation.org/reports/squeeze\\_play\\_10/squeeze\\_play\\_10.pdf](http://www.highereducation.org/reports/squeeze_play_10/squeeze_play_10.pdf)

**\*\*\* In a recent survey, 80% said that at many colleges, education received is not worth the cost.**

Time Magazine, October 29, 2012, p. 37

**\*\*\* Lumina survey in November/December 2012, three quarters (3/4) of respondents said that college is unaffordable.**

<http://chronicle.com/article/Americans-Value-Higher/137023/>





# Is Disruption Coming?

**Clayton Christensen**

**Disruption comes from cheaper and simpler technologies that are initially of lower quality. Over time, the simpler and cheaper technology improves to a point that it displaces the incumbent.**

**He argues that technology, and especially the on-line course, is the disruption enabler.**

The Innovative University.  
Clayton Christensen and  
Henry J. Eyring. 2011





# **AASCU' s Red Balloon Project 2010**

- **Declining Funding**
- **Increasing Expectations**
- **Technology Revolution**





**RED BALLOON PROJECT**

*aaascc*

**Defense  
Advanced Research Projects  
Agency**



**RED BALLOON CONTEST**

- ✿ **40<sup>th</sup> Anniversary of the Internet  
1969 - 2009**
- ✿ **Contest: Find Ten (10) Bright Red  
Helium-filled Balloons  
Located Somewhere in  
the United States**
- ✿ **Prize: \$ 40,000**



# DARPA RED BALLOON CONTEST





**How long did it take to find 10 randomly placed 8 foot high bright red weather balloons, suspended 30-50 feet above the ground, somewhere in the United States?**

**8 hours, 52 minutes**



**RED BALLOON PROJECT**

*aaacu*

**The Red Balloon Contest Is Both:**

**A Metaphor**

**And**

**An Analogy**



**The Red Balloon Contest is a Metaphor for the new ways that knowledge is now being:**

- **Created**
- **Aggregated**
- **Disseminated**



**The Red Balloon Contest Is an Analogy for the way that we might work together collaboratively to re-design undergraduate education**





# **Technology Changes Everything**

- **Place**
- **Expertise**
- **Processes**
- **Scale**
- **Imagining what's possible**



# The Concept of Expertise

Study in the journal *Nature*  
comparing the accuracy of entries in two  
well-known on-line references:

*Encyclopedia Britannica*

Wikipedia

*Found that error rates were about 3 per  
entry for Encyclopedia, 4 per entry for  
Wikipedia*

<http://www.nature.com/nature/journal/v438/n7070/full/438900a.html>



# ***Encyclopedia Britannica***

**Founded in 1768, on-line version started in 1994, the first internet encyclopedia.**

**English print edition is (was) a 32 volume set, 64,000 articles, 4,300 contributors, latest print edition 2005.**

**Breaking News. 13 March 2012**

**After 244 years, Encyclopedia Britannica has decided to stop publishing its famous and weighty 32-volume print edition.**

**<http://www.bbc.co.uk/news/business-17362698>**



# Wikipedia

**Edited by anyone, 7<sup>th</sup> most visited website in the world.**

**78 million readers in U.S., 365 million worldwide, each month.**

**250+ languages**

**4,286,362 articles in English, 14 million articles total. 22,711,389 pages**

**Staff of 30, started 2001, not-for-profit organization**

Wikipedia's Evolving Impact. Stuart West. TED2010



**We now live in a world where solitary expertise is still important, but increasingly we use networked knowledge and linked/shared information to advance knowledge and understanding.**



**Devin Bloom and a team of ichthyologists collected 5,000 fish specimens from Guyana's Cuyuni River system in South America.**

**They needed to identify them quickly.**

**They loaded pictures of all 5,000 fish onto Facebook.  
Within 24 hours, all 5,000 were identified.**

[http://www.sciencedaily.com/releases/2011/05/110513204526.htm?  
utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A  
+sciencedaily+%28ScienceDaily%3A+Latest+Science+News  
%29&utm\\_content=Google+Feedfetcher](http://www.sciencedaily.com/releases/2011/05/110513204526.htm?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+sciencedaily+%28ScienceDaily%3A+Latest+Science+News%29&utm_content=Google+Feedfetcher)



**RED BALLOON PROJECT**

*aaac*

**Networked knowledge...**

**The wisdom of crowds...**

**And now, perhaps the most critical  
component...**

**Vast and rapid improvements in technology**



**“WISCONSIN appears to be in the driver’ s seat en route to a win, as it leads 51-10 after the third quarter. Wisconsin added to its lead when Russell Wilson found Jacob Pedersen for an eight-yard touchdown to make the score 44-3 ... .”**

**A typical sports article that might appear in a local newspaper?**

**Yes...but this one was written 60 seconds after the 3<sup>rd</sup> quarter by a computer...that charges less than \$10 for articles of less than 500 words.**

**In Case You Wondered, a Real Human Wrote This Story. Steve Lohr, *The New York Times*, September 10, 2011**





## **IBM' s Watson played Jeopardy**

**For each question, Watson evaluated information from about 200 million pages of content, or 1 million books, in 3 seconds.**

**Watson won the 3 rounds, with 3 times (\$ 77,147) as much as the next competitor, Ken Jennings (\$ 24,000).**

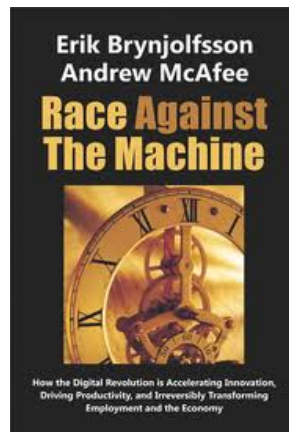


# RED BALLOON PROJECT

aaau

**“ Artificial intelligence machines are getting so good, so quickly, that they’ re poised to replace humans across a wide range of industries...**

**...diagnosing your diseases, dispensing your medicine, handling your lawsuits, making fundamental scientific discoveries and even writing stories just like this one.**



**Farhad Manjoo. “Meet Mr. Bot. He’ s the competition.”**  
*Washington Post.* October 2, 2011. P. G5.



**Science Fiction?**

**Brave New World?**

**End of Civilization?**

**Evolutionary changes take hundreds,  
sometimes thousands of years.**

**Meanwhile, every 18 months, computing  
power doubles while computing costs  
drop by half (Moore's Law).**



**RED BALLOON PROJECT**

*aascc*

# **Technology Changes Everything**



RED BALLOON PROJECT

aaaccc

Think about the impact of technology:

On journalism...

Rocky Mountain News

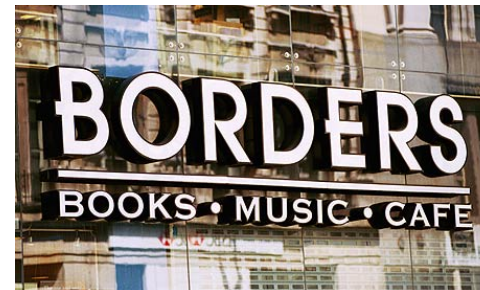
On the music business...



On the photography business...



On the book publishing/selling business...



The Long Tail.

Chris Anderson (Hyperion, 2006)



## **But do we realize the impact in time?**

**Once you see this pattern—a new story rearranging people’s sense of the possible, with the incumbents the last to know—you see it everywhere. First, the people running the old system don’t notice the change. When they do, they assume it’s minor. Then that it’s a niche. Then a fad. And by the time they understand that the world has actually changed, they’ve squandered most of the time they had to adapt**

**Napster, Udacity, and the Academy. Clay Shirkey (blog post) November 12, 2012. <http://www.shirky.com/weblog/2012/11/>**



**Headline in the Washington Post, Spring 1900, just before its first auto show in December 10, 1900.**

**“Horse Market Active. Effect of Automobile is Not Feared by Dealers. It Is Looked Upon Only as a Fad”**

Washington Post, Monday, February 4, 2013 John Kelly's Washington

- Overman Automobile Company
- Riker Motor Co. Knox Automobile Company
- Woods Motor Vehicle Company
- Pennsylvania Horseless Carriage Manufacturing Company
- Electric Vehicle Company



## **What' s Changing?**

- 1.The Role of Venture Capitalists**
- 2.The Models of College**
- 3.The Course Models**
- 4.Data Analytics**
- 5.The Cost: Reduced and Free**
- 6.Measuring Success**
- 7.Threats to the Degree**





# 1. The Role of Venture Capitalists

Venture-Capital Investment in Education-Technology Companies



Note: Data include educational-technology companies in elementary and secondary education, higher education, lifelong learning, and informal education.

Source: National Venture Capital Association, Thomson Reuters

## New Start-Ups

Udacity

Udemy

University Now

Coursebook

Coursekit

Courseload

CourseRank

<http://chronicle.com/article/A-Boom-Time-for-Education/131229/>



## **2. The Models of College**

- **University of the People (UoPeople):**
- **Western Governors University (WGU)**

now also WGU Indiana, WGU Washington (state), WGU Texas, WGU Tennessee, and WGU Missouri

- **Peer to Peer University P2PU**
- **Udemy**  
and new forms of collaboration and sharing...
- **The New Paradigm Initiative**



### **3. The Course Models**

- **Cottage Industry Models**
- **Open University (UK) – University of Phoenix Models**
- **Partnership Models (USC)**
- **Individual Course Models**
- **Massive Open Online Courses**



## Cottage Industry Model

**Everyone designs his or her own course, from scratch, each semester.**

**And no one learns anything about the most effective course content or most effective teaching practices...**

**except that individual teacher, who learns only from his or her own experiences.**



## Open University of the UK - University of Phoenix Model

- Huge resources (money and people) put into course design
- Taught by a large number of adjuncts in a fairly similar way
- Evaluation of learning outcomes conducted by another unit
- Huge scale involved (U of Phoenix 450,000 students)



## Partnership Model (USC)

**Venture capitalist partners with a public or not-for-profit university**

- **2tor USC and John Katzman. MAT**
- **Academic Partnerships. Example, Lamar University and Randy Best: MA in Education – reduced cost and time to completion.**
- **2U. Semester Online. 10 universities**

**The last frontier, when outsourcing finally penetrates the academic center.**



## Individual Course Offerings

### **StraighterLine:**

- **offers courses for \$ 99**
- **entire freshman year for \$ 999**

### **Blackboard and K-12, Inc**

- **Selling online courses to community colleges**



# Massive Open Online Courses (MOOCs)

**Stanford University. Computer Science (CS) 221  
Offered Fall 2011 by S. Thrun and P. Norvig.  
More than 160,000 students from 190 countries.  
44 languages. 23,000 students completed. 200  
Stanford students enrolled; by the end of the course,  
only 30 Stanford students were still attending the  
lecture.**

Great resource on MOOCs: <http://iberry.com/cms/mooc>

**EdX  
Coursera  
Udacity  
Semester Online**





## **The State of the MOOCs**

### **Mixed messages**

#### **Bad News**

- 1. Hype cycle**
- 2. Lack of completion**
- 3. Credit for MOOCs**
- 4. No one wanted credit for MOOCs, Colorado State**
- 5. Udacity MOOC at San Jose State on hold**

#### **Good News**

- 1. Coursera got \$ 43 million in additional funding**
- 2. Institutions/systems, 9 states, signed with Coursera**
- 3. Many institutions experimenting with MOOCs**
- 4. 6 million students enrolled**
- 5. EdX MOOC at San Jose State succeeds**



**“MOOCs are not the future of higher education-----**

**----- that future will be far more various and surprising than we can see now-----**

**but they do expand the horizon of the visible.**

Clay Shirkey. MOOCs and Economic Reality. Chronicle of Higher Education. July 8, 2013



## **4. Analytics (Big Data)**

**A method of warehousing, organizing, and interpreting the massive amounts of data accrued by online learning platforms and student information systems ...**

**... in hopes of learning more about what makes students successful...**

**... and by giving instructors (and the platforms themselves) the chance to adjust to improve learning outcomes.**

**<http://www.insidehighered.com/news/2010/11/09/completion>**



## **Analytics provides:**

### **Information for the Institution**

- **Predicting academic demand**
- **Tracking course success**
- **Dropout prevention, social integration**
- **Reporting information: state, federal, accreditors**

### **Information for Faculty Members**

- **Student Progress and Success**
- **Areas of Confusion or Misunderstanding**

### **Information for the Student**

- **Course selection and progress**
- **Major selection**
- **Program progress**



## **5. Personalization**

**The capacity of software and systems to tailor course materials, learning processes, and approaches to the unique circumstances of individual learners.**

- **Individual characteristics**
  - Learning style**
  - Memory decay**
  - Pacing**
- **Obstacles or misunderstandings**



## 6. Reducing Costs

- **Free Textbooks**
- **Time to Completion**
- **120 hours for all majors**
- **Reducing bottlenecks in completion**
- **Charging out-of-state for 30+ credits beyond graduation requirements**
- **Intrusive advising and early remediation**
- **Flat rate for summer courses**



## 7. Measuring Success

**CAAP (ACT)**

**MAPP (ETS)**

**CLA (CAE)**

**Lumina's Degree Qualifications Profile  
(DQP)**

**National Institute of Learning Outcomes  
Assessment (NILOA)**

**New Leadership Alliance for Student  
Learning and Accountability**



## **8. Threats to the Degree**

### **New Concepts of the Degree (competencies)**

- **Southern New Hampshire University**
- **Northern Arizona University**

### **Prior Learning Assessments**

### **Badges (Kahn Academy, etc.)**

### **Certifications (CLA and Straighter Line)**





# So What Does Disruption Look Like?



**RED BALLOON PROJECT**

*aaacscu*

## Drivers of the New 21<sup>st</sup> Century University

**Cost**

**Efficiency**

**Effectiveness**

## Strategies for Success

**Scale**

**Experimentation**

**Differentiation**

**Partnerships**

**Challenging Old Models and Paradigms**

**Reliance on Evidence**



# Changes in Physical Space

- **Classrooms**
- **Library**
- **Bookstore**
- **Office Space**
- **Campus**



## Flipped Courses

The “flipped” course. You do homework by watching lectures. You go to class to work on problems together.

**Khan Academy: 2,400 videos covering everything from arithmetic to physics, finance, and history. Khan lessons viewed by more than 4,000,000 people a month.**

<http://www.khanacademy.org/>

**Less lecturing, more collaboration**



# Open Learning Initiative (OLI)

**Carnegie Mellon University**

<http://oli.web.cmu.edu/openlearning/index.php>

**Team: content specialist  
cognitive scientist  
instructional designer  
graphic designer**

**Results showed that OLI-Statistics students learned a full semester's worth of material in half as much time and performed as well or better than students learning from traditional instruction over a full semester.**

<http://oli.web.cmu.edu/openlearning/publications/71-effectiveness-statistics0>

**New kinds of staff, new space to work together,  
and more classes online**



## Science Classes

### The Carl Wieman Science Education Initiative

Three strategies:

1. Reducing cognitive load
2. Addressing beliefs
3. Stimulating and guiding thinking

<http://www.cwsei.ubc.ca/>

**Experiment produced two times the learning outcomes**

Deslauriers, Schelew, and Wieman. Science. 13 May 2011, pp. 862 – 864.

**Reduced reliance on lectures (and lecture halls);  
Increased attention to cognitive processes and  
Learning outcomes**



# Math Emporiums

“Higher Education’s Silver Bullet” Carol Twigg <http://www.changemag.org/Archives/Back%20Issues/2011/May-June%202011/math-emporium-full.html>

## **3 Keys To Success:**

- 1. Interactive computer software**
- 2. Personalized on-demand assistance**
- 3. Mandatory Student Participation**

**Personalized learning, individual but group, tiered help, attention to learning outcomes, less individual student freedom. Very different space needs**



## Blended Courses

**Blended (hybrid) courses combine fact-to-face classroom instruction with online learning and reduced classroom contact hours (reduced seat time)**

Charles Dziuban, Joel Hartman, Patsy Moskal. Blended Learning. EDUCAUSE. 2004 <http://net.educause.edu/ir/library/pdf/ERB0407.pdf>

### **SRI Study**

<http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>

### **Ithaka Study**

<http://www.sr.ithaka.org/research-publications/interactive-learning-online-public-universities-evidence-randomized-trials>

**Reduced need for classrooms, altered faculty work**





## Online Classes

**Potentially the greatest disrupter of all**

- **Scale**
- **Cost**
- **Features and Tools**
- **Competitiveness**

**Different infrastructure, reduced need for physical facilities, fewer place-based faculty**



# Broad Course Re-Design

## George Kuh *High Impact Practices*

- First-year seminars and experiences
- Common intellectual experiences
- Learning communities
- Writing-intensive courses
- Collaborative assignments and projects
- Undergraduate research
- Diversity/global learning
- Service learning, community-based learning
- Internships
- Capstone courses and projects

George Kuh. High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter. AAC&U, 2008.

Ensuring Quality & Taking High Impact Practices to Scale. AAC&U, 2013.





## Free and Inexpensive Materials

**Free courses: 15,000+ free courses**

**Free textbooks: Temple, Rice, Flatworld**

**Free materials: Open Educational Resources (OER) initiative, \$110 million, Hewlett**

**“One potential ... introductory courses are commodities offered free or close to free.**

**Jeff Selingo. A Disrupted Higher-Ed System <http://chronicle.com/blogs/next/2012/01/26/a-disrupted-higher-ed-system/>**



**Library**: Repository and source of information, but also gathering and learning space.

**Bookstore**: Books: From linear to hyper.

**Offices**: From cloistered to open, from individual to collaborative.

**Campus**: From physical space to physical and virtual space. From rigid boundaries to permeable membrane. Partnerships, community engagement, sharing of resources.



# Changes in Academic Structures

- **Course (set of competencies)**
- **Credit Hour (based on seat time)**
- **Semester (unlike Facebook)**
- **Curriculum (interdisciplinary, community-linked)**
- **Degree (competency, certificates, etc.)**



# Changes in Administrative Practices

- **Outsourcing**
- **Campus Consolidation**
- **Multiple-institutional Courses**
- **Strategic and Corporate Partnerships**
- **Contingent and Flexible Workforce**
- **Alterations in Benefits**



# Categories Will Become Blurred

- **High school / college**
- **Two year / four year**
- **Transfer**
- **Academic Affairs / Student Affairs**
- **Interdisciplinary**
- **Academic Units Based on Topics/Problems**



# Changes in Faculty Work

- **Faculty will work in a networked world --- collaboration of faculty, other experts, and students across time and space.**
- **Faculty will become more interdisciplinary as they also become more specialized.**
- **Many other specialists will be involved in teaching and learning.**





# A Focus on Learning Outcomes

- **New Tools** (*CLA, CAAP, and MAPP*)
- **New Organizations** (*NILOA, New Leadership Alliance, etc.*)
- **New Initiatives** (*Degree Qualifications Profile DQP*)
- **New Pressures** (*Academically Adrift*)
- **New Expectations** (*business, parents and students, government, accreditors*)



## **Old Arguments, New Narratives**

- **Online v. Face-to-Face**  
**(same stupid arguments)**
- **College Algebra**  
**(guess what...not everyone needs it)**
- **Job Preparation or Career Preparation**  
**(a false dichotomy)**



**One important institutional question:**

**What is the unique value  
that your institution adds?**

**What does your institution do that cannot  
be done as well or better by others?**

**The question for faculty members:**

**What is the unique value I add?  
What do I do that cannot be done as  
well or better by someone else?**



# **The Key Institutional Question: What Are We?**

- **Deliverer of Instruction?**
- **Workforce Preparer?**
- **Assessment Center?**
- **Bundler of Credits?**
- **Certifier of Competency?**
  - **Degree Provider?**



# The Key Challenge

How do we educate more  
students, with greater  
learning outcomes, at lower  
costs?



**Our system of higher education  
was originally built on scarcity;**

**Now it has to be re-built on  
abundance.**



**Our system was originally built  
on faith; now it will have to be  
built on evidence.**



**America's economy is caught up in a "race between innovation and calcification--between the power of new ideas to lower costs and boost quality, and the power of entrenched interests to protect their habits and incomes."**

**Matt Miller, Washington Post, September 22, 2010**



**RED BALLOON PROJECT**

*aascc*

# **The Ultimate Question For Our Institutions**

**Can we transform ourselves  
before we are disrupted?**





**RED BALLOON PROJECT**

*aascc*

**The challenge is enormous. We have a confusion of purposes, distorted reward structures, limited success, high costs, massive inefficiencies, and profound resistance to change.**



**RED BALLOON PROJECT**

*aascc*

# **The Pony Express**

## **A Cautionary Tale About Disruption**



# RED BALLOON PROJECT

*aaac*



## PONY EXPRESS

St. JOSEPH, MISSOURI to CALIFORNIA  
in 10 days or less.

➔ **WANTED** ➔

**YOUNG, SKINNY, WIRY FELLOWS**  
not over eighteen. Must be expert  
riders, willing to risk death daily.

**Orphans preferred.**  
**Wages \$25 per week.**

APPLY, **PONY EXPRESS STABLES**  
St. JOSEPH, MISSOURI



## **The Pony Express**

**St. Joseph, MO to Sacramento, CA 1,900  
miles**

**Stations set up every 10 miles (as far as a  
horse can gallop); Riders changed every  
60 to 100 miles.**

**Reduced letter delivery  
from 24 to 10 days**



**Started: April 3, 1860**

**Ended: October 26, 1861**

**19 months later**

**Why?**

**The completion of the  
transcontinental telegraph**





**“It is not the strongest of the species that survives, nor the most intelligent.**

**It is the one that is the most adaptable to change.”**

Attributed (apparently incorrectly) to Charles Darwin





## **RED BALLOON PROJECT**

*aaascu*

**For a detailed discussion of many of the issues  
in this presentation, see:**

**“Challenge and Change.” *EDUCAUSE Review*.**

**George L. Mehaffy. (vol. 47, no. 5. September/ October 2012).**

**<http://www.educause.edu/ero/article/challenge-and-change>**