Universities in an era of economic and technological challenge

Universities **WILL** Change the World

-Everyone wants universities to change, but exactly how is not so clear

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Title: Universities in an era of economic and technological challenge.

- Speaker: Jack M Wilson, President Emeritus and Distinguished Professor of Higher Education, Emerging, Technologies and Innovation.

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- Abstract: Never has more been expected of universities. We are expected to change the world and our communities and create an exciting and successful future for our students. At the same time, we are expected to demonstrate greater accountability and to find ways to meet the raised expectations with much less resource. At one time MOOCs were expected to be the savior of higher education while making education universally available and free. Over time, the flaws in that theory became clear and the pendulum swung to another extreme -with university after university rejecting deployment of MOOCs out of both rational and irrational fears. At the same time, the relentless growth of online education has continued without interruption by great recessions or political upheavals- with over seven million students now participating in online education from very reputable (and somewhat less so) institutions,. Many think that higher education is now in the process of being disrupted by technology in the manner that Clayton Christenson has shown to have occurred in so many other sectors of our economy. He may be right, but may not understand why or how.

The Paradox

- At the same time that universities are facing extraordinary financial pressures due to a collapse of state revenue and endowments
- Everyone is looking to universities to lead us out of the economic decline
- Creating futures for students and communities
- And solving social challenges like
  - improving college readiness
  - Reducing disparities (racial, economic, gender,etc)
  - Increasing graduation rates
  - Attracting students into STEM fields
  - Better matching workforce needs

President Obama's Goal

- To be first the world by 2020 in the proportion of college graduates.
  - -Address to Congress on Feb. 24, 2009.

- The US was tied for 6th place at 30% according to 2006 data.

How can we do this?

- The **only way we can possibly approach these goals** is through a much more intense focus on professional education, continuing education, online learning and technology enhanced learning – from MOOCs to flipped classrooms..

- Otherwise we do not have the traditional capacity to meet the increased needs for both quality AND quantity.

  - Need to deliver educational experiences to K-12 that are not presently uniformly available.

  - Improve success, retention, persistence, and graduation rates through higher quality learning experiences.

  - Reach students unable to participate in traditional learning settings for a variety of reasons.

- Are we ready?

The Catalyst for the Future

- What do Boston, Bombay, Beijing, Bangalore have in common with

- San Francisco, Austin, Raleigh, Cambridge, and other world economic leaders?

- They are vibrant economic regions nucleated by world class universities.

- The President is right: we must do better!

The Secret Sauce?

- Universities pouring out highly educated graduates with skills and intellectual property.

- World class research that is curing illnesses and creating new jobs, companies, and even entirely new industries.

- And doing this at very large scale.

The Path

- The path to economic and social development in the world goes through our world class universities.

But all is not well!

- Many think that Higher Education **costs** too much

- Higher Education has not yet taken full advantage of the research into how students learn –**cognitive** sciences.

- Higher Education reflects **disparities** in access and quality

- While **technology** has certainly pervaded higher education, it has not as significantly changed it.

Higher Education costs too much?

- This widely held political position is most notable for the lack of understanding of why this might be –if indeed it really is!

- Nonetheless- we should buckle our seatbelts for a ride to drive down the cost of higher education -and many of the "well meaning" efforts will be far more damaging than helpful. Some will be downright foolish
    - like government attempts in Florida and Texas to mandate $10,000 bachelor's degrees –based upon political rather than academic considerations.
    - "New University of California," an institution with no faculty and no tuition

The $10,000 degree?

- **Gov. Scott challenges community colleges to offer $10,000 degrees**
  - As more and more students struggle with college affordability, Florida is planning to offer a $10,000 bachelor's degree (Miami Herald –Nov 26, 2012)

- **23 Florida Colleges Accept Governor's $10,000 Degree Challenge**
  - All 23 institutions in the Florida College system that offer bachelor's degrees have accepted a challenge from Gov. Rick Scott to create degree programs that will cost no more than $10,000 in tuition over four years, the governor announced on Monday. (Chronicle Jan. 28 2013)

- **Texas Could Offer a Stripped-Down Degree for Just $10,000, Commissioner Says (Chronicle Apr 27, 2000)**

- **$10,000 Bachelor's Degree Is Proposed in California Legislation**
  - Assemblyman Dan Logue, a Republican, has introduced a bill to create a pilot program for students to earn a bachelor's degree at a cost of no more than $10,000. (Chronicle Jan 3, 2013)

But far too many are in denial

- While change has actually been rather large scale, the conventional wisdom is that there has been little change.

- It is also probably accurate to say that even the large scale changes have not penetrated the culture of higher education nearly as much as necessary.

- There is no shortage of contrarian voices that decry even those changes that HAVE occurred.

- The disparity is creating a vacuum into which politics is inevitably drawn.

Are MOOCs the next dot-com bubble fad?

- Or are they the real thing?

- Remember that in the deployment of any new technology (or idea) most efforts fail and only a few succeed.

- BUT….. the result of the dot-com bubble was a totally transformed US economy with many extraordinarily successful enterprises like Amazon, Google, Yahoo, Facebook, Apple (which was nearly dead!), Microsoft (which just kept getting bigger!), and so on.

- Today's economy is quite different from that of 1990. How consumers interact with retail, or even more traditional utilities, is transformed.

- Some folks figured out the economics and sociology, and others just went with the hype!

- I suspect the same in higher education.
  - Most of these projects will fail, but universities will be transformed.

Are MOOCs going to change the world

- Too late. The world already changed without MOOCs even if Stanford, Harvard, MIT and others had not noticed!
- "the vast majority of people who sign up for MOOC's don't complete their courses, yet MOOC creators are hailed as visionaries rather than being denounced for their 10-percent completion rates" –Kevin Carey –Chronicle Blog

- MOOCs are interesting and valuable experiments, but they are not on the critical path of online education –at least in their current form. BUT……
- Online education is changing the world, and MOOCs can be a part of that.

Massive Open Online Courses MOOCs

- Kahn Academy -2006
  - Salman Kahn –non-profit -2006
- Udacity -2012
  - Sebastian Thrun, Stanford - for-profit
- Coursera -2012
  - For-Profit – Andrew Ng, Daphne Koller, Stanford
- edX (MITx -2011 and edX in 2012)
  - Harvard, MIT, Berkeley –non-profit
- Udemy -2010
  - Eren Bali and Gagan Biyani –for profit

The Biggest Myth of MOOCs

- Education will be free –or at much lower cost.

- "How can colleges charge $50,000 a year if my kid can learn it all free from massive open online courses?"

  --Thomas Friedman –NY Times March 5, 2013

- "The question is not just whether MOOCs are going to disrupt traditional education, but how. Is it just about lower costs and access?"
  -Clayton Christensen, Harvard

- The threat is to the random little-known accredited college and the person you've never heard of who is employed there teaching garden-variety, highly-replicable three-credit courses. As Thrun credits become widely accepted, people will be less willing to pay for the other kind. -Kevin Carey, Chronicle of Higher Ed. Dec. 14, 2011.

  - Wilson: doubtful

MOOCs are not cost free.

- They look cost free because they have been done on the margin by outstanding faculty who wish to devote the time to create them, but who may not wish to continue to devote the time to operate then and revise them with the change of both content and technology.

- The unit cost can indeed be made lower by large scale use, but that does not take into account the costs of other portions of a learning environment that do not demonstrate the economies of scale.

- People do not pay for content, they pay for something much larger.

An example from the past:
Content and the Value Chain

□ "Given what MIT has done (OCW), how can UMassOnline compete?" – **Boston Globe** reporter in 2002

What MIT provides

• **Course materials**

No access
• **Reputation**
• **Courses**
• **Faculty**
• **Credentials**
• **Curriculum**
• **Students**
• **Alums**
• **Library**
• **Facilities**

Vintage Slide: AAC&U November 2003
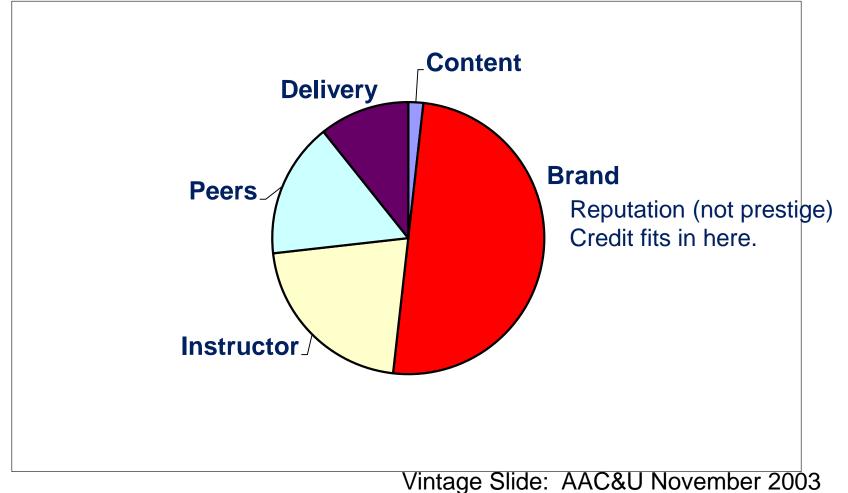
Content?

- ☐ The smallest part of the value chain.

- ☐ A Techno-MBA Course that I taught at RPI
  - ◘ 75-125 students (business execs)
  - ◘ **$ 3000** per student (indicator of value?)
  - ◘ A book might be **$50** (content)
  - ◘ MOOC or Web site is open and free
  - ◘ Revenue: **$225,000 - $375,000**
  - ◘ One faculty, one full time TA

- ☐ Content is king?
- ☐ What do students REALLY pay for?

Vintage Slide: AAC&U November 2003

The Value Chain

What do students want and pay for?

Content

Delivery

Peers

Instructor

Brand
Reputation (not prestige)
Credit fits in here.

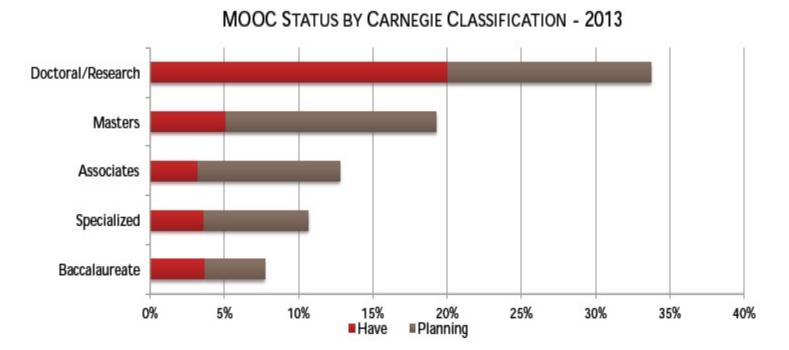Vintage Slide: AAC&U November 2003

Sloan-C- More on MOOCs

- The percent of higher education institutions that currently have a MOOC, increased from 2.6 percent to 5.0 percent over the past year.

- The majority of institutions (53 percent) report they are still undecided about MOOCs, while under one-third (33 percent) say they have no plans for a MOOC.

- Only 23 percent of academic leaders believe that MOOCs represent a sustainable method for offering online courses, down from 28 percent in 2012.

- A growing proportion of academic leaders have concerns that credentials for MOOC completion will cause confusion about higher education degrees (64 percent in 2013, up from 55 percent in 2012).

Doubts About MOOCs Continue to Rise, Survey Finds (Chronicle January 15, 2014)
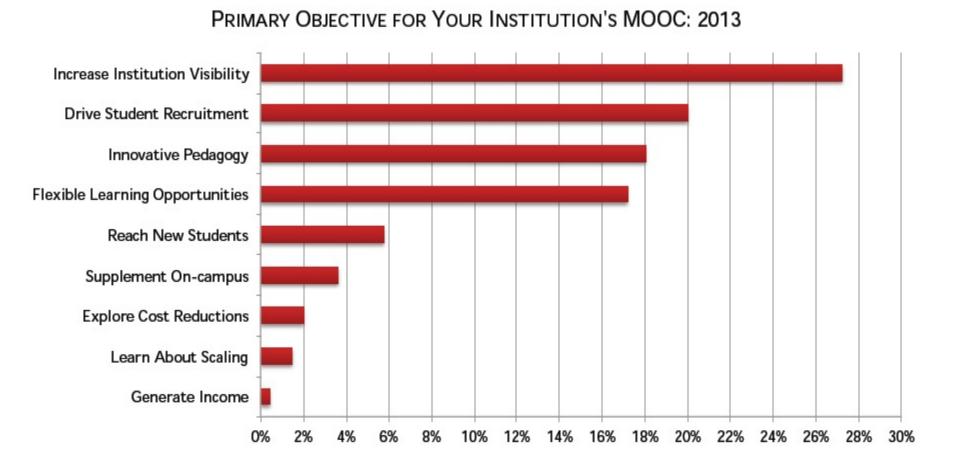
- Description of the most recent Sloan Foundation –Babson Survey Report

- The hope and hype: Disrupting Higher Education
  - Clayton Christenson, Harvard
  - MOOCs made no significant inroads in the past year in the existing credentialing system in higher education, calling into question whether they will be as disruptive to the status quo as some observers first thought.

- The fear of faculty:
  - Still, academic leaders remain worried that "credentials for MOOC completion will cause confusion about higher-education degrees."

MOOCs predominate in larger institutions

- Sloan-C Survey

MOOC STATUS BY CARNEGIE CLASSIFICATION - 2013

Why they do MOOCs? (Sloan-C)

PRIMARY OBJECTIVE FOR YOUR INSTITUTION'S MOOC: 2013

The dangers of hype

- Students get hurt by well meant, but poorly designed experiments.
- Money gets wasted at a time when every dollar is precious in higher education
- Good ideas get discredited by over-reaching and then failing.

- To anyone in the audience that I offend, I offer this prior apology but…..
- I hope that it encourages you to adopt a position of scientific skepticism and innovative optimism.

MOOCs hit the iceberg

- "Angered by MOOC Deals, San Jose State Faculty Senate Considers Rebuff" –Chronicle, November 18, 2013

- "Credit-for-MOOCs Effort Hits a Snag" -Chronicle, Jan. 17, 2014
  - "*we did not have reports of students asking for credit for MOOCs at the universities*" Tracking the ACE program

- "edX Drops Plans to Connect MOOC Students With Employers," Chronicle Dec. 16, 2013
  - *In a pilot job-placement program, edX recruited 868 high-performing students from two computer-science MOOCs at the University of California at Berkeley. But it didn't pan out. Of those 868 students, only three landed job interviews. None was hired.*

- "*We were on the front pages of newspapers and magazines, and at the same time, I was realizing, we don't educate people as others wished, or as I wished. We have a lousy product,*" -Sebastian Thrun, Fast Company Magazine –Jan 2014.

More trouble for MOOCs

- **"Harvard, MIT Online Courses Dropped by 95% of Registrants" Bloomberg News Jan 21, 2014**
  - Out of 841,687 registrants in 17 courses offered in 2012 and 2013 by the universities' joint EdX program, 43,196 saw the classes to conclusion.
  - -http://www.bloomberg.com/news/2014-01-21/harvard-online-courses-dropped-by-95-of-registered-study-says.html

Even More Trouble for MOOCs

- "**Data Mining Exposes Embarrassing Problems for Massive Open Online Courses**: Not only does student participation decline dramatically throughout the new generation of Web-based courses, but the involvement of teachers in online discussions makes it worse."
  - MIT Technology Review, December 18, 2013
    - (http://www.technologyreview.com/view/522816/data-mining-exposes-embarrassing-problems-for-massive-open-online-courses/)
  - JMW: the teacher involvement issue may be understandable as more of an instructional design issue.

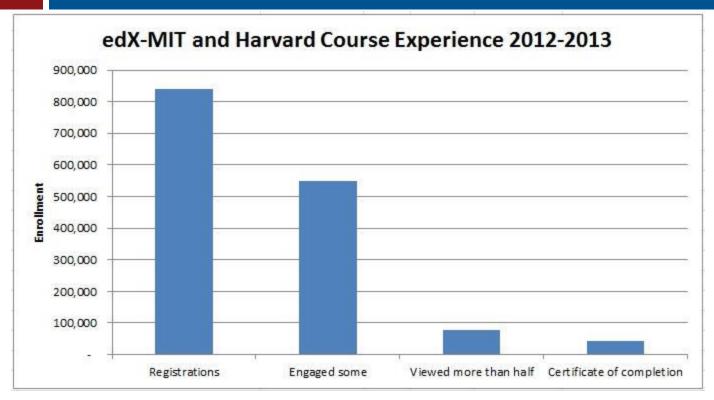# "MIT and Harvard release working papers on open online courses"

☐ Research findings challenge common misconceptions, offer surprising insights about how students engage with MOOCs"

- http://web.mit.edu/newsoffice/2014/mit-and-harvard-release-working-papers-on-open-online-courses-0121.html

- http://www.jackmwilson.com/ArticlesTalks/MOOC-report-edX-MIT-Harvard.html

☐ Report assertions:
Takeaway 1: Course completion rates, often seen as a bellwether for MOOCs, can be misleading and may at times be counterproductive indicators of the impact and potential of open online courses.

Takeaway 2: Most MOOC attrition happened after students first registered for a course. On average, 50 percent of people left within a week or two of enrolling. After that window, attrition rates decreased.

Takeaway 3: Given the "massive" scale of some MOOCs, small percentages are often still large numbers of students — and signify a potentially large impact.

MIT: Glass half full

edX-MIT and Harvard Course Experience 2012-2013

- Don't even ask what "completion" means!
- But is certainly does not mean tested competence or that academic credit would be granted.

What MOOCs Bring to the Party

- Most importantly they bring a recognition by the brand name universities that online education has changed the world and they almost missed the bus!

- They encourage faculty who have not been involved to become involved.
  - Faculty who get involved in online education become more self reflective on teaching and learning.

- They create good content presentations with (in the best of them) built-in assessment tools for student self assessment of progress.

- They generate interest in the press that the larger and more successful online programs never have!

- They attract venture capital to the education space.

- They create a data rich learning environment that can provide extensive data to help us understand how students learn through cognitive research.

What MOOCs need to work on

- Content and self assessment do not constitute a learning environment (More on that on a future slide)
- The large numbers of users is vastly inflated by window shoppers.
  - exponential drop-off power law that characterizes participation in today's MOOCs (i.e., the final course lectures have 5% the viewing rate of the earliest lectures).
    - Mehran Sahami, Stanford University at SIGCSE
- The percentage of students who successfully finish is tiny.
- Credit is not (usually) given by the institutions creating MOOCs.
- MOOCs thus far are **courses not curricula**
- MOOCs do not (generally) provide the kind of engagement that has been shown to encourage learning. (See George Kuh….)
- Some assume that although their "good" institutions will never use MOOCs, that this will be a charitable donation to the "lesser."
  - Data on that is coming in the next slide

What do the Professors Creating MOOCs Think?

- Some results are what most of us would expect.
    - It takes an extraordinary amount of work to create a MOOC and even more to create a good one!
    - Faculty had to do this on their own time and did not get credit of doing this through their teaching load assignments.
- Some of the results are more revealing:
    - **75%** of the respondents did not think that MOOCs would significantly reduce costs at their institution (35% none and 40% marginal).
        - That certainly goes against the conventional wisdom! "*everyone at the US Dept. of Ed thinks that MOOCs finally will help to make significant cost reductions in higher ed*!" –Dept. Of Ed. Official.
    - **72%** of those teaching MOOCs did **NOT** think that students who successfully completed their MOOC should get academic credit at their own institution, and **66%** believe that they **NEVER** would grant that credit.
        - The article makes that a positive in that 28% actually DO think they deserve credit. Some truth to that.
- The most revealing result: When those same two issues were explored for **SOME OTHER** institution, the respondents thought that they might have **far more impact**.
- At this point, those involved with MOOCs are quite **excited** about the possibilities, **daunted** by the work required, and convinced that they will not significantly change their institution, but that they might change **others**.
    - **http://chronicle.com/article/The-Professors-Behind-the-MOOC/137905/?cid=at&utm_source=at&utm_medium=en#id=overview**

The creator of MOOCs is now at the Gates Foundation, and he has always seen a different path

□ And decades later—in 2008, when he was a researcher at the University of Manitoba—he helped invent the massive open online course, or MOOC. In the hands of other academics at better-known institutions, MOOCs evolved into something much different from Mr. Siemens's original vision.

January 13, 2014

George Siemens Gets Connected

Chris Bolin for The Chronicle

George Siemens cites his Mennonite upbringing as inspiration for his theories about how knowledge can be distributed in networks, whether small religious communities or MOOCs.

The 3 C's - the forces on education -*

- **Computers**
- **Communication**
- **Cognition**
- Many of the innovations that catch the eye of the public do a good job on the first two and a lousy job on the third.
- We know much more about how students learn, and learning environments need to change to create the engagement that leads to student learning.
- That is indeed happening at many places
        The NCAT, NRC Report, White House Conferences

* **"Using the Computer in Teaching Physics," J.M. Wilson, Physics Today 42(1) (January 1989).).**

NRC Report: On Engagement

☐ An overarching theme has emerged from educational research: *Learning improves when students are interactively engaged with their peers, their instructors, and the material being learned, and when they are integrating the newly learned concepts with their previous ideas, whether learned in a formal classroom or in everyday life.*

☐ While this statement does not sound revolutionary, it does emphasize that success in physics learning is more strongly determined by how successfully and frequently students are engaged in the learning experience than by the content knowledge or the delivery skill of the instructor. This research finding does not devalue an instructor's role, but it indicates the most accessible path to improving effectiveness.

NRC Report sees hope

- creation of new instructional tools that can be incorporated into conventional course structures and then measured learning outcomes with these new tools.
  - student response systems (or "clickers") that can help make lectures interactive;
  - interactive small group activities based on research about specific conceptual difficulties;
  - structured collaborative group work;
  - undergraduate peer instructors or "Learning Assistants;"
  - computer-based laboratory instruments and software to facilitate real-time data collection and analysis; and
  - Web-based systems for simulations, class preparation, lectures, and homework.
  - Other physics education researchers have focused on wholesale course redesign, creating unified in-class activities where students work together to make sense of concepts, problems and experimental phenomena rather than maintaining the traditional separation of lecture, recitation, and laboratories.

1. Materials primarily for use in lecture sessions or lecture-based courses

- Polling students, using flashcards or Personal Response Systems (also known as "clickers") has become prevalent in large lecture classes as a mechanism for motivating student engagement.

- Clickers (handheld IR or RF transmitters), allow the rapid and convenient collection and display of student responses to multiple-choice questions posed by the instructor.

- These facilitate interactive engagement techniques even in large lecture classes by encouraging discussion among peers and by giving real-time feedback to students and instructors. Because these devices are easily used in most existing classrooms and lecture halls as an adjunct to traditional learning environments, they have found wide application.

2. Materials primarily for the laboratory

- Laboratory experiments in physics courses serve many purposes, of which developing conceptual understanding is only one. For this purpose, computers equipped with data acquisition devices and analysis software offer an advantage over more traditional techniques (*e.g,* using meter sticks, timers, etc.) by allowing rapid, or even real-time, display of results, bypassing the need to tabulate data and make graphs by hand.

- For example, students can graph their own position, velocity, and acceleration in real-time, perhaps attempting to move in such a way that produces a particular graph, a strategy that can help address specific student difficulties in relating position, velocity and acceleration.

- Sensors and entire laboratory activities exist for a broad range of topics in introductory physics.

- Sophisticated but easy-to-use video analysis tools allow students to make direct measurements of the motion of objects in digital videos supplied by an instructor, found on the web, or made by students themselves using inexpensive digital cameras or even their "smart phones." The rapid production of graphs and other representations can help students focus on the physics concepts and enable discussions among peers.

- Modeling toolsets facilitate student participation in an important aspect of physics: the construction of a simplified model, particularly a mathematical model, of a physical process and the subsequent exploration of the relationship between the model and the actual phenomena while noting the limitations of the models.

3. Fully integrated courses

- While many of the methods listed here can be incorporated into existing course structures as part of lectures, labs, recitations or homework, at some institutions, the entire traditional courses structure has been replaced. New courses that integrate direct instruction (if any), with laboratory experiments, discussions, and problem solving exercises allow the introduction of different activities with different goals when appropriate, rather than according to a predetermined timetable.

- Many of these fully integrated courses feature "**studio-style**" classrooms with large tables, equipped with computers, that facilitate discussions among students. These approaches also promote coherence and consistency, which is difficult to achieve when different elements of a courses are developed and implemented independently, as is often the case.

4. Tutorials and problem-solving worksheets

- "Tutorial" has become a generic term for research-based worksheets primarily intended for use in small sections that supplement instruction in lectures and labs. Tutorials are designed to lead students, working with small groups of peers, through the reasoning processes involved in constructing, interpreting and applying fundamental concepts.

- Because many introductory physics courses have a lecture-lab-recitation structure, the introduction of tutorials in place of some or all recitations often requires little or no additional investment of faculty or teaching assistant (TA) time. However, as with all research-based instructional approaches that depend on TAs, their preparation is critical for the effective implementation of tutorials.

5. Computer simulations, intelligent tutors and pre-instruction quizzes

- Carefully constructed and tested simulations make visible what was previously invisible. For example students can watch microscopic models in action (electrical current, magnetic fields, gas molecules, etc.), examine how electrical, potential and thermal energy change during mechanical processes, and explore the shapes of wavefunctions associated with different potentials. All of these can facilitate instruction by helping students focus on the most important phenomena, by giving them access to richer representations (3-D models, etc), and by allowing them to explore the implications of increasing or decreasing friction, gravity, etc.

Online homework is now the norm in college physics.

- The two largest online homework systems in physics, MasteringPhysics.com and WebAssign.com, have nearly 400,000 unique users in physics per year, and together are used in more than 1/2 of over 300 US colleges surveyed recently. Homework systems by various other publishers reach an additional 20% of these colleges.

- A large fraction of students complete and submit assignments online, providing them with instant feedback and instructors with a report containing a wealth of data for analysis.

- In many cases the decision to adopt online homework systems is made for economic reasons, but many systems offer educational advantages as well.

Cognition

- My involvement with the recent National Research Council report reminded (and saddened) me to note that educational innovation often reinvents the wheel rather than advancing our understanding
  - –based upon the research on the way students learn.
- There are notable exceptions like:
  - The National Center for Academic Transformation
  - The Rensselaer Studio Courses
  - Carnegie Mellon Open Learning Initiative (OLI).
  - Many others but not enough.

TheNCAT –A brief mention

- Whenever anyone suggests that you cannot simultaneously enhance **quality**, **access**, and **cost** in traditional universities, I always ask them to look at the website of the National Center for Academic Transformation –founded right here at RPI.

- Conventional wisdom is that universities do not change, but many do –and many are documented here.

- It is particularly notable because many of these reforms were driven by research in the cognitive sciences and make student engagement paramount.

Rensselaer Studio Courses

- In the 1990's RPI led a nationally prominent effort to use the three C's of Computing, Communications, and Cognition to create new approaches to large enrollment courses

- The 200% Solution (A massive investment in student computing)

- The Rensselaer Studio
  - Calculus, Physics, Chemistry, Electrical Engineering, etc.
  - Won the Theodore Hesburgh Award, the Pew Charitable Trust Prize, the Boeing Prize, and many more.
  - Inspired the founding of the National Center for Academic Transformation with $8.8 million from the Pew Charitable Trusts.

- The Rensselaer Mobile Computing Initiative

The Reality of Online Education transcends

- If one reads the traditional press coverage of online education it is dominated by either
  - Skepticism
    - Can students learn?
    - Cheating
    - etc
  - Hype
    - MOOCs will change the world and make higher education obsolete
    - The hyper prestigious universities drive the change
- **Not!**
- So what is the reality and the future?
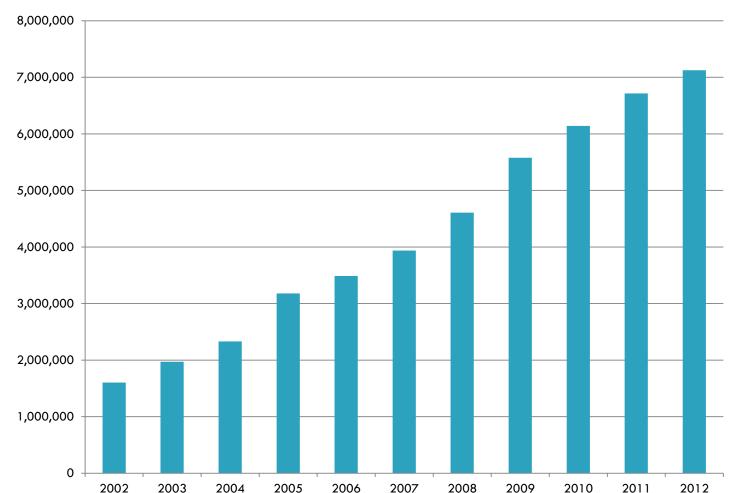
Nov. 2003 Press:
Has Online Learning failed?

- In November of 2003, the press was ready to pronounce online learning dead!

- Hardly!

- The rapid demise of Fathom, Cardean, Pensare, Virtual Temple, Harcourt University, Caliber and others

- The Red Sox, the Cubs, and 29 other teams didn't win the world series again this year either.

  - (ed. remember this was **2003**!)

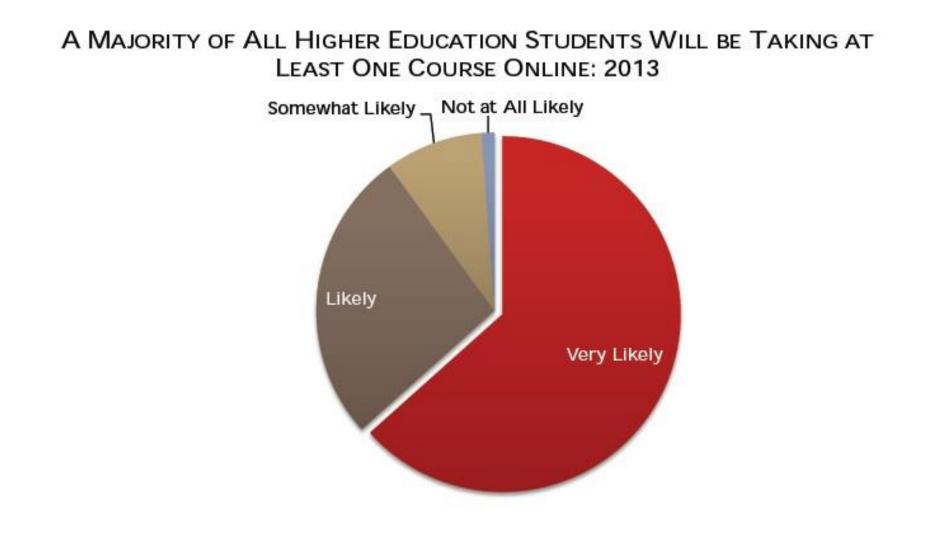- Just like baseball, distance learning has it's winners and losers!

Vintage Slide: AAC&U November 2003

Relentless growth nationally 2002-2012

Sloan-C- Growth in Online Fall Enrollments

Sloan-C -Is it likely?

A MAJORITY OF ALL HIGHER EDUCATION STUDENTS WILL BE TAKING AT LEAST ONE COURSE ONLINE: 2013

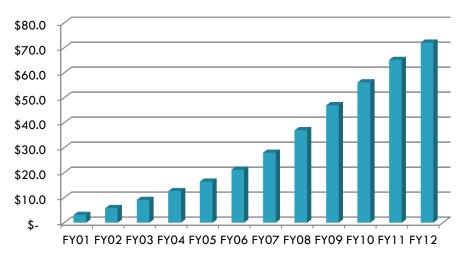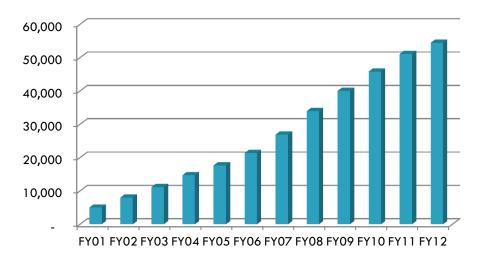Somewhat Likely — Not at All Likely

Likely

Very Likely

Sloan-C Annual Survey -2013

- 7.1 million of higher education students are taking at least one online course. (7,126,549)

- The 6.1 % growth rate represents over 400,000 additional students taking at least one online course.

- The percent of academic leaders rating the learning outcomes in online education as the same or superior to those as in face-to-face instruction, grew from 57% in 2003 to 74% in 2013.

- The number of students taking at least one online course continued to grow at a rate far in excess of overall enrollments, but the rate was the lowest in a decade.
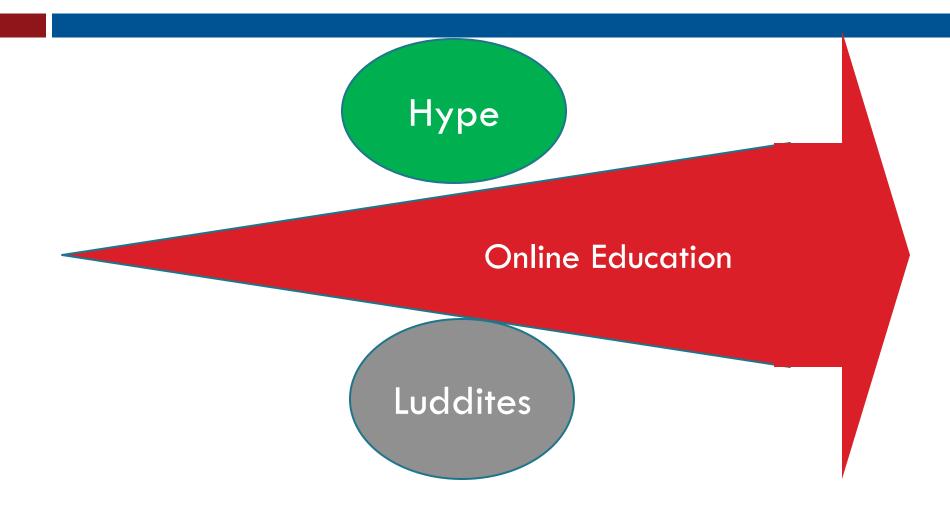
UMassOnline Growth 2001-2012

Revenue ($ Millions)

Enrollment

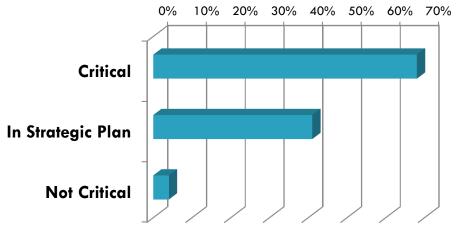# A Relentless Force that Will **Not** Be Denied

American Public and Land-grant Universities

- APLU-Sloan Survey -2009
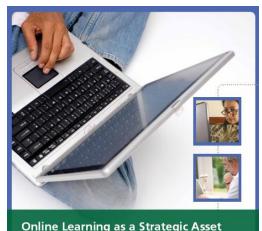 - Strategic Importance of Online Learning
    - interviews conducted with administrators, faculty, and students at 45 public institutions across the country and more than 10,700 responses from faculty across the spectrum of teaching positions – tenure/non-tenure track; full- and part-time; and both those who have and those who have not taught online
- Critical to long-term strategy of institution   - 68%
- Represented in institution's strategic plan   - 41%
- Not critical to long term strategy   -   4%

Online Learning as a Strategic Asset

- Survey revealed that President's know that continuing education and distance learning needs to part of the strategic plan,

- However, many of them **were not well equipped by past experience** to understand how these programs, once considered peripheral, could become an **integral tool of their institutions strategic plans**.

Benchmarking Study Results
The Opportunities

☐ Everyone teaches – stereotypes are not correct

☐ Faculty are motivated by student needs

☐ Faculty recommend online

☐ Faculty with online experience are more positive

Benchmarking Study Results
Imperatives for Campus Leaders

- Administrators need to know who is teaching online and why
- Campus leaders need to develop creative ways to recognize and reward faculty
- Faculty and administrators need to resolve issues around perceptions of quality
- Online initiatives must be routinely reviewed and assessed to identify and address needs and opportunities as they arise

Institutional Interviews
Key Observations

- Integrate online into institutional planning, academic structure
- Review and assess routinely over time
- Develop reliable financing mechanisms
- Develop adequate and consistent resources for both faculty and students
- Engage senior leadership

Summary

- Universities have changed rather radically in many ways.
    - Meteoric rise of online learning
    - Involvement in economic development
    - Deployment of 2 of the 3 C's
    - Disinvestment by government
- The future will continue to be quite a challenge for leaders of higher education.
- Technology is indeed changing higher education, but in ways more consistent with academic values than external propenents understand.
- Universities that are in denial will experience the most difficulty.

Thank you.

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