

Online Learning:

Evolution or Revolution?

The relentless advance of online learning
-Neither hype nor negativity can stop it.

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October 10 2012



University of Massachusetts

Amherst • Boston • Dartmouth • Lowell • Worcester • UMassOnline

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.



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 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

- I love to say:
- “The path to economic and social development in Massachusetts goes through the University.”
- It is fair to say that the path to economic and social development in the world goes through our world class universities, and through the continuum of world class education from K-Retirement.

Change



- But it is not your father's (or mother's) university any more.
- The Ivory Tower has cross-pollinated with the Silicon Village through the information superhighway to create:
- A more engaged university – in many ways fulfilling the 21'st century vision of the original land grant mission.

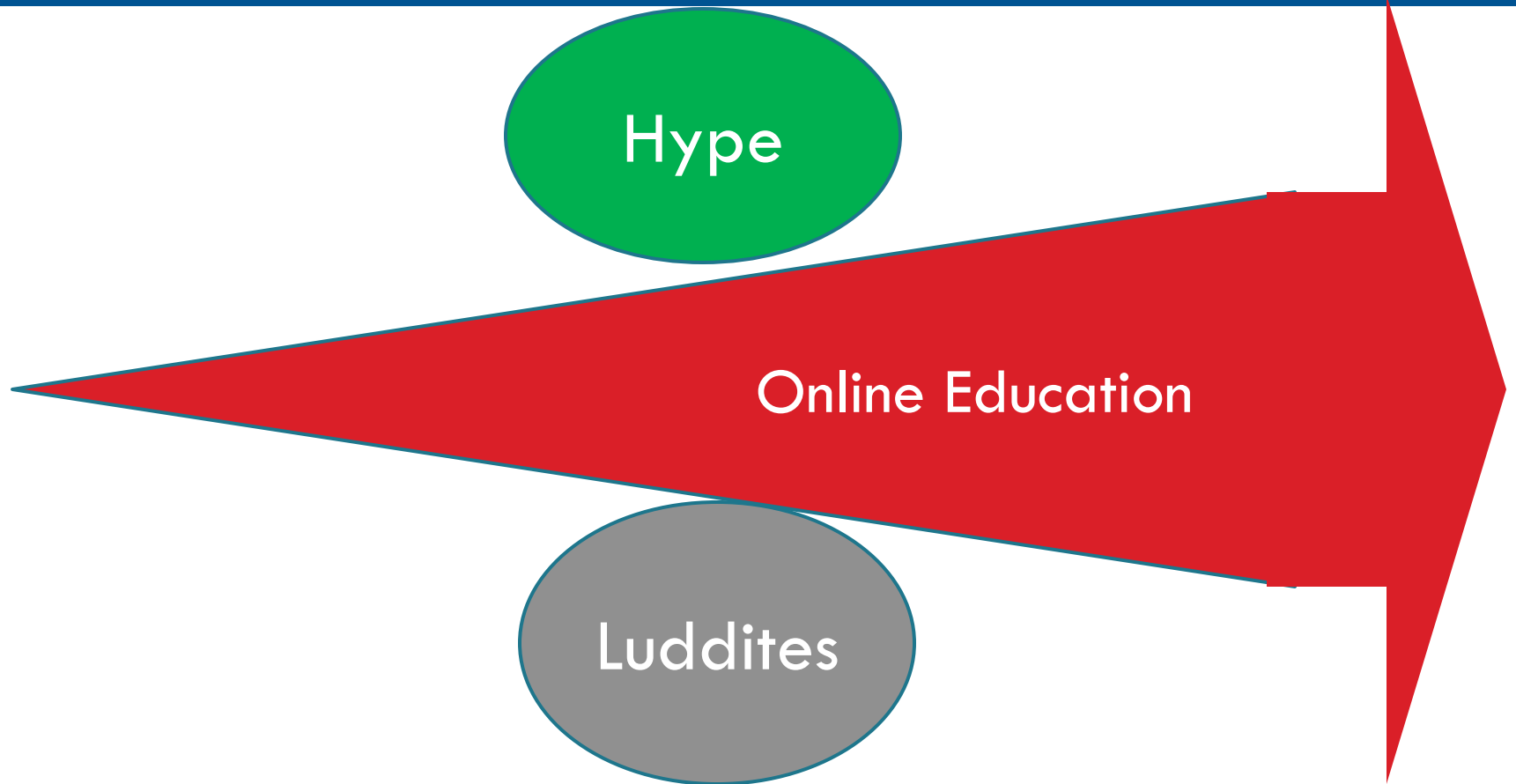
How can we do this?

- The **only way we can possibly approach these goals** is through a much more intense focus on online learning and technology enhanced learning.
- 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 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?

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



Online Education: A Strategic Tool

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- While most faculty use online technology to support their teaching, too few institutions systemically and institutionally support a portfolio of programs that can be completed at online and at a distance
- However, for many institutions, distance and online learning is becoming an indispensable part of their strategic plans
 - A tool that can reach diverse communities of learners in an efficient, sustainable way
 - Providing additional financial resources to institutions.

APLU Initiative in Online Learning

- Grant from Sloan Foundation to *create a cadre Presidents and Chancellors knowledgeable about the strategic value of online learning*
- Established APLU-Sloan National Commission on Online Learning (Jack Wilson, President, University of Massachusetts, Chair; seven Presidents; and other senior administrators)
- Commission Strategies:
 - Understand the knowledge base and experience of Presidents/Chancellors re: online learning
 - Target the key priorities and concerns of senior leadership
 - Determine the potential of online learning to serve as a strategic tool to address those issues
 - Develop strategies/resources that could assist Presidents and Chancellors in overcoming barriers limiting the strategic utilization of online learning

Online Learning as a Strategic Asset

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- APLU-Sloan Benchmarking Study: Online Learning as a Strategic Asset
- First survey of Presidents and Chancellors regarding their attitudes and experiences regarding online learning. A significant study:
 - Surveyed more than 850 people, including more than 300 Presidents/Chancellors.
 - Institutions in this study represent more than 1 million students and more than 100k online enrollments.
- The Overarching Question: Are Universities equipped to respond to this challenge?

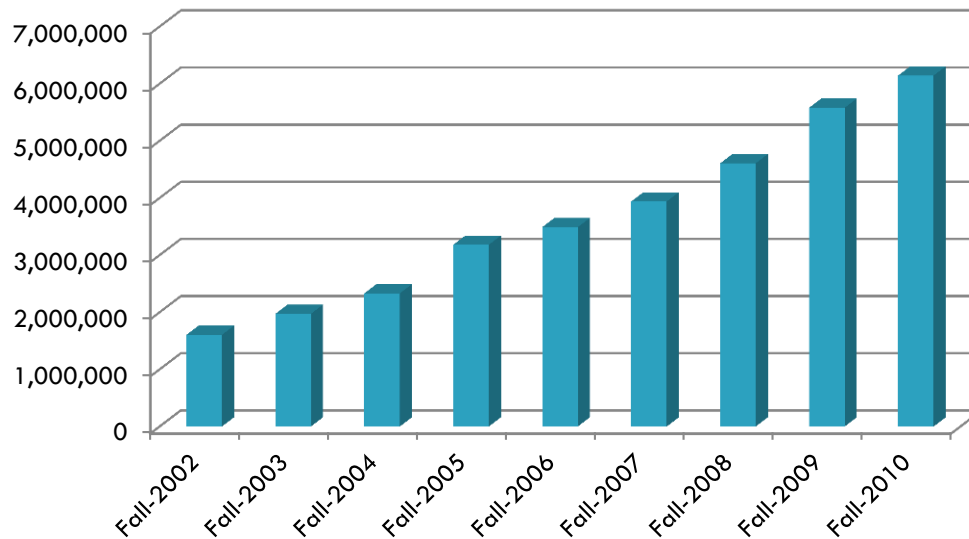
APLU-Sloan National Commission on Online Learning

- Surveys:
 - ▣ APLU Presidents and Chancellors
 - ▣ Tribal Colleges and Universities Presidents
 - ▣ NAFEO Presidents and Chancellors

- 27 dialogue events:
 - ▣ 850 participants; 300+ CEOs

Key Survey Findings: Is there a disconnect?

Students Taking at Least One Online Course



Strategic Importance of Online Learning

Critical to long-term strategy of institution

Represented in institution's strategic plan

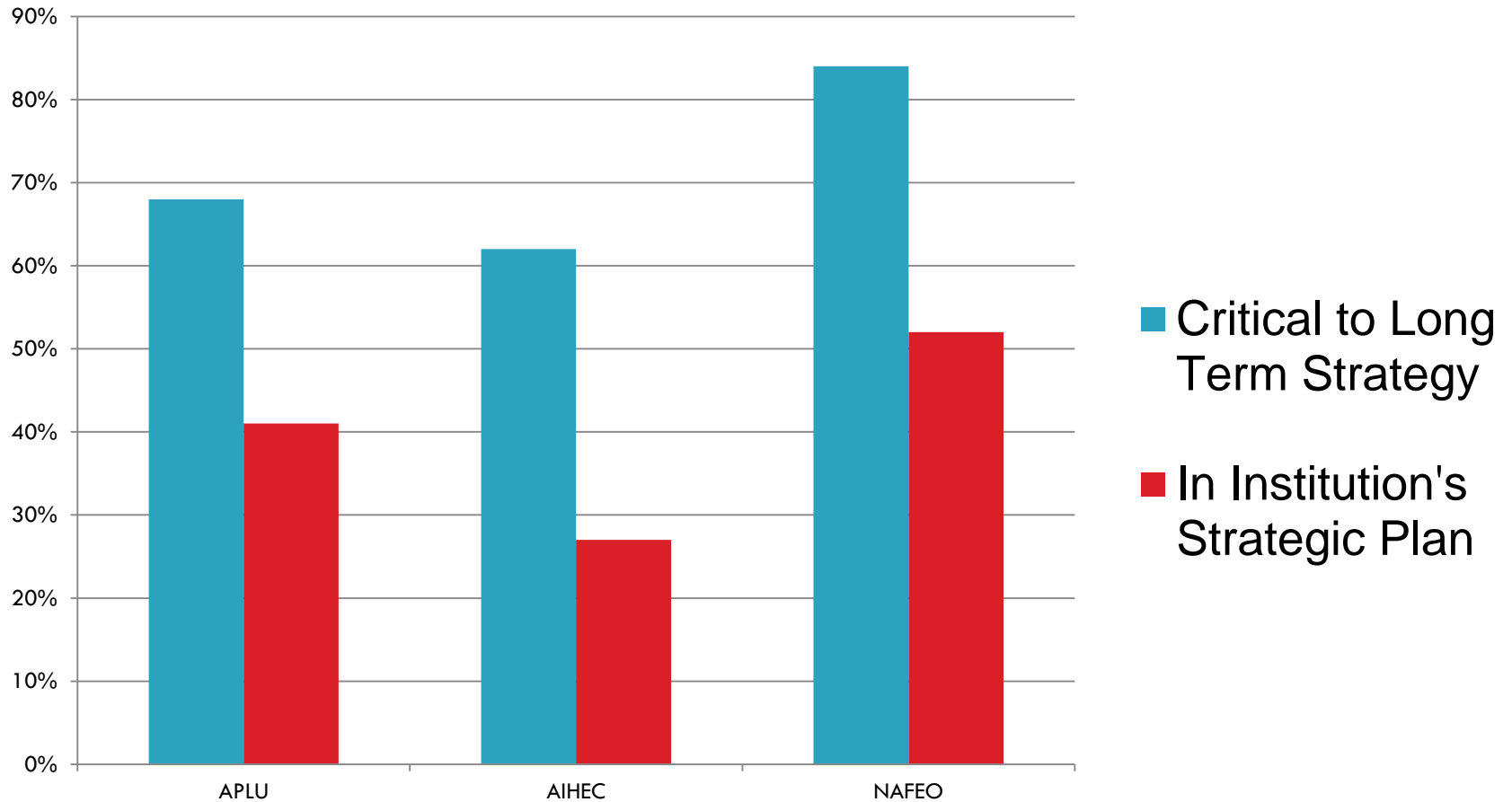
Not critical to long term strategy

APLU- 68% AIHEC – 62% NAFEO – 84%

APLU- 41% AIHEC – 27% NAFEO – 52%

APLU- 4% AIHEC – 15% NAFEO – 7%

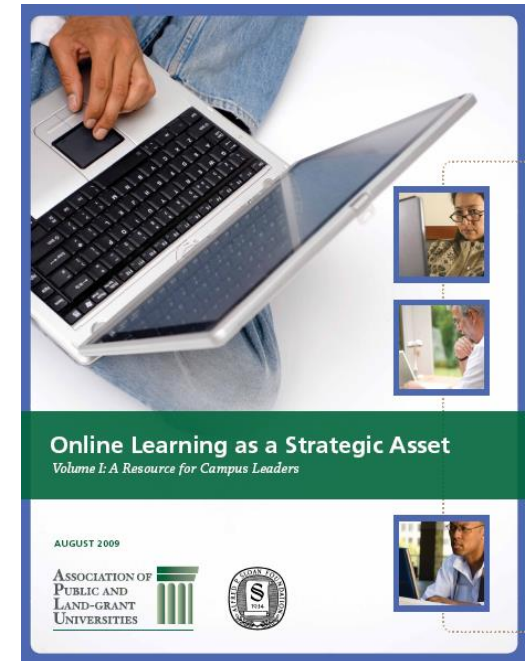
There IS a disconnect!



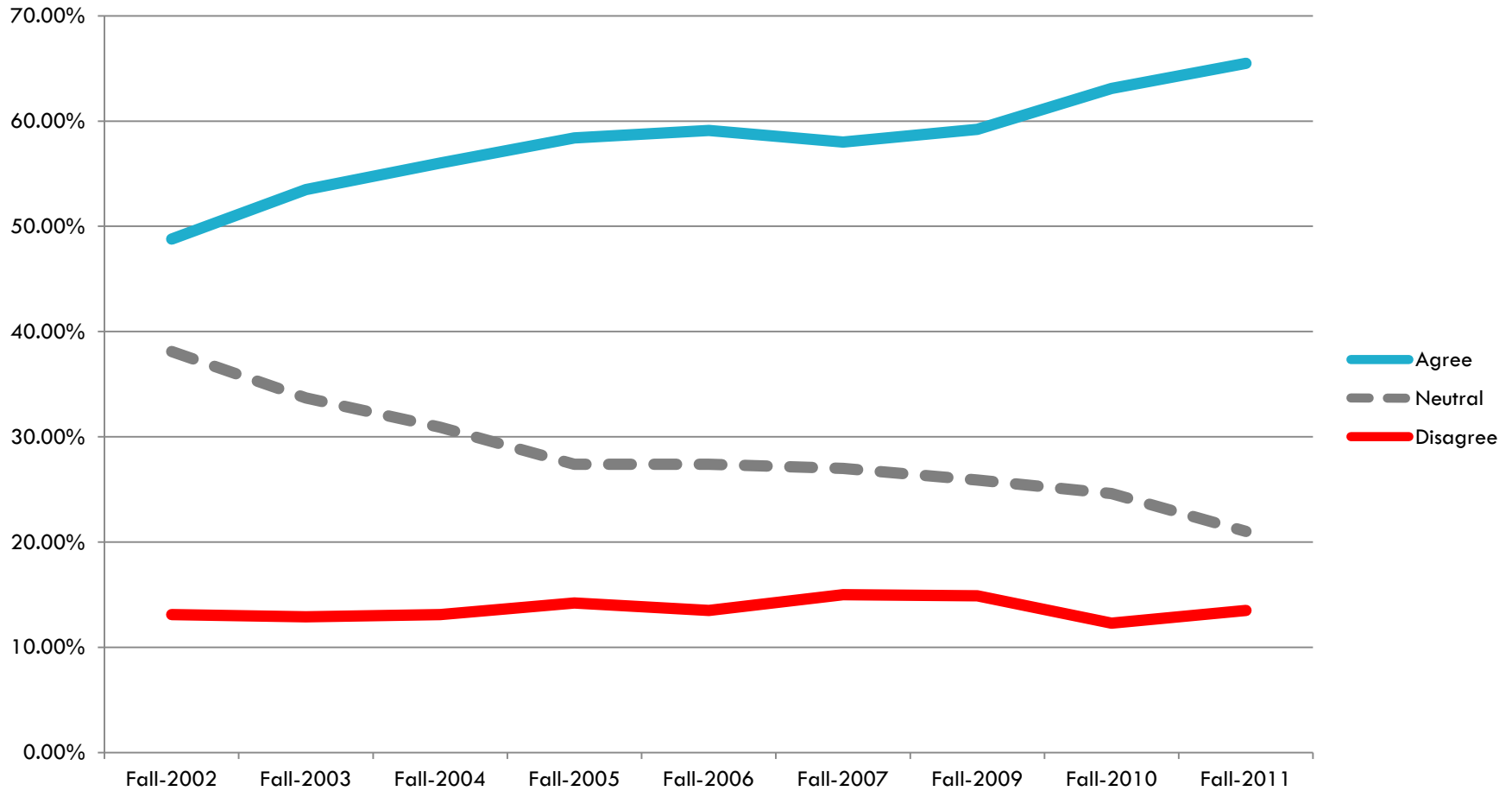
Online Learning as a Strategic Asset

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- Survey revealed that President's know that 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.**



ONLINE EDUCATION IS CRITICAL TO THE LONG-TERM STRATEGY OF MY INSTITUTION -- FALL 2002 TO FALL 2011 - Babson Survey



Online Learning as a Strategic Asset

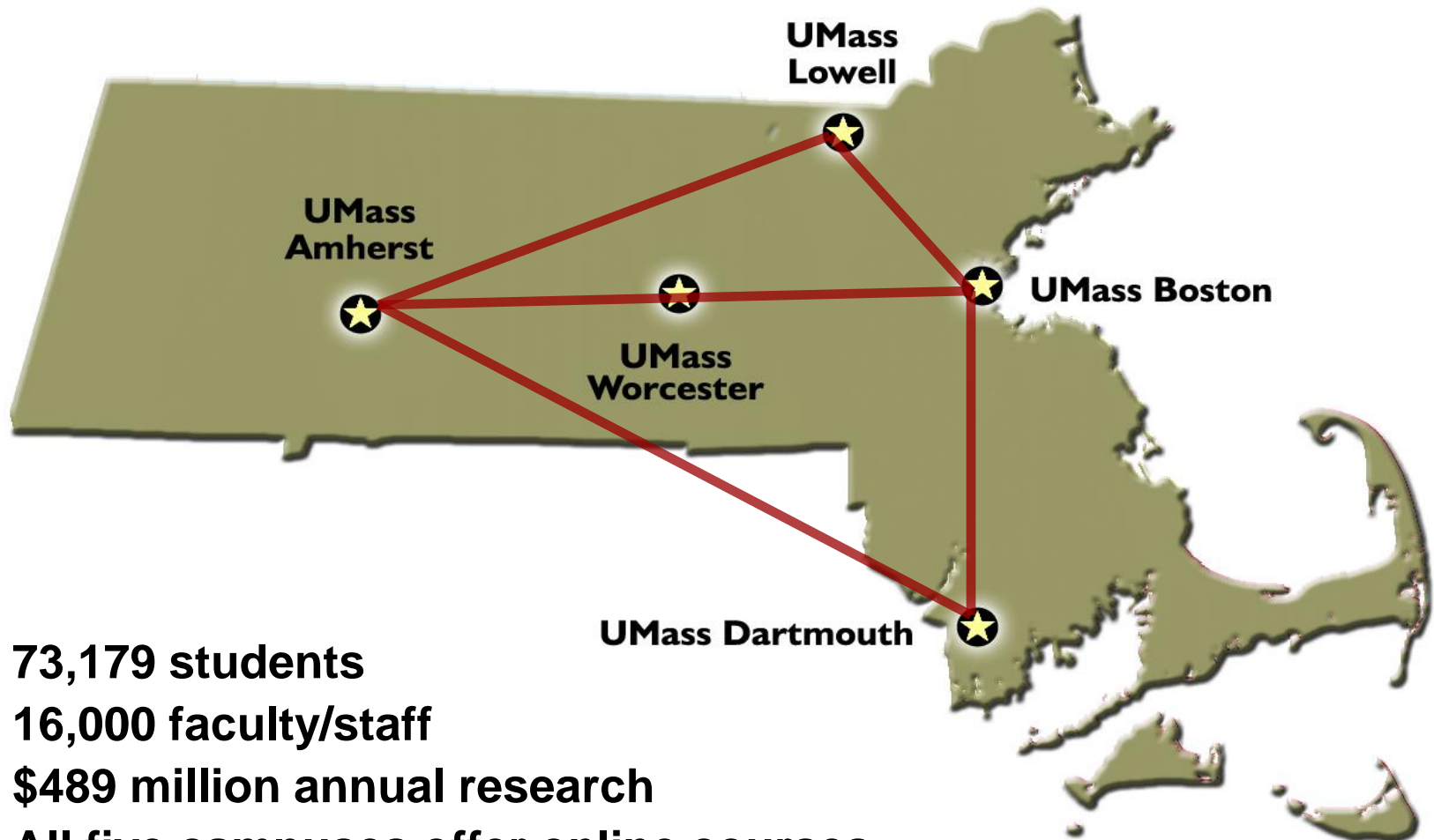
- Another striking finding from the surveys of campus leaders was the presence of a “disconnect” or gap between a recognition by campus leaders of the **strategic value** of online learning and the **strategic utilization** of online.
- This gap exists even at a time when online enrollments have grown an average of almost 20% per year over the past six years.

Benchmarking Study Results

The Opportunities

- Stereotypes are not correct
 - ▣ Every sub-group teaches (full, part time, tenured, non-tenured, early and late career)
 - ▣ Faculty are motivated by student needs
 - ▣ Faculty recommend online
- Faculty with online experience are more positive

UMass Campuses



- **73,179 students**
- **16,000 faculty/staff**
- **\$489 million annual research**
- **All five campuses offer online courses and programs through UMassOnline**

UMassOnline at UMass

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- Founded in 2001
- Supported by the Board of Trustees, the President and five Chancellors
- Financed by a \$15 million loan at 7.5 percent interest, with additional support in the form of grants for technology.
- Focused on serving the community - particularly with respect to economic development - and revenue generation.

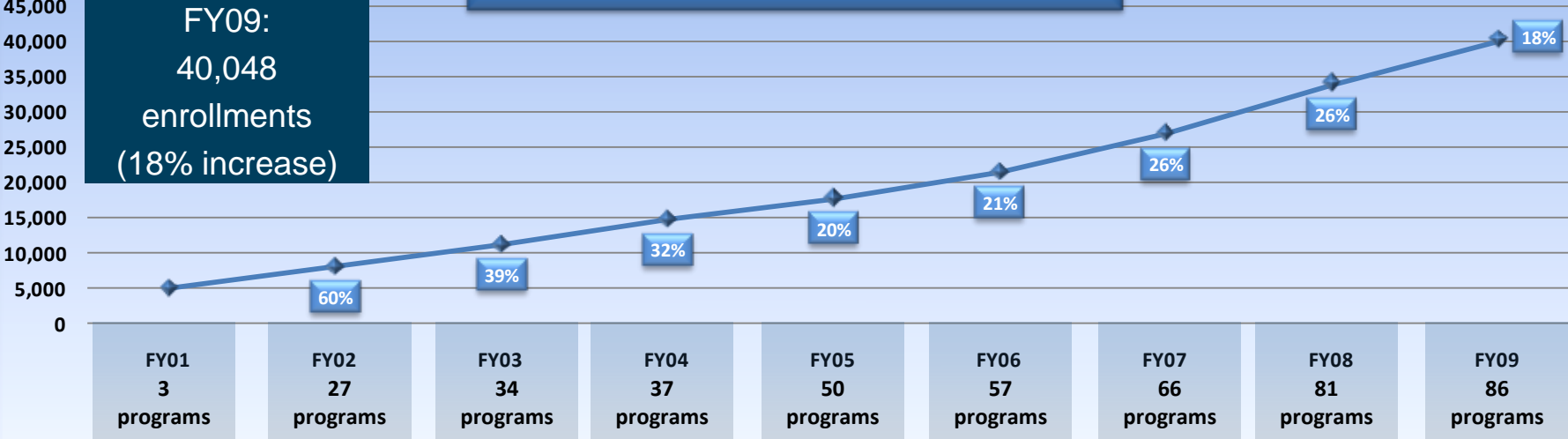
UMassOnline, Created to Support University Strategic Priorities

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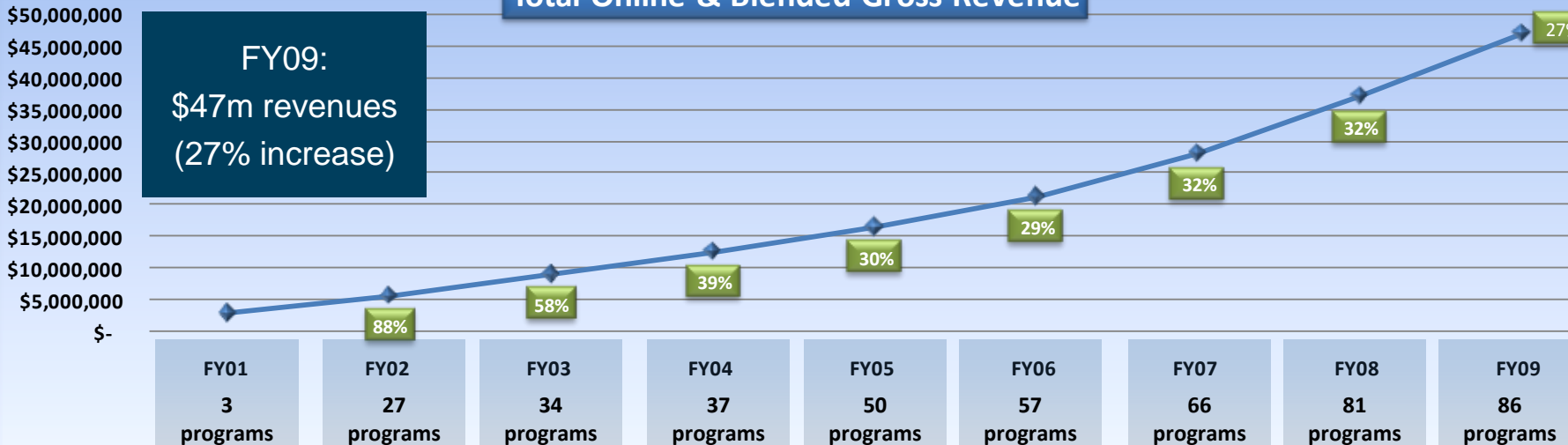
- Increase student **access** and **success**
- Drive **revenue** to the campuses
- Grow educational **opportunities**
- Meet state, national and international **workforce** needs
- Attract students outside the traditional service area
- Increase the rate of **degree completion**
- Improve student **retention**
- Reduce or contain costs
- Increase **diversity** of student/alumni population
- Enhance **brand** of the university

UMassOnline Growth Trajectory

Total Online & Blended Course Enrollments



Total Online & Blended Gross Revenue



UMassOnline in 2009

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- **93** online and blended programs and **1,500** courses (FY10 YTD):
 - **30** new programs in development
 - **4** new programs launched since July 2009
- Cumulative total revenue since founding UMassOnline = **\$180 million** (FY01-09)
- Double-digit growth in both enrollments and revenues. Generated **40,048** enrollments and **\$47m** in revenue (FY09)
- Delivered approximately 44,000 student inquiries to the campuses (FY09)
- Provides technology solutions to 15 campuses

By 2011 -A Relentless Force

- UMassOnline, saw a **12 percent increase** in student enrollment in fiscal year 2011,
- Enrollment in the online program increased from 45,772 to **51,097** year-over-year and the program saw a 16 percent increase in revenue, from \$56.2 million to **\$65.2 million**.
- The four UMass campuses launched **22 new** online programs during the past year and recently inked a deal with the National Education Association that offers 15 online master's degrees to NEA members.
- It is the **10th year in a row** that UMassOnline has reported double-digit growth in both enrollment and revenues. The program was founded in 2001.

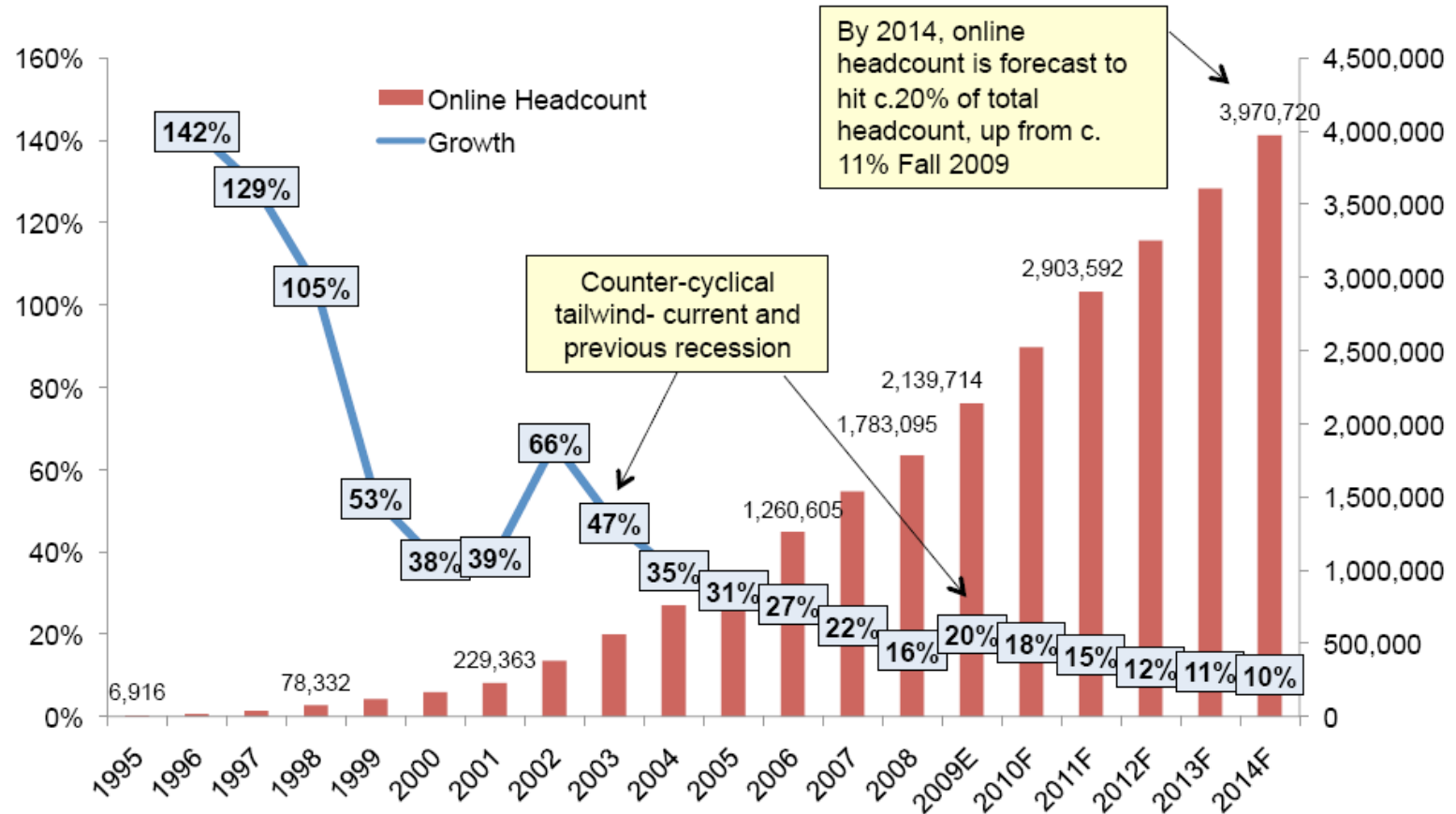
Expanding Access to UMass Education

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- Online Learner Demographics at UMass
 - ▣ 22.2% of all UMass students took at least 1 online course in FY09
 - ▣ Under 35 yrs of age largest growing segment of online learners:
 - 40% of our students are under 25 yrs old
 - 72% of our students are under 34 yrs old
 - ▣ Approximately 1/3rd of our students come from outside Massachusetts
 - Both out of state and in state population growing steadily
 - ▣ 43% of prospective student inquiries come from outside of Massachusetts, with inquiries from every state within the US and over 184 countries

What's in the 'Distance' for Online Education

To date, online is both acyclical and counter-cyclical; low penetration/ improving brand combination should perpetuate pattern five years out



Online significance in the adult market- Eduventures estimates that in Fall 2009, online headcount represents c.24% of total adult (aged 25+) headcount at degree-granting schools; and is forecast to hit 35-40% by 2014

The Rise of the For-Profit University

- During the 10 years spanning from 1996-1997 to 2006-2007 the total number of accredited degree granting institutions grew approximately 7.5%,
- The number of public institutions decreased slightly, while private institutions increased by almost 14%.
- Within the private sector, the number of accredited non-profit institutions decreased by more than 3%, while accredited private for-profit institutions grew by over 60%.

Table 1: Changing Profile of US Accredited Degree Granting Institutions

Year	All Institutions	Public	Private	Private Non-Profit	Private For Profit
1996-1997	4009	1702	2307	1693	614
2006-2007	4314	1688	2626	1640	986
% Change	7.61%	-0.82%	13.83%	-3.13%	60.57%

[1] 2007 Digest of Educational Statistics: http://nces.ed.gov/programs/digest/d07/tables/dt07_255.asp

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.

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

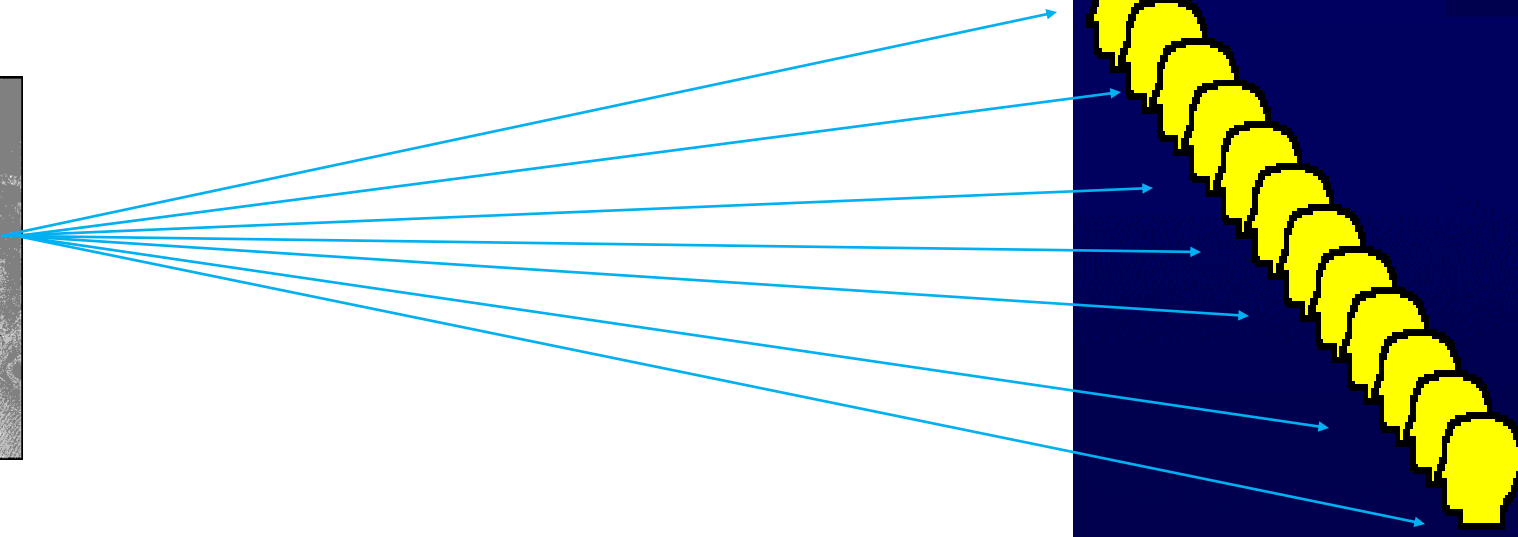
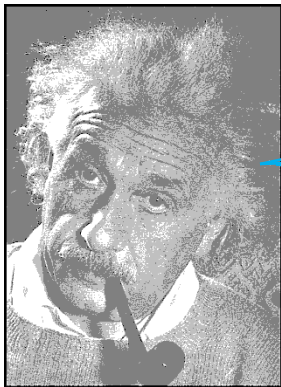
A Brief History of “Distance Learning”

- Correspondence Courses
- TV Courses – Cable, Satellite, Videotape
- Interactive Video Courses (2-way satellite, videoconferencing, and now Skype)
- ALN – “traditional” online education
- MIT OpenCourseware or Carnegie Mellon OpenLearning
- MOOCs

- Unfortunately many of the MOOCs look eerily like the “moving hand writes and then moves on” of the video days!

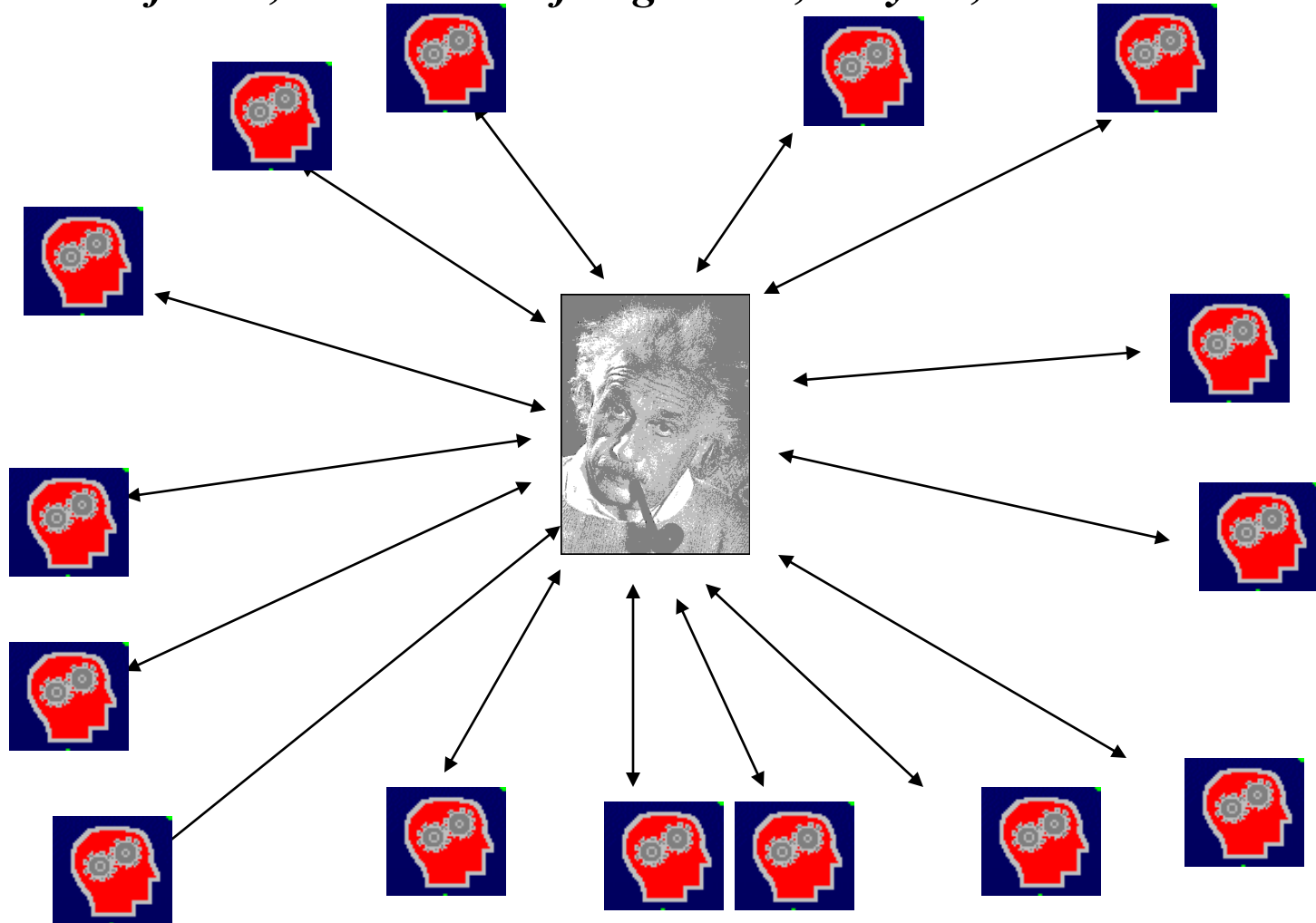
The transmission model

- The mainframe approach
 - ▣ Face to Face: The Lecture
 - ▣ Distance: TV (Cable, Video, Satellite, or MOOC)
 - Pushes the back wall out a few thousand miles

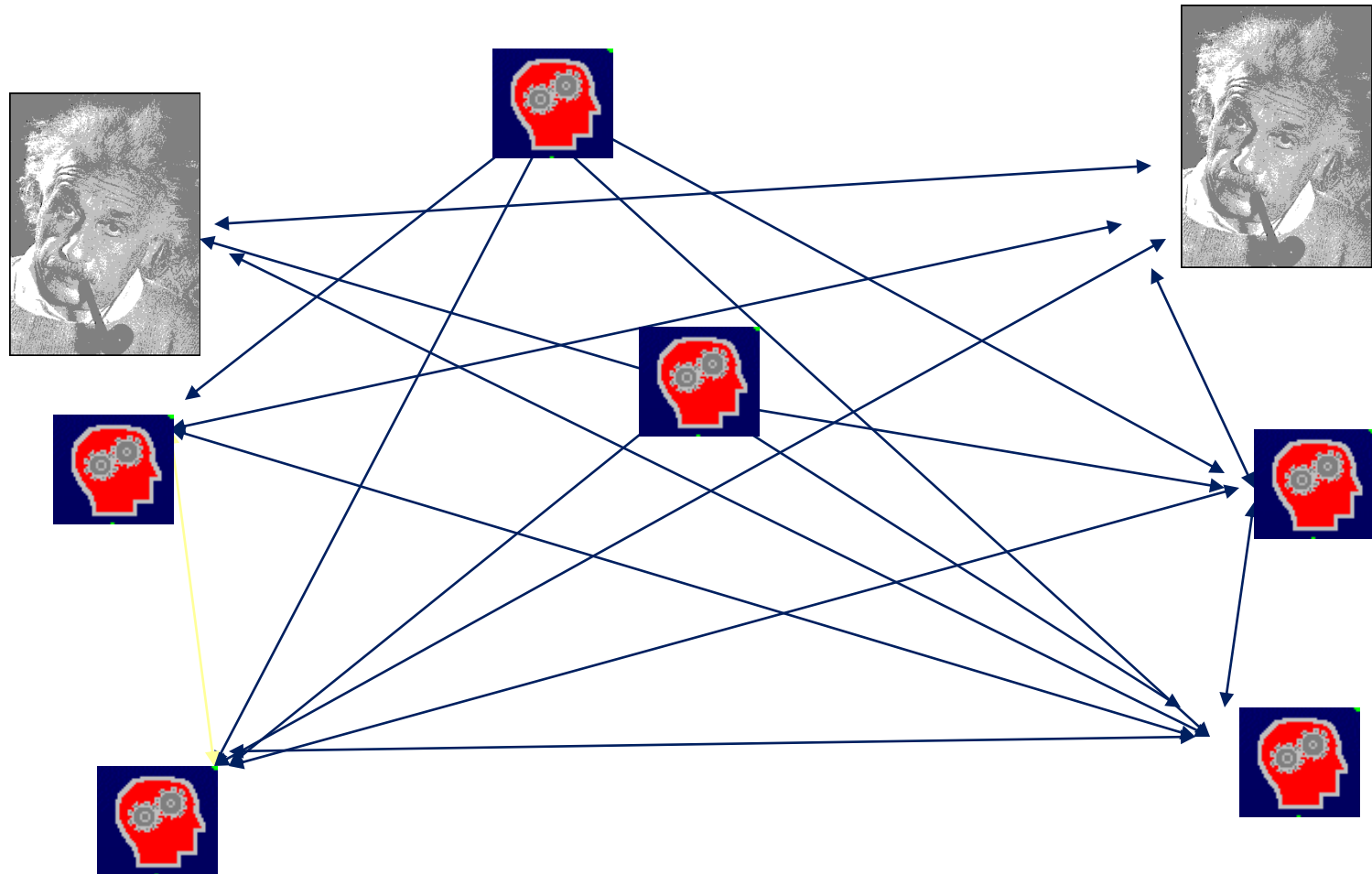


Which can become the usual on-line course organization

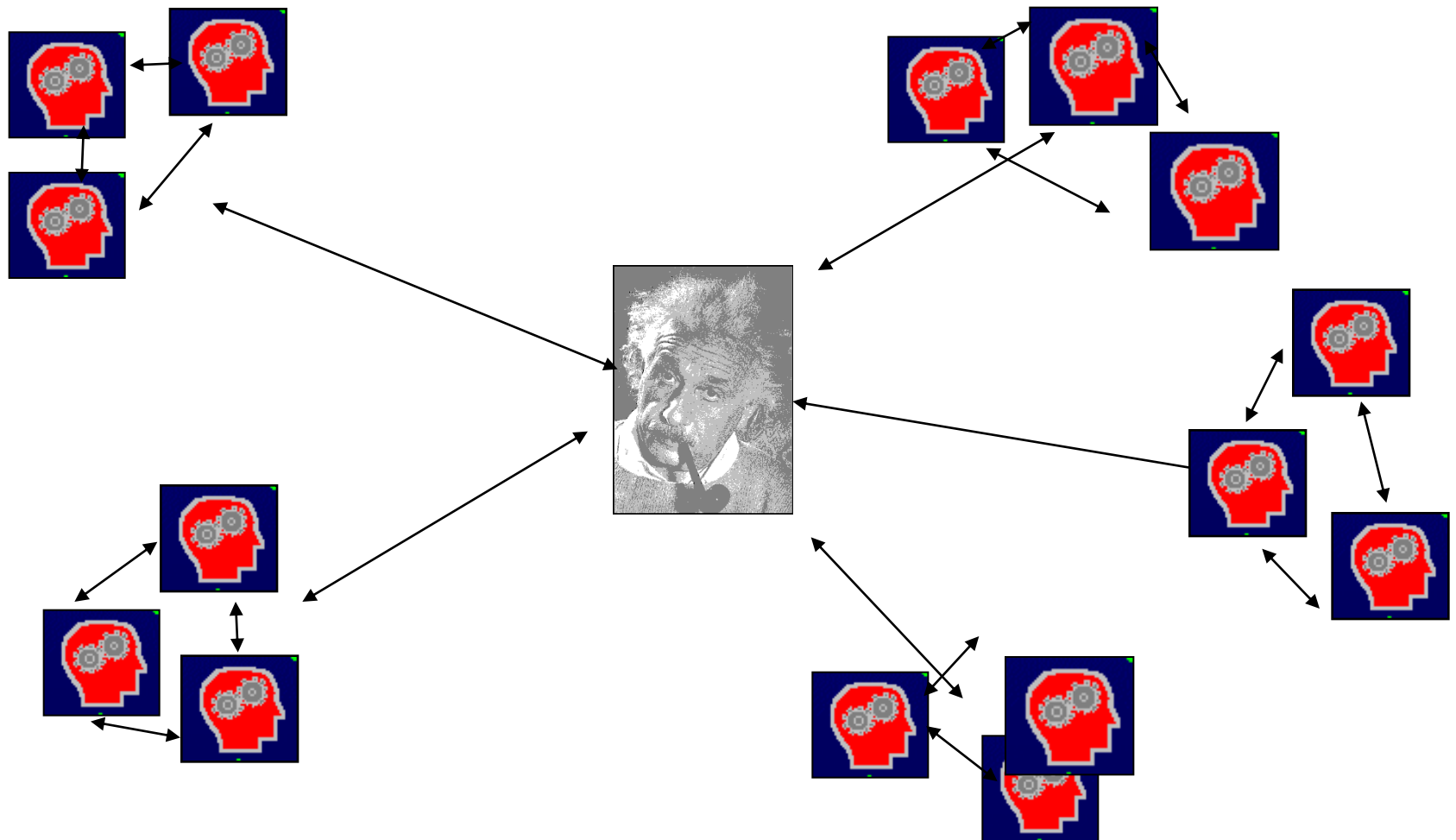
“The 24-Hour Professor;” Chronicle of Higher Ed; May 31, 2002



Distributed Collaborative On-line Model



Collaborative Learning, Peer Learning.....



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).

Creating the Future

- Creating strong Universities to lead us out of the great recession.
- Leading the world in the proportion of college graduates.
- Distance learning is nothing less than a juggernaut.
- Most Universities are struggling with their financial model
- Many (but not all!) traditional universities are struggling to understand the strategy.
- For-Profit Universities are stepping in to fill the vacuum, but are increasingly under attack for their poor performance on retention, persistence, and graduation rates and for their poor use of federal financial resources.

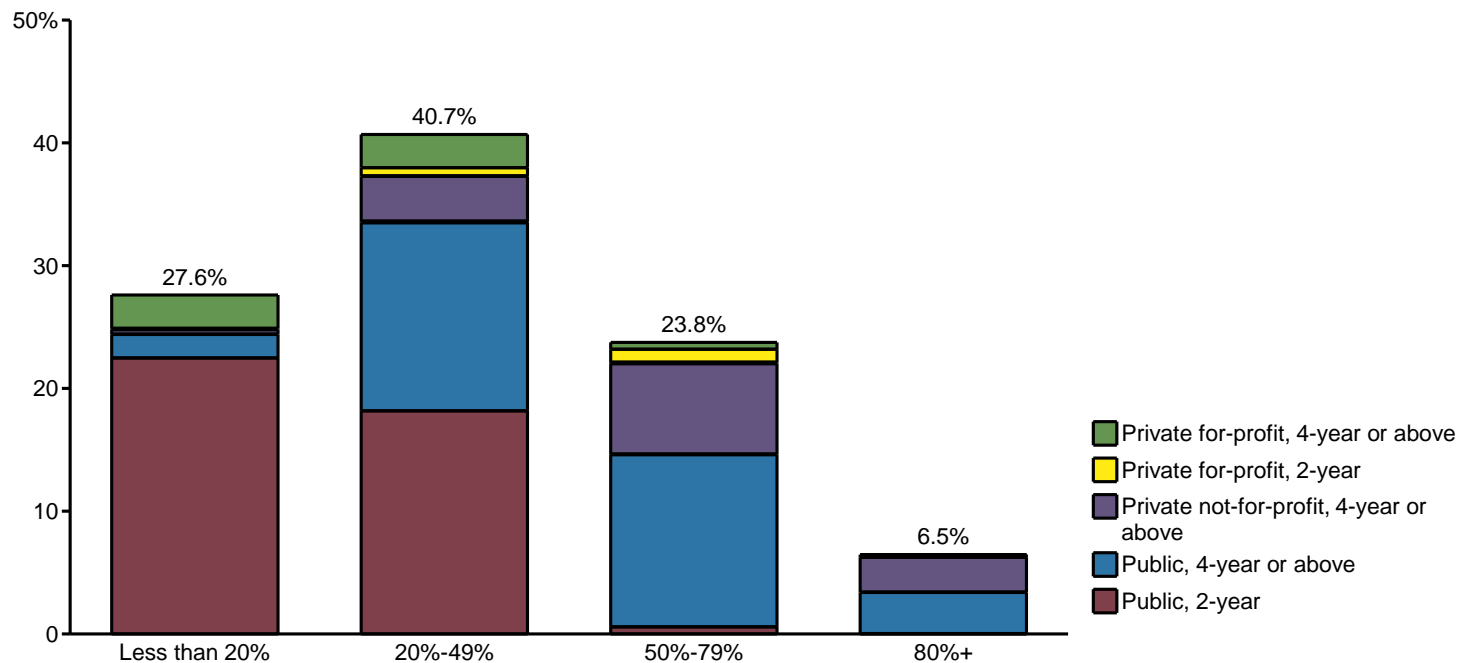
Thank you

- On-line Education- once peripheral -is now strategically important.
- Too many leaders of traditional universities know this **should be** strategic, but do not know enough to actually **make** it strategic.
- Distance learning success requires:
 - **Vision, support and leadership** from the top of the organization,
 - A learner-centered environment
 - Well-defined roles where academics, technologists, and support staff are encouraged to collaborate and do the work that they each do best.
- We **all** have work to do!



Online Education
—a Relentless Force

2/3 of Students Attend Schools < 50% Grad. Rate



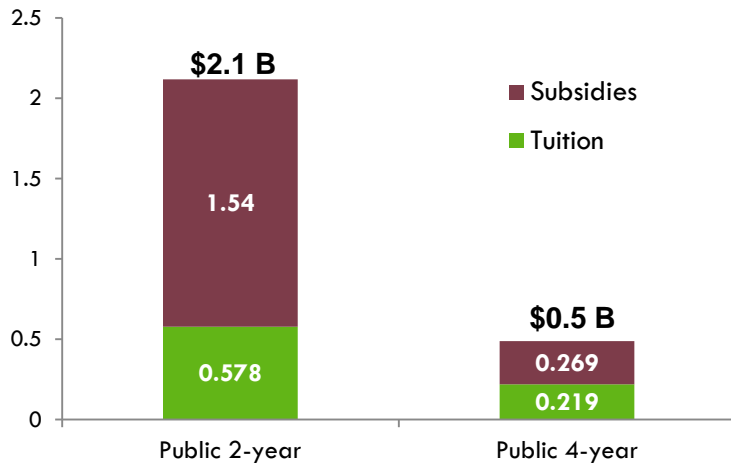
Institutions	710	1,680	1,216	292
Weighted grad. rate	12%	33%	63%	85%

Source: IPEDS 2009 from Parthenon

Cost of College Readiness Remediation

Remediation Costs for 2- and 4-year Public Colleges

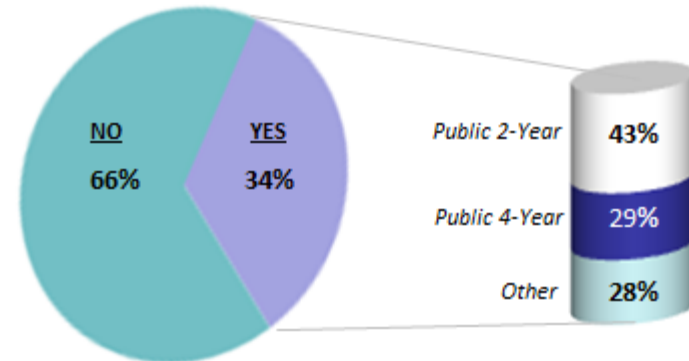
\$2.6 billion is spent each year on remediation in public institutions



Percent of Students Receiving Remediation

34% of all U.S. students enroll in remedial classes

Percent of Students Receiving Remediation



Who Teaches and Develops Online?

