

Creating New Learning Environments in the Convergence of Computers, Communications, and Cognition

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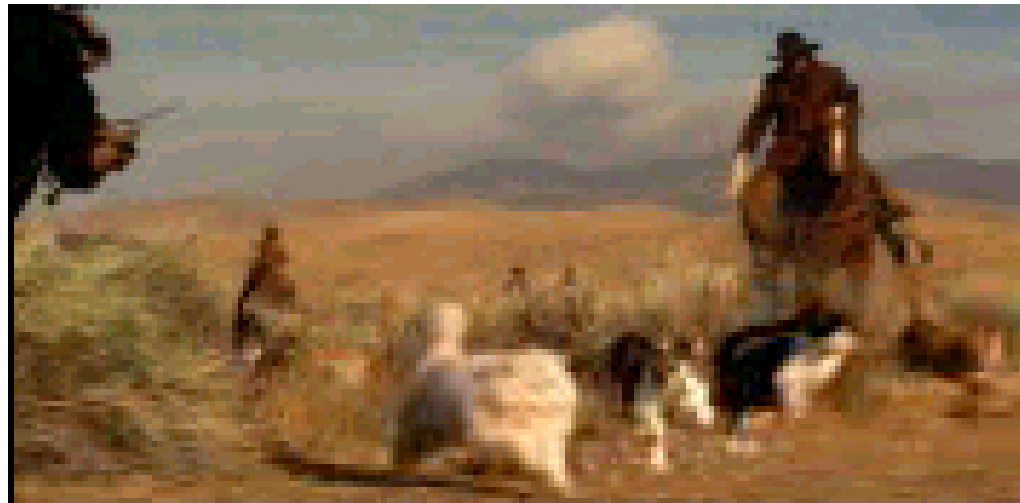


High hopes for eLearning

- **Columbia formed Fathom & teamed with XanEdu.**
- **U. of Penn Wharton School teamed with Caliber, a spin-off from Sylvan Learning.**
- **Cornell spun off eCornell with \$12 million internal investment**
- **UNext created Cardean University with Columbia, London School of Economics, Carnegie Mellon, Stanford, and Chicago.**
 - **Reportedly Cardean had pledged to pay Columbia, and perhaps the others, \$20 million dollars if they failed within five years.**
- **Temple formed “Virtual Temple”**
- **Pensare teamed up with Duke.**
- **Click2Learn teamed with NYU Online.**
- **North Carolina, Harvard, and USC went to University Access for help in getting online.**
- **Harcourt Higher Education was launched as a college in 2000 and confidently predicted “50,000 to 100,000 enrollments within five years.”**

The horrible mismatch

- People change very slowly
 - Both a comfort and irritant!
- Technology changes very rapidly



And Now?

- Pensare is gone.
- Fathom is gone -needed ~\$30 million from Columbia
 - Faculty became restive, closed in early 2003
- Cardean laid off half work force –”restructures”.
- Temple University closes virtual Temple.
- NYU folded NYUOnline back into the campus.
- Harcourt gone after enrolling 32 students in 2001.
- eCornell open BUT with reduced expectations.
- Britain’s Open U. closes US branch -\$20 M later.
- Caliber goes bankrupt- acquired by iLearning(Sylvan).
- University Access -> Quisic withdraws from H.Ed.

Lessons Learned

- For-profit model - not proven viable for universities (NYUOnline, UMUC, etc.).
- Joint ventures between universities and for-profits are hard to make viable (Pensare, Caliber, NYUOnline, U21 Global, etc)
- It is difficult to borrow brand equity from one institution to another: (Cardean, Pensare)
- Brand equity does not transfer easily from a different business to eLearning (Harcourt)
- To succeed in business one must have product to sell (Fathom, etc.)
- Content is a commodity, over investment in content is often fatal.
- Brand and prestige are not the same.

Coping with change

- Design for the future not the present
- Design based upon human learning and not technical limitations
- When forced to compromise by technology
 - Remember it is a compromise
 - Do not enshrine compromises
 - Watch how technology changes can eliminate need to compromise.

UMassOnline

- UMassOnline will end the fiscal year 2003 with
 - over \$12 million in revenues
 - 11,139 enrollments from “new” students
 - an annual growth of nearly 50%
 - 38 (and growing) degree and certificate programs
 - Serving the educational needs of students in Massachusetts, New England, and the U.S.
 - Over 500% growth in inquiries through portal
 - 55% of inquiries from outside Massachusetts.
 - 8% of inquiries from outside the U.S.

Content and the Value Chain

- Given what MIT has done (OCW), how can UMassOnline compete? – Boston Globe reporter

What MIT provides

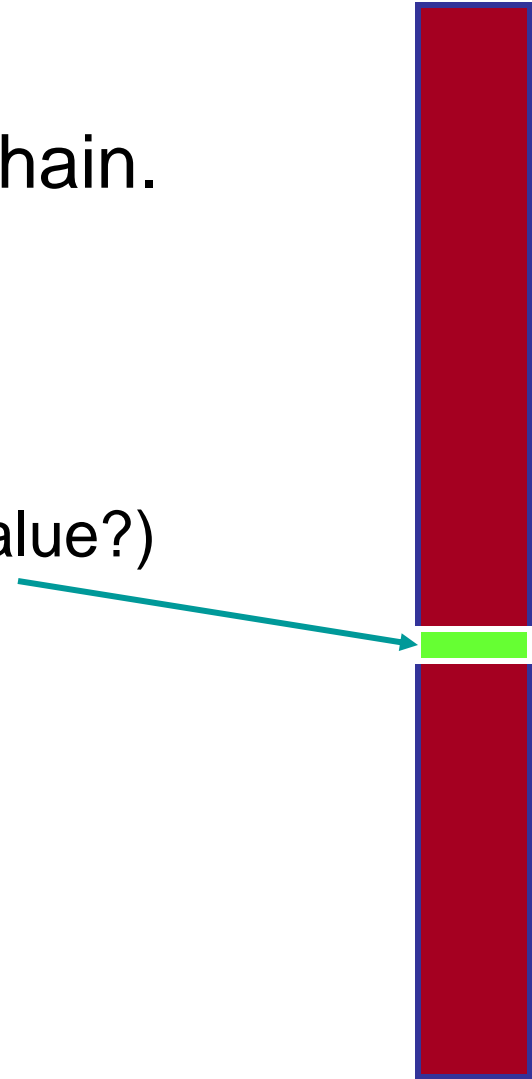
- Course materials

No access

- Reputation
- Courses
- Faculty
- Credentials
- Students
- Alums
- Library
- Facilities

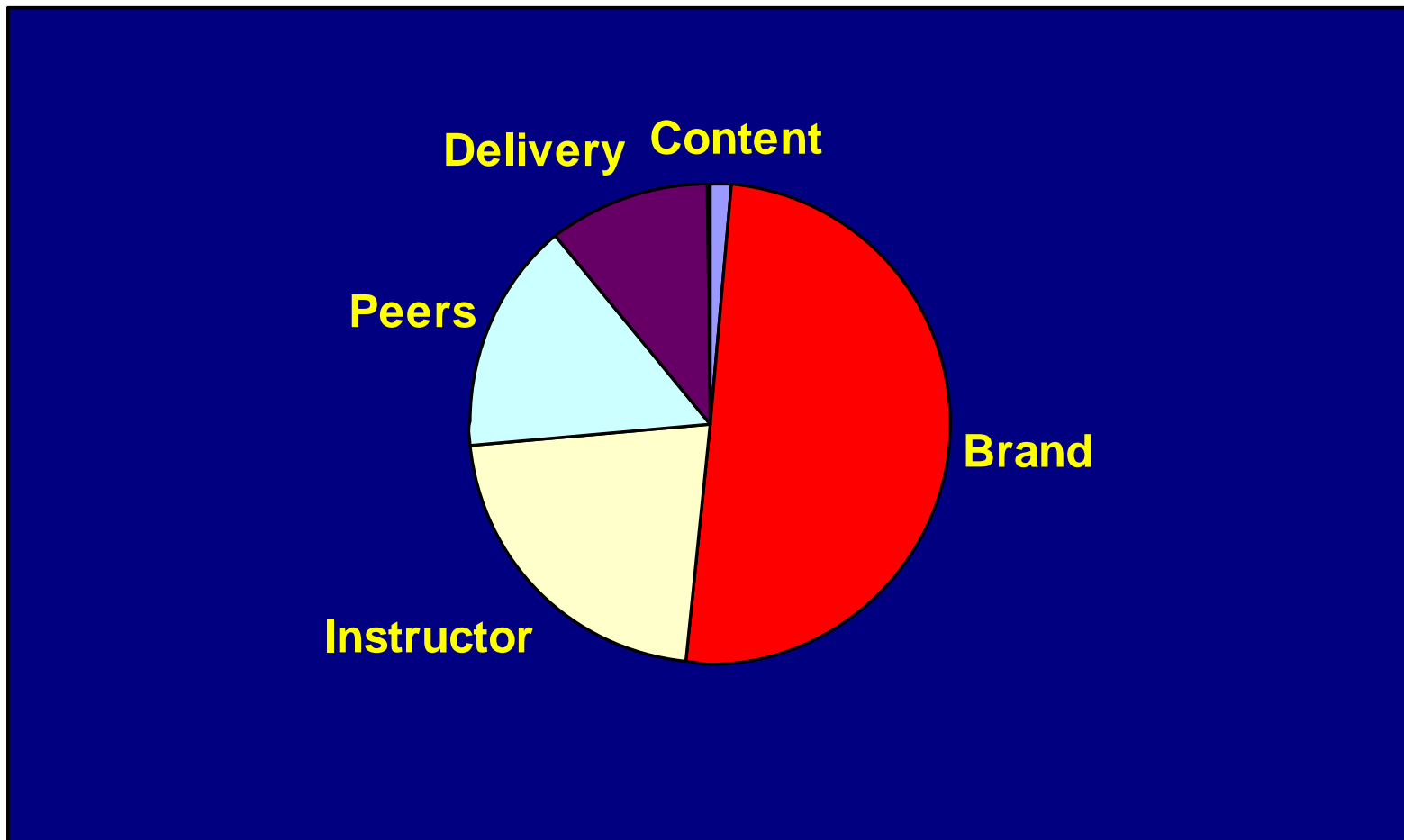
Content?

- The smallest part of the value chain.
- Introduction to eBusiness
 - 75-125 students (business execs)
 - \$ 3000 per student (indicator of value?)
 - A book might be \$50 (content)
 - Web site is open and free
 - Revenue: \$225,000 - \$375,000
 - One faculty, one full time TA
- Content is king?



The Value Chain

Brand ~ Reputation (not just prestige)



Has Online Learning failed?

- Hardly!
- The Red Sox, the Cubs, and 29 other teams didn't win the world series again this year either.
- Just like baseball, distance learning has it's winners and losers!

Is this unusual in history?

- Take the railroads. The 1880s saw more miles of track built than in any other period.
 - By the 1890s, more miles were bankrupt than at any other time.
- From 1904 to 1908, more than 240 companies entered the automotive business.
 - In 1910, a big shakeout occurred because too many companies were operating at an inefficiently low scale. Today only two US companies remain.
- The early days of radio and TV saw both a proliferation of entrants and a valuation bubble. It took decades for the values to recover and the three main broadcasting systems emerged.
 - RCA \$114 (1929) -> \$3 (1932) (adjusted for split)

Is it over?

- Its only just begun!
- No one has repealed Moore's Law
- The Bandwidth Law (Gilder's law) is slower but still on track
- Metcalf's law remains the a key indicator for success.
 - Microsoft, AOL-TimeWarner, eBay, Amazon all demonstrate the power of the large network.

A few successful on-line initiatives

- Arizona Regents University 12,353 Ex
- Univ. of Maryland Univ. Coll. 68,250 New
- Florida Virtual Campus 56,198 Ex
- FL Comm. Coll. D.L. Consortium 85,278 Ex
- Maryland Online: 27,060 Ex
- Georgia Globe: FY2002: 40,000 Ex
- Illinois Virtual Campus: 46,678 Ex
- eArmyU (23 campuses) 12,000 New
- Connecticut D. L. Consortium 9,683 Ex
- UMassOnline 13,375 New
 - Ex=>primarily existing students
 - New=>primarily new online students

– Source: Center for Academic Transformation meeting

For-profits

- Phoenix 37,000 / 110,000
- Capella 5,000 / 5000
- DeVry ? / 56,000
- Strayer ? / 14,000
- Sylvan (NTU) ?
 - (Walden U, NTU, Canter, Caliber, iLearning, etc.)

Models for Virtual Universities

- For Profit Universities
 - Pure plays: Phoenix, Capella, DeVry University, Strayer University etc.
 - Joint Ventures: Cardean, Caliber, Pensare, U21
 - Internal: eCornell, Fathom etc.
 - (formerly UMUC, NYUOnline)
 - Outside VC (Original Fathom plan) versus internal
- Not for Profit
 - Internal Collaborative (UMassOnline etc.)
 - Independent (WGU, etc)
 - Solo or Consortia (UMUC)

A robust enterprise

- During the 12-month 2000–2001 academic year, **56 percent** (2,320) of all 2-year and 4-year Title IV-eligible, degree-granting institutions offered distance education courses for any level or audience,
 - (i.e., courses designed for all types of students, including elementary and secondary, college, adult education, continuing and professional education, etc.)
- **Twelve percent** of all institutions indicated that they planned to start offering distance education courses in the next 3 years;
- **31 percent** did not offer distance education courses in 2000–2001 and did not plan to offer these types of courses in the next 3 years.
 - Source: U.S. Department of Education, National Center for Education Statistics. *Distance Education at Degree-Granting Postsecondary Institutions: 2000–2001*, NCES 2003-017, by Tiffany Waits and Laurie Lewis.

Public vs Private

- Public institutions were more likely to offer distance education courses than were private institutions. In 2000–2001,
 - **90 percent** of public 2-year and
 - **89 percent** of public 4-year institutions offered distance education courses, compared with
 - **16 percent** of private 2-year and
 - **40 percent** of private 4-year institutions
- [Source NCES 2003-017]

Credit Programs

- College-level, credit-granting distance education courses at either the undergraduate or graduate/first-professional level were offered by **55 percent** of all 2-year and 4-year institutions (table 3).
- College-level, credit-granting distance education courses were offered at the
 - undergraduate level by **48 percent** of all institutions, and at the
 - graduate level by **22 percent** of all institutions.

– [Source NCES 2003-017]

Enrollments

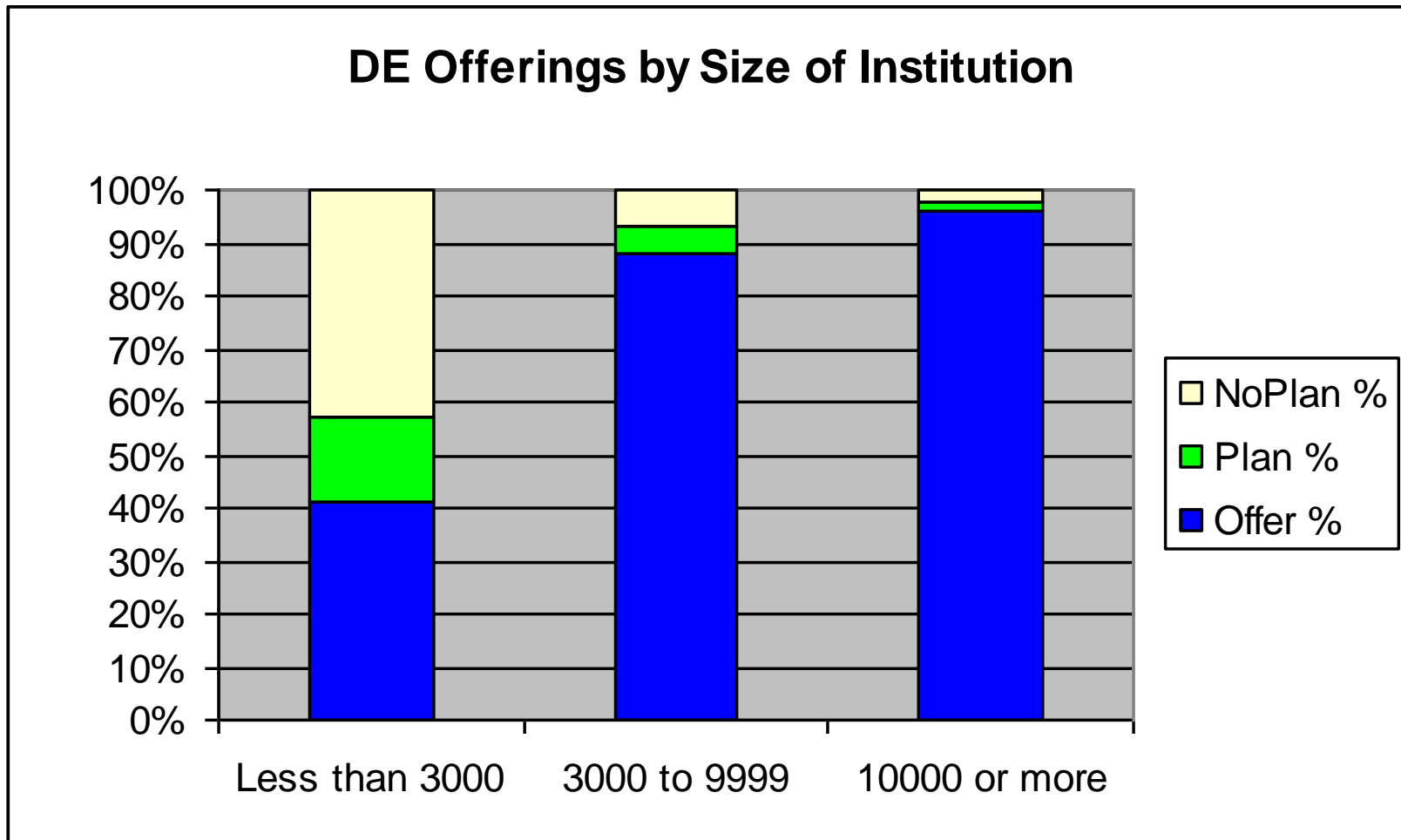
- In the 12-month 2000–2001 academic year, there were an estimated **3,077,000** enrollments in all distance education courses offered by 2-year and 4-year institutions
- There were an estimated **2,876,000** enrollments in college-level, credit-granting distance education courses,
 - with **82 %** of these at the undergraduate level (figure 2).
- Consistent with the distributions of the percentage of institutions that offered distance education courses, most of the distance education course enrollments were in public 2-year and public 4-year institutions.
 - **Public 2-year** institutions had the greatest number of enrollments, with **1,472,000** out of 3,077,000, or **48 %** of the total enrollments
 - **Public 4-year** institutions had **945,000** enrollments (**31 %**), and
 - **private 4-year** institutions had **589,000** enrollments (**19 %**).
 - [Source NCES 2003-017]

Is this sign of failure?

- Over 3 million enrollments.
- 89% of all publics offer distance learning courses.
- 30% of those offering some distance learning offer fully online degree programs.

- Quite a healthy corpse!

Size Matters the Most



[Source NCES 2003-017]

Big institutions fully committed

- While 97% of large institutions either are already offering (95%) or plan to offer (2%) distance education courses
- 43 % of small institutions have no plans and
 - only 41% are already involved
 - with another 16 % planning

[Source NCES 2003-017]

Technologies

- The Internet and two video technologies were most often used as primary modes of instructional delivery for distance education courses by institutions during the 12-month 2000–2001 academic year.
- Among institutions offering distance education courses, the percentage using specific technologies are as follows:
 - **90 % asynchronous** computer-based instruction
 - **43 % synchronous** computer-based instruction,
 - **51 % two-way video** with two-way audio
 - **41 % one-way prerecorded video**
 - **29 % CD-ROM**
 - **19 % multi-mode** packages.

– [Source NCES 2003-017]

Technology Futures

Percent that indicated plans to **start using or increase** the number of Internet courses using a specific technology as a primary mode of instructional delivery for distance education courses

- 88 % asynchronous computer-based instruction
- 62 % synchronous computer-based instruction
- 40 % two-way video with two-way audio,
- 39 % CD-ROMs
- 31 % multi-mode packages.
- 23 % one-way prerecorded video.

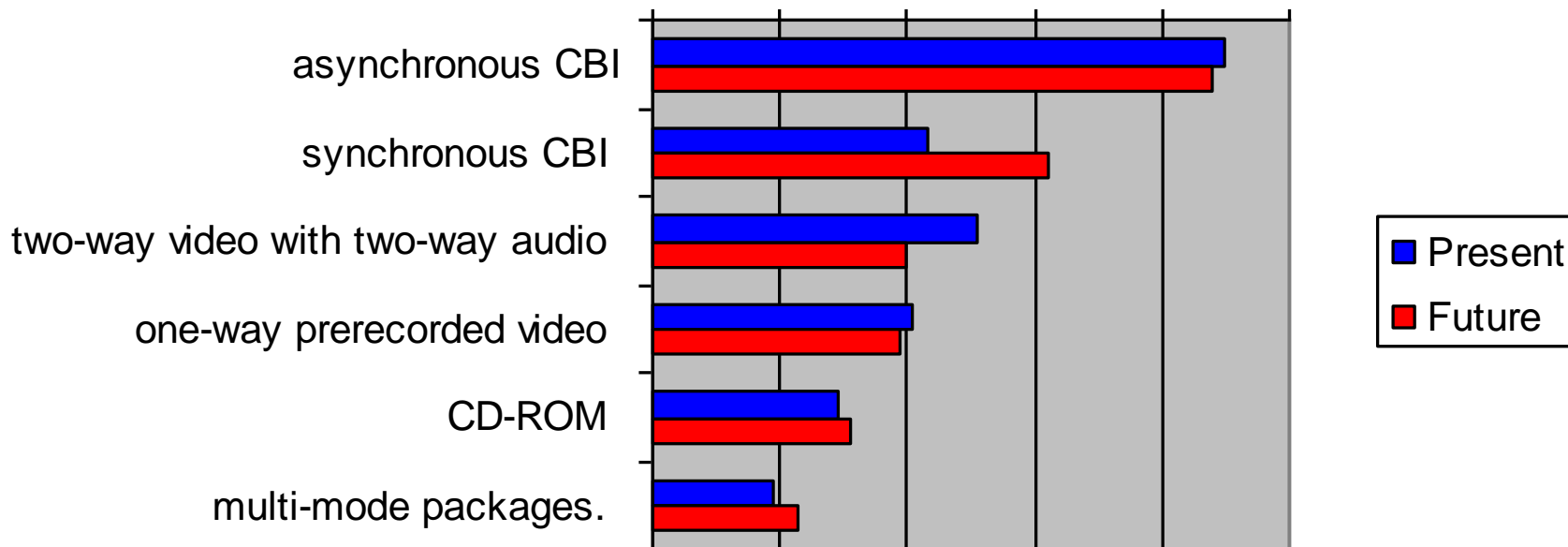
[Source NCES 2003-017]

Growth and decline in technologies

Technologies- Present and Planned

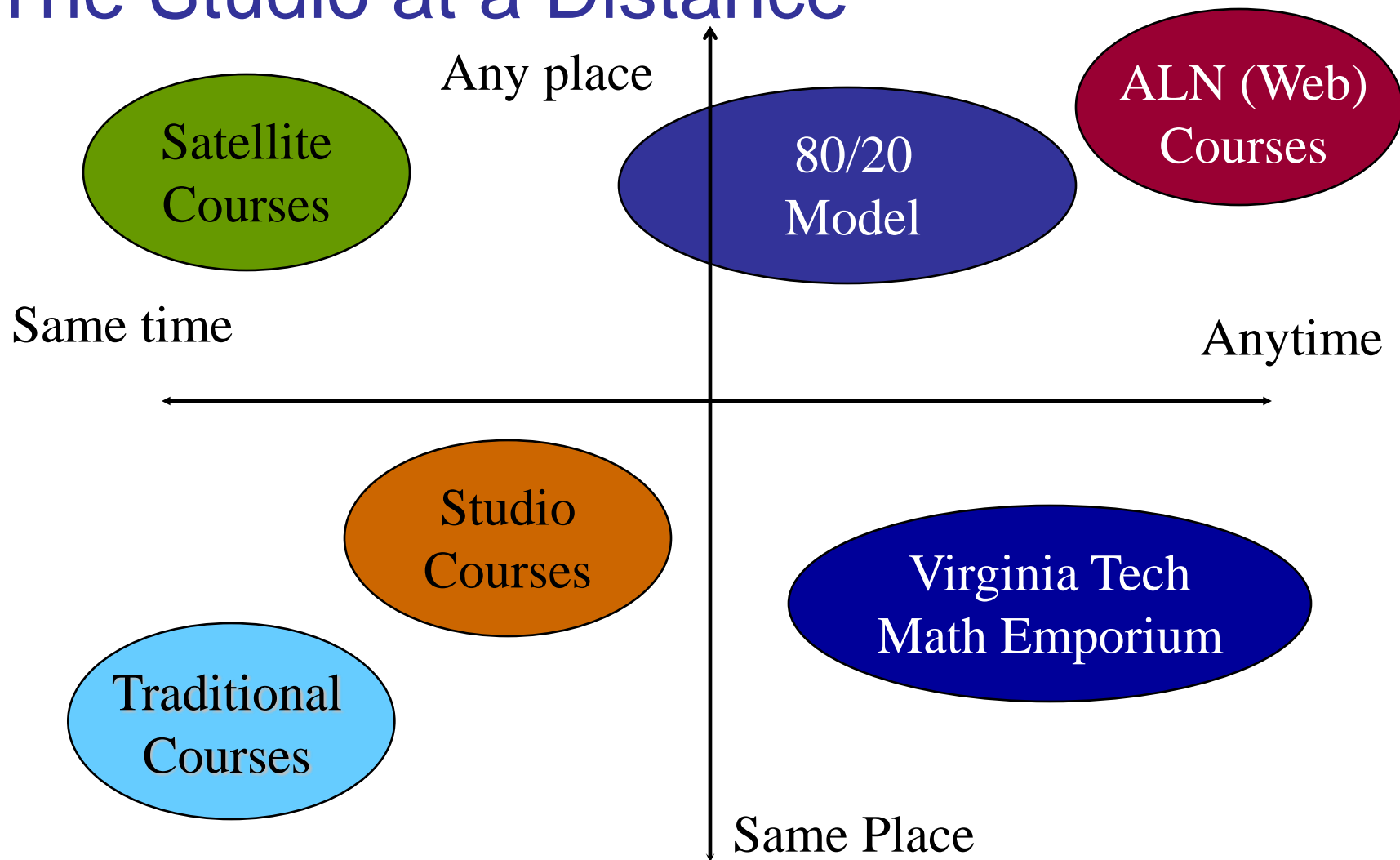
(Data source NCES 2003-017)

0% 20% 40% 60% 80% 100%



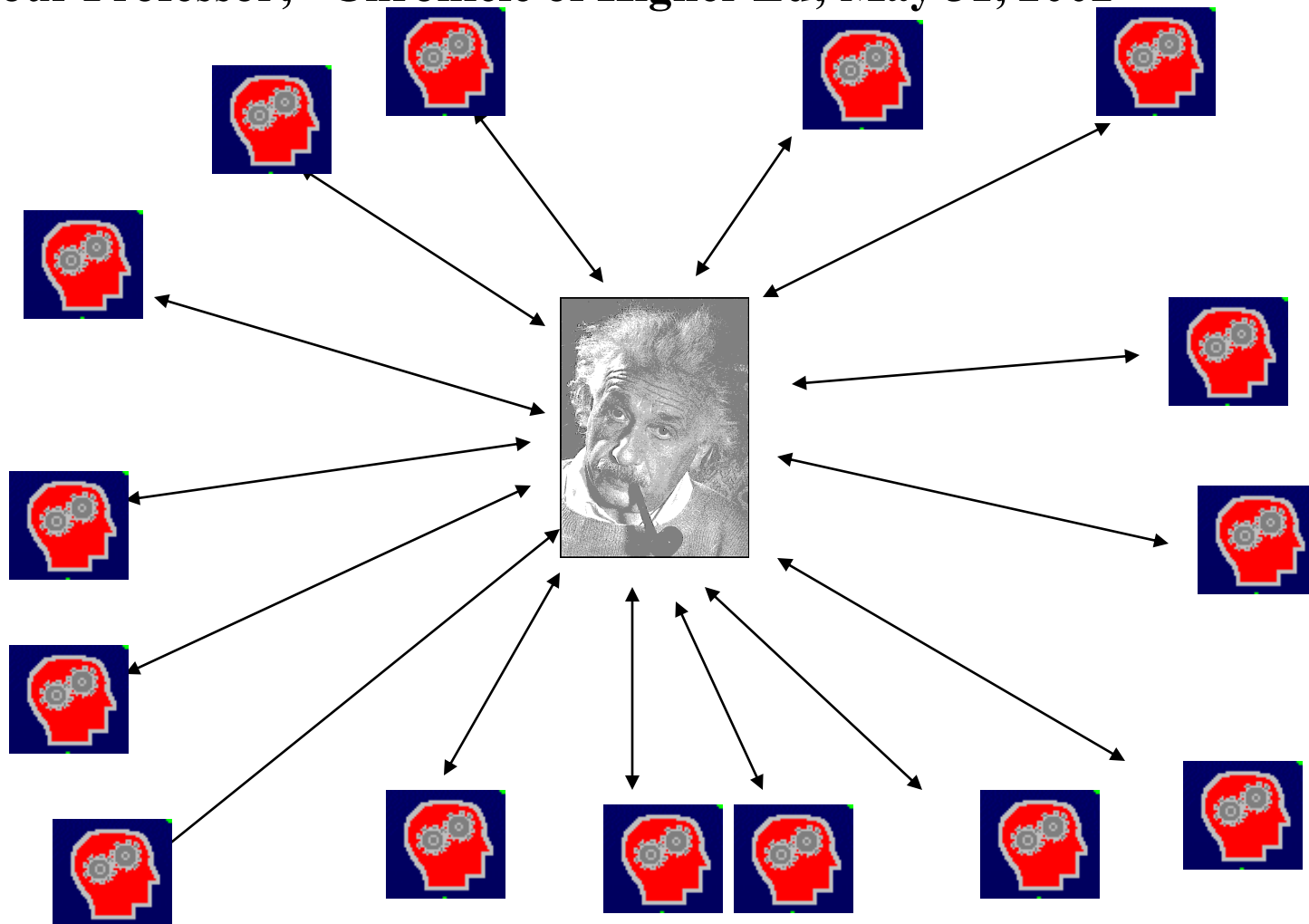
[Source NCES 2003-017]

The Studio at a Distance

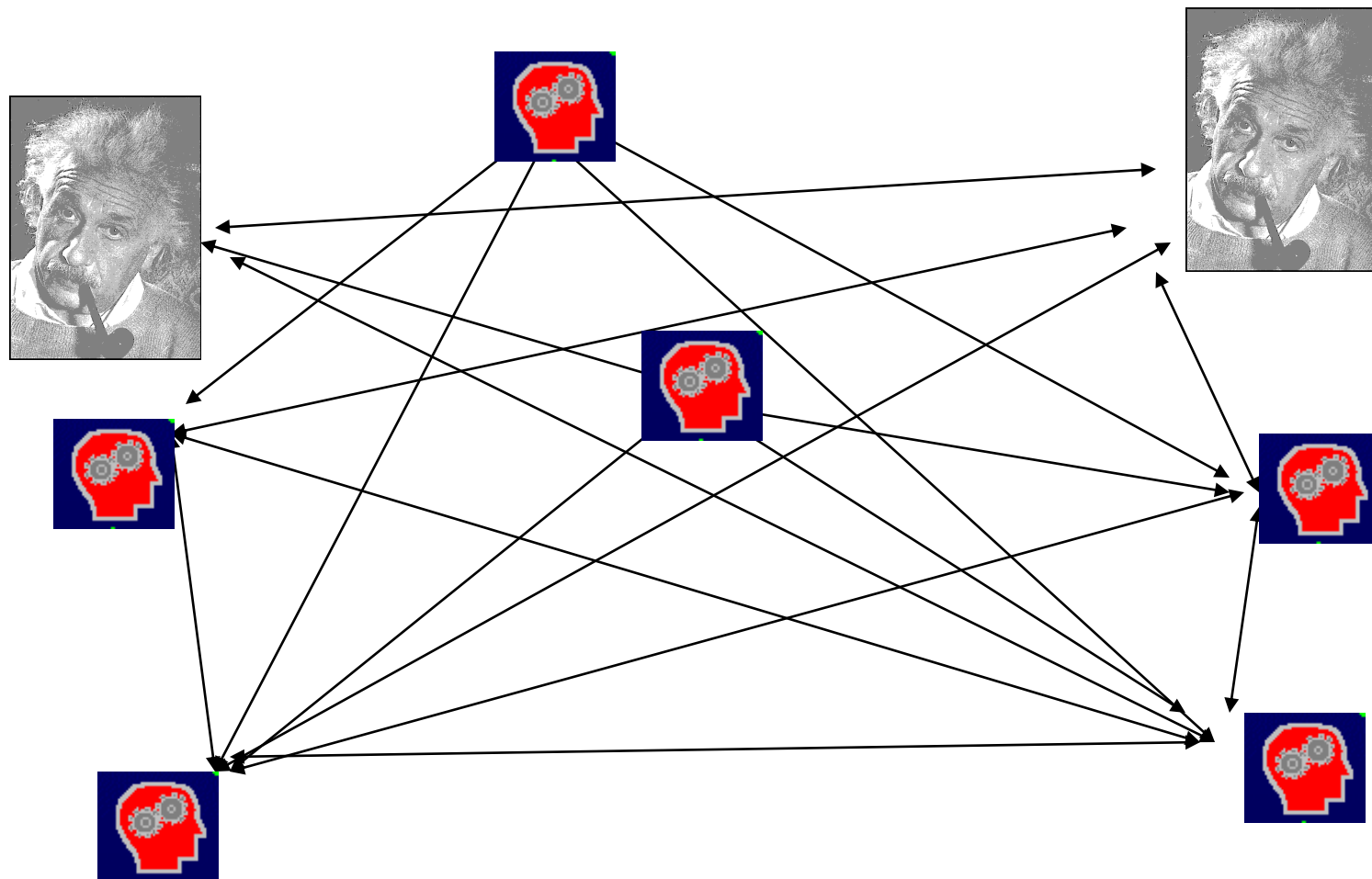


Usual On-line course organization

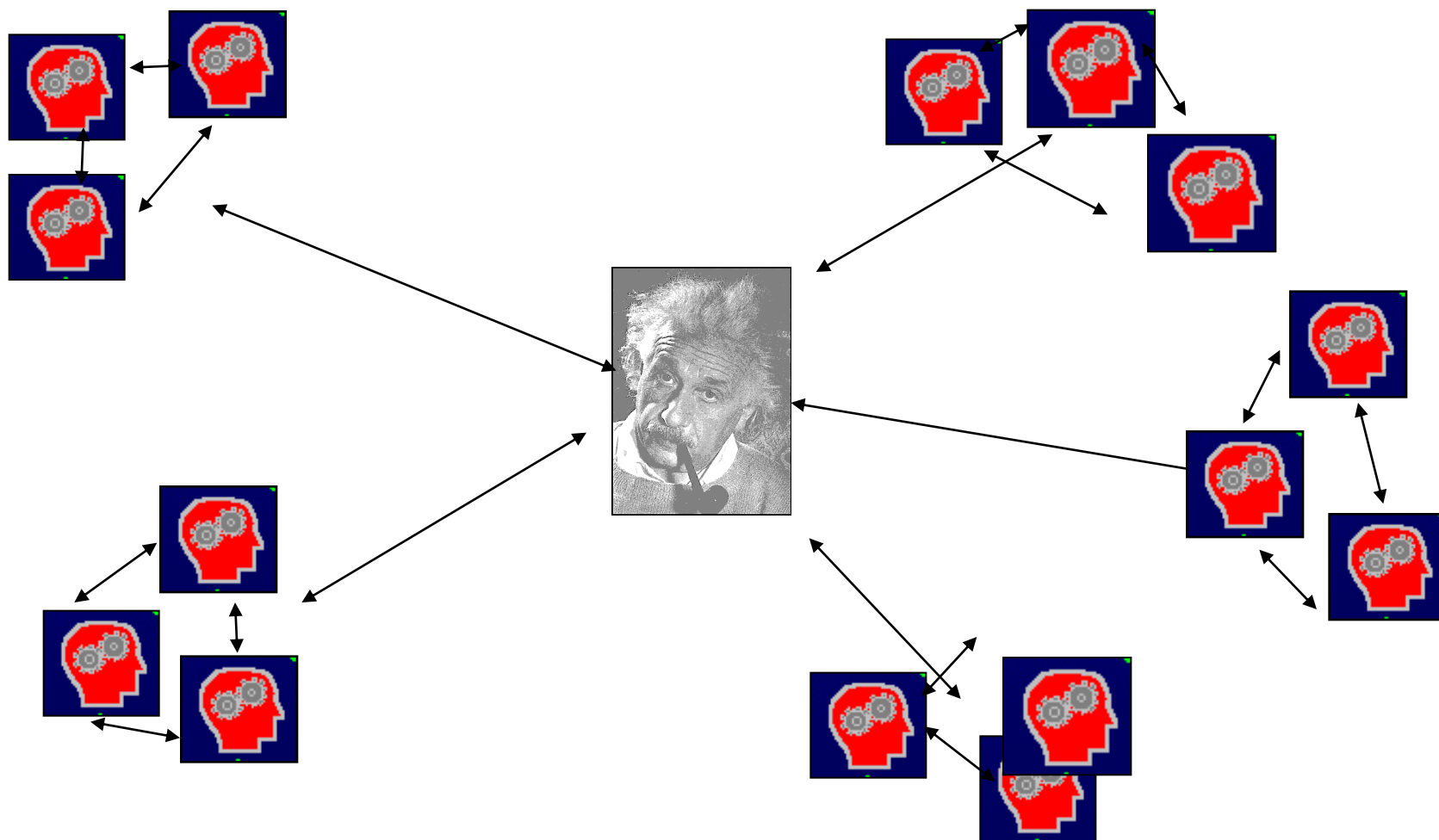
“The 24-Hour Professor;” Chronicle of Higher Ed; May 31, 2002



Distributed Collaborative On-line Model



Collaborative Learning, Peer Learning.....



Consortia

- Among the institutions that offered distance education in 2000–2001, **60 percent** participated in some type of distance education consortium (figure 6 and table 13).
- Of those that participated in a consortium,
 - **75 percent** participated in a **state** consortium,
 - **50 percent** in a **system** consortium
 - **27 percent** in a **regional** consortium,
 - **14 percent** in a **national** consortium, and
 - **4 percent** in an **international** consortium.

– [Source NCES 2003-017]

Access

- Of those institutions that offered distance education courses in 2000–2001, a majority reported that increasing student access in various ways was a very important goal of their institution's distance education program.
 - **69 %** of the institutions indicated that increasing student access by making courses available at **convenient locations** was very important, and
 - **67 %** reported that increasing student access by reducing **time constraints** for course-taking was very important
 - **36 %** reported that making educational opportunities more **affordable** for students, another aspect of student access, was a very important goal of their distance education program.

[Source NCES 2003-017]

WHY?

- Cited as very important:
 - *increasing access to new audiences* -65%
 - *increasing institution enrollments* - 60%
 - *reducing per-student costs* – 15 %
 - *improving quality of course offerings* - 57 %
 - *meeting the needs of local employers* - 37 %

[Source NCES 2003-017]

Succeeding?

- In general, institutions reported that most of the goals they considered to be important for their distance education programs were being met to a moderate or major extent.
 - Increasing student access by making courses available at convenient locations was reported to have been met to a major extent by **37 percent** of institutions that considered it an important goal, and
 - increasing student access by reducing time constraints for course-taking was reported to have been met to a major extent by **32 percent** of institutions that considered it an important goal

[Source NCES 2003-017]

Perceived Obstacles

For those who are not using and have no plans to use the obstacles are perceived to be:

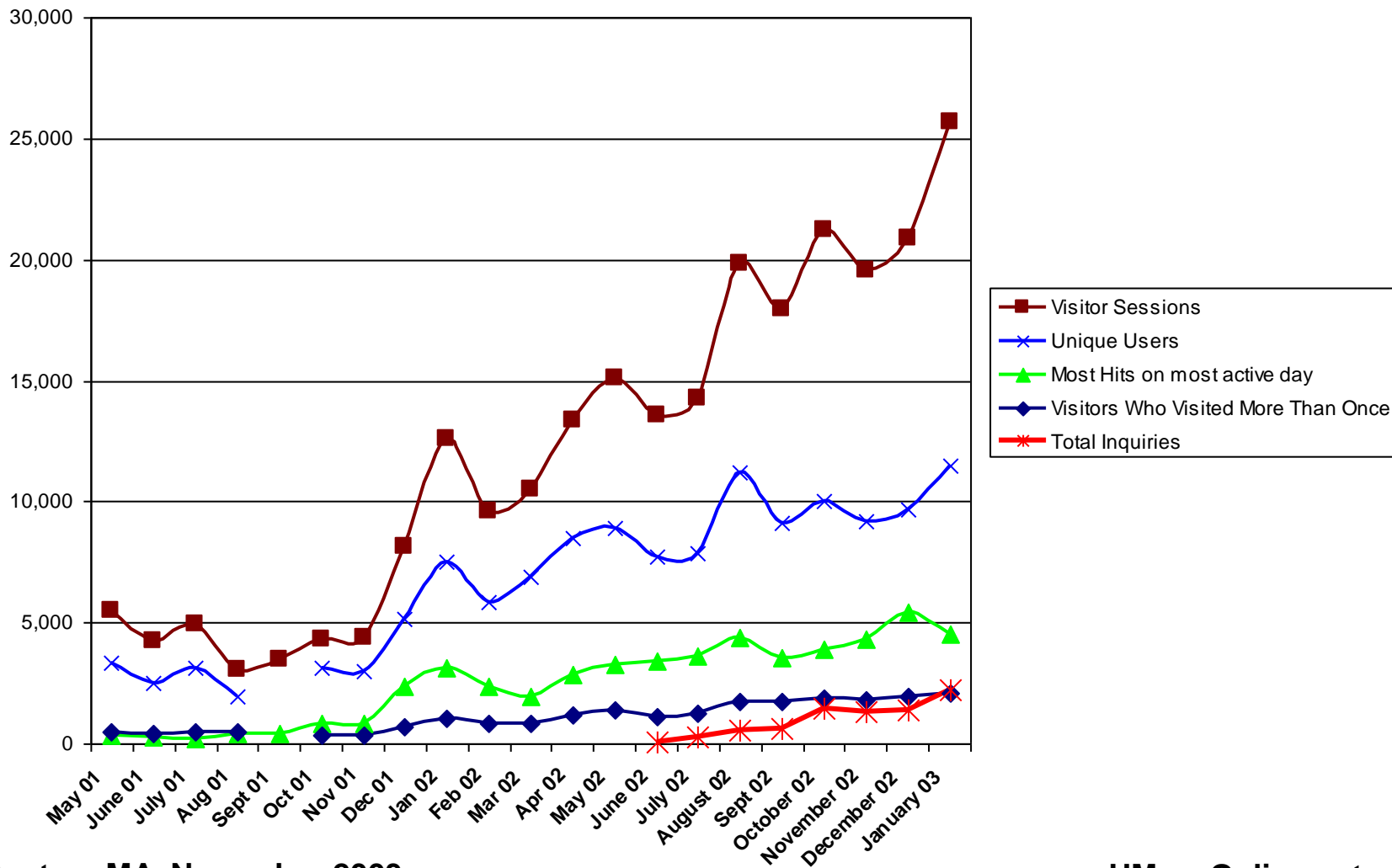
- lack of fit with institution's mission (44 %),
- program development costs (33 %),
- concerns about course quality (26 %),
- limited tech. infrastructure/support DE (24 %),
- lack of perceived need (22 %)

Interestingly those already doing DE do not cite any of these as obstacles except program development costs (22%)

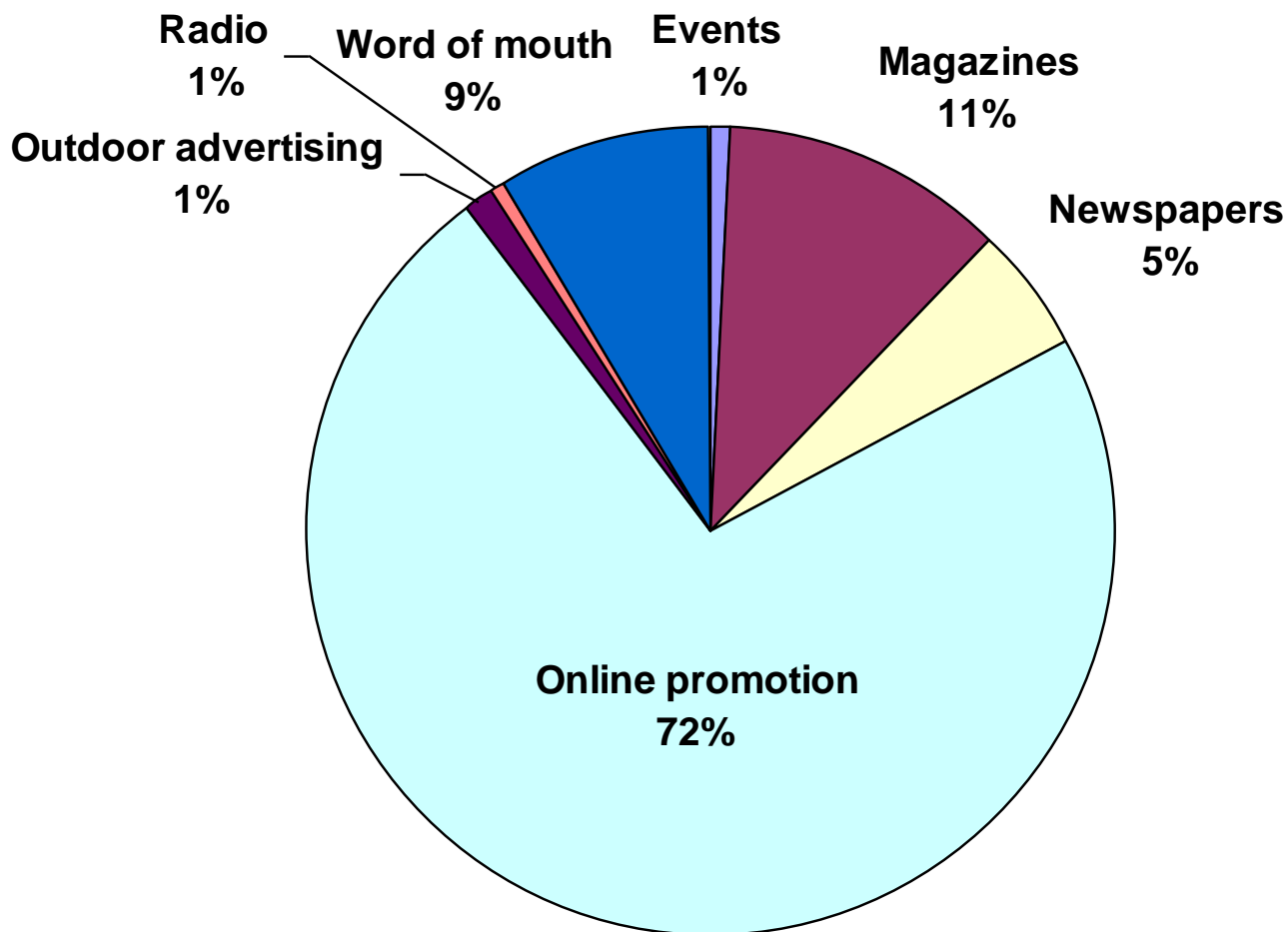
[Source NCES 2003-017]



Portal Traffic

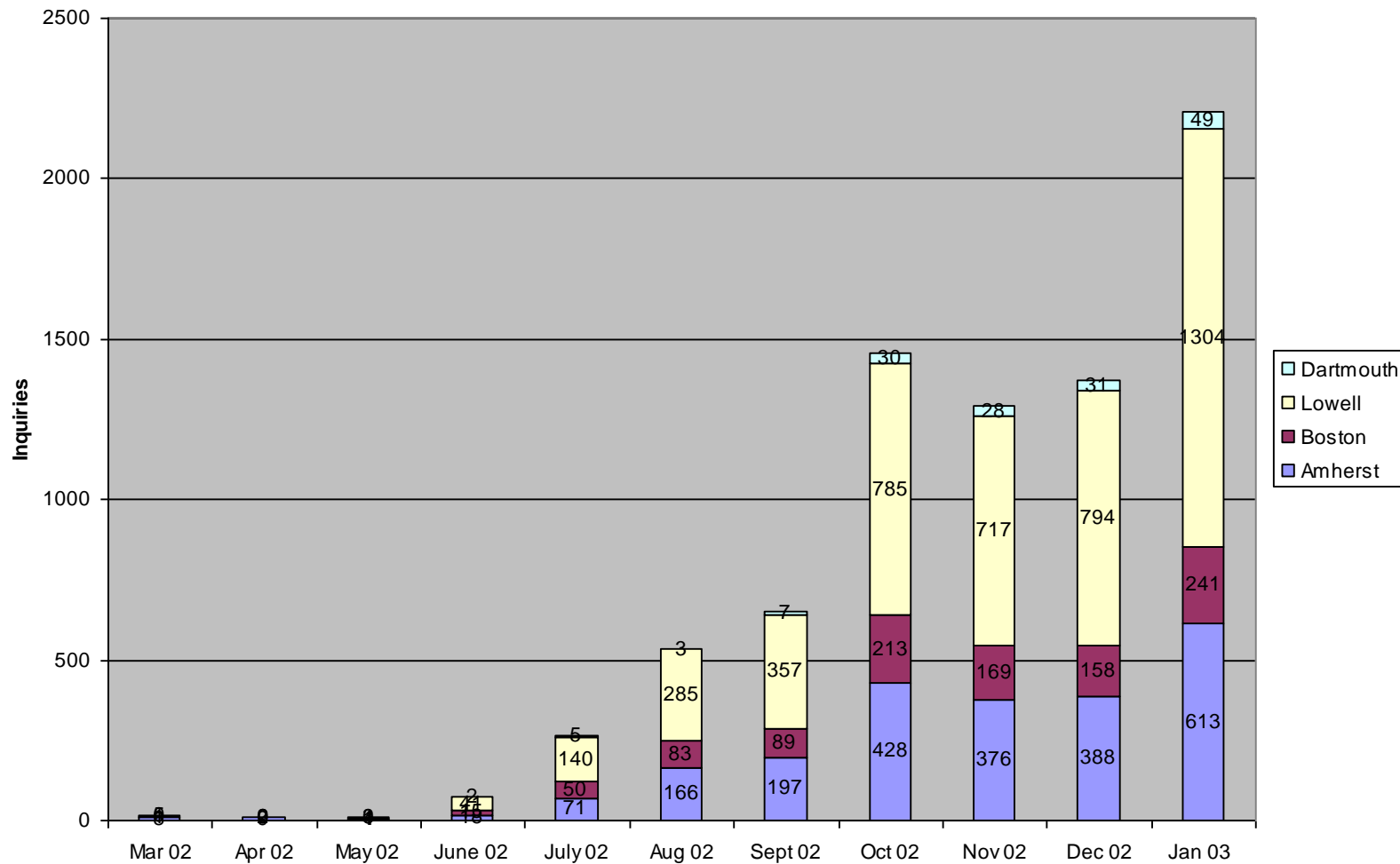


Inquiries by Source





Inquiries by Month





Top Ten- Inquiries by State

Results: State	Inquiries	Percent of total
Massachusetts	780	29%
California	194	7%
New York	193	7%
Texas	132	5%
Florida	118	4%
New Jersey	100	4%
Pennsylvania	86	3%
Georgia	85	3%
Virginia	73	3%
Connecticut	64	2%

Thank you!

Jack M. Wilson,
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Formerly CEO, UMassOnline

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Creating New Learning Environments in the Convergence of Computers, Communications, and Cognition

- The ultimate opportunity and challenge in technology-enhanced education is that people change very slowly while technology changes very rapidly. Human beings continue to have the same hierarchy of needs. Behaviors might change a bit, but the needs that motivate those behaviors do not. We have learned much about how students learn over the last decades although we have only begun to apply this knowledge in new ways throughout higher education. If we base our use of technology on established human needs, abilities, and new information about learning, it can promote stability in a time of rapid change. This session will address historical trends, present developments, and future possibilities in technology-enhanced education.
- **Jack M. Wilson**, *President, The University of Massachusetts*,
- Introduction: **Chenfeng Zhang**, *Department of Curriculum and Instruction, University of Massachusetts Boston*