# Emerging Technologies: How Do We Define and Accomplish IT?

## Jack M Wilson, CEO UMassOnline.net



## **UMassOnline**



- www.UMassOnline.net
- Virtual University for the State of Massachusetts
- 6800 Enrollments in 2001
- Intellectual capital of the UMass system.
  - Amherst-Boston–Dartmouth-Lowell-Worcester (Medical)
- Collaborative Non-Profit model
- Financed by \$15 M loan at 7.5%
- Grant of \$ 2.25 M this summer for platform

# Investing and Developing Programs



- Twenty five degree and certificate programs
  - Bachelor's, Master's, and Certificate programs
  - Many more coming this summer
- Three of our programs have been recognized by US News and World Report as top on-line programs in the October 15, 2001 issue.
  - MBA UMass Amherst
  - MEA UMass Lowell Ed. Administration
  - MPH UMass Amherst- Public Health

# Serving Community Needs

- BSIT \*
- MSIT
- Nursing \*
- MBA \*
- Techno-MBA
- MPA
- MPH \*
- MS Substance Abuse Professionals
- BLA Liberal Arts \*
- Degree Completers



### The horrible mismatch

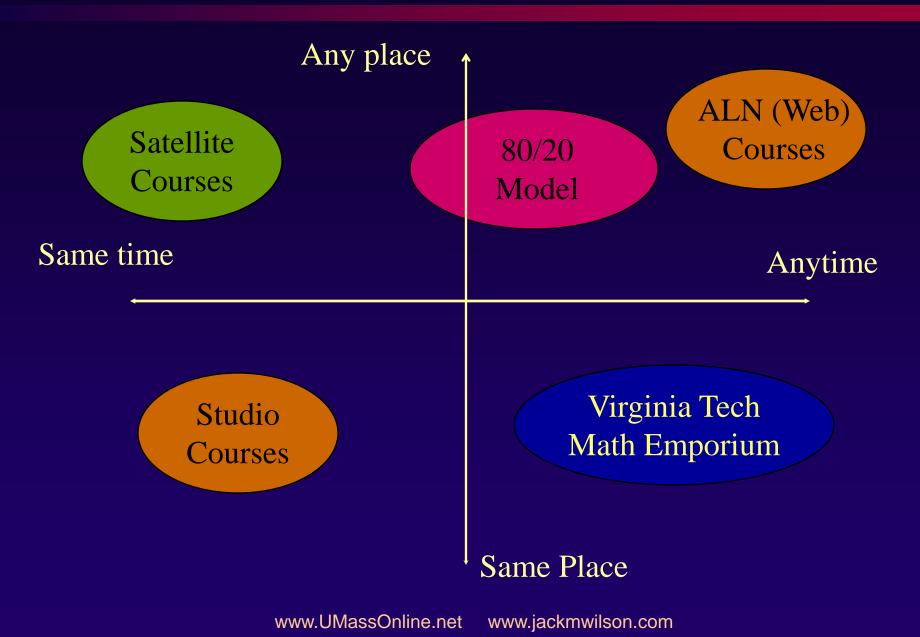


- People change very slowly
  Both a comfort and irritant!
- Technology changes very rapidly



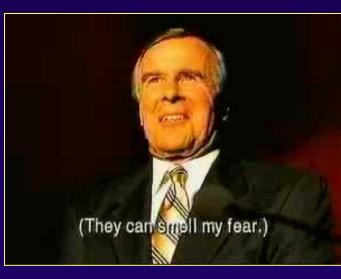
## **Models of Distance Learning**



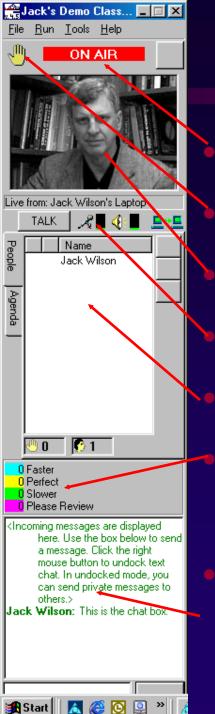




- Live Online Learning
- Fall 2000: 125 (50 on/75 off) campus students
  - IBM, Ford, GE, Lockheed Martin, Pratt and Whitney, Ford, Consolidated Edison, NY Power,
    - J. P. Morgan, Carrier, Otis, etc.
- Extensive Website:
  - http://www.jackmwilson.com/eBusiness/Syllabus-Spring2001/
  - MBA, MSIT, MS
  - On-line studio style miniLectures, Discussion, Student presented cases, & asynchronous interaction (ALN)





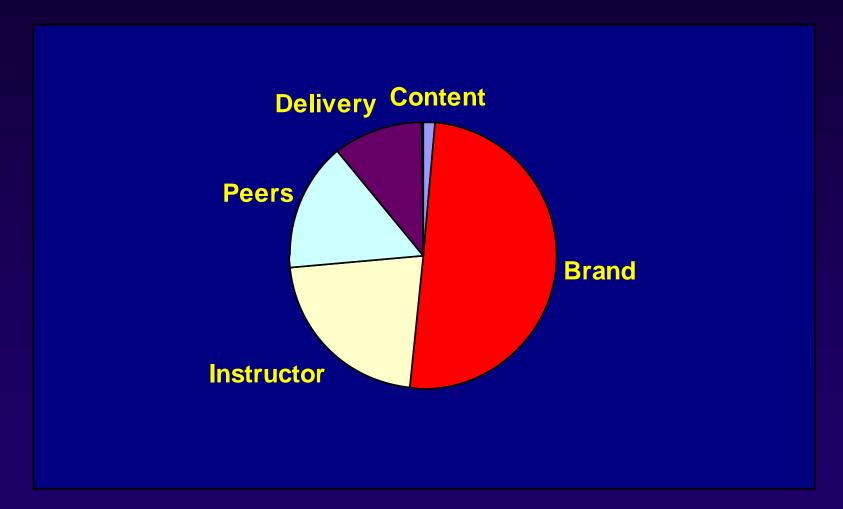


On-Air indicator Raise your hand Picture or video of speaker Audio and Network controls Agenda or class roll Feedback section (can be pace, agreement, T/F, Yes/No, etc.) Chat Window

#### The Value Chain



#### **Brand** ~ **Reputation**





- Is all the excitement over eLearning over?
  - Question from a reporter at the Chronicle of Higher Education.



## Jack M. Wilson http://www.UMassOnline.net

#### The End www.JackMWilson.com/eLearning



- Service as:
  - 31 years as a professor, department chair, research center director, dean (4 flavors), and provost
  - RPI: J. Erik Jonsson '22 Distinguished Professor of Physics, Engineering, Information Technology, and Management.
- Founder, CEO, Chairman of LearnLinc
  - a successful eLearning Co
  - Now Mentergy Corporation (NASDAQ: MNTE)
  - Sold in February 2000.



- Industry Consultant (IBM, AT&T, Lucent, Ford, GM...)
- Army TRADOC Advisory Committee
- Pew Center for Academic Transformation (\$8.8 M)
- One of founders of the Nat. Learning Infrastructure Init.
- Chair, NY State Task Force on Distance Learning
- Wash. DC: 8 yrs on Science Education: HS. and Univ.
- National Acad. of Science/National Research Council
  - Committees on Information Tech., Physics Decadal Overview Committee, and National Digital Library Committee
- Lots of visits, speeches, writing, reading, and visitors

# A personal journey



- Began career as a research physicist
- Research required high performance computing
- Why are students not learning about this?
- How can this help learning?
- Restructuring physics education.
- Computing Communication Cognition -> The Studio Classroom
- Restructuring Undergraduate Program
- How can the studio experience work at a distance?

# NY Times Midnight Question



 "Dr. Wilson, Governor Kean told me that all this technology emphasis was fine but the the best education was:

Mark Hopkins on one end of a log and the student on the other."

"Could you comment on that?"

- Rosalie Stemer, New York Times in a late night call

# The Electronic Log?

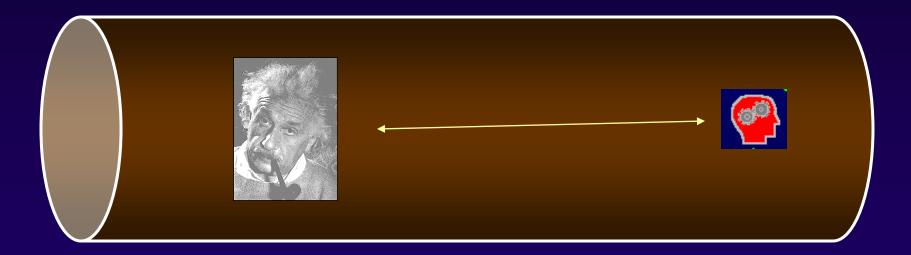


- "Rosalie, I couldn't agree more..... as long as you will allow me to make it an electronic log."
  - A sleepy Jack Wilson:
- This became the lead for the NY Times piece.
- My other hours of interviewing at other times did not appear.
  - NY Times: <u>The Virtual Classroom: Colleges face tough</u> <u>questions about using technology to teach more students.</u> <u>Can video lectures and E-mail offer the give-and-take of real</u> <u>learning?</u> By Rosalie Stemer; The New York Times, Sunday, January 8, 1995





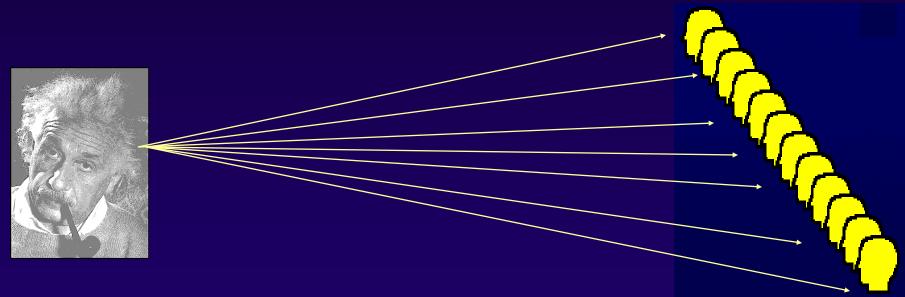
## The (electronic) Log



#### The transmission model

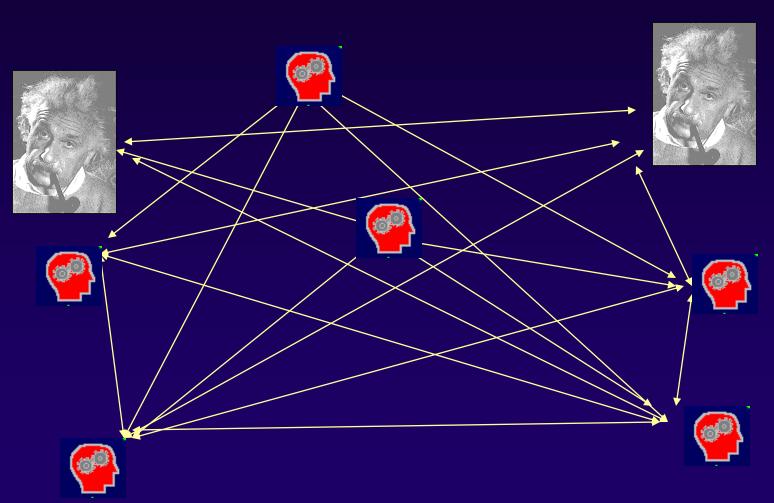


- The mainframe approach
  - Face to Face: The Lecture
  - Distance: TV (Cable or Satellite)
    - Pushes the back wall out a few thousand miles



#### Distributed Collaborative Model





# Faculty fears and legislators hopes

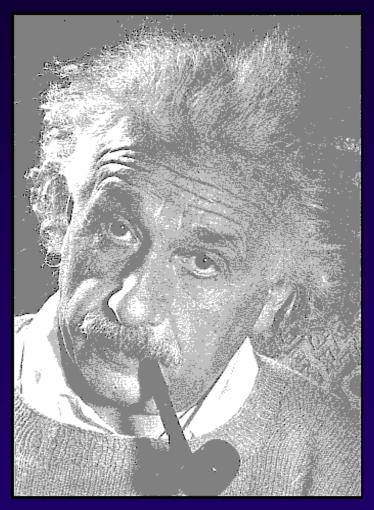


 Prism: "If a student can zoom the best professors into his or her living room, then what is to happen to the rest of the countries professors?" (the mainframe model!)

- In a word: hogwash.

Presenting is not teaching!

# What happens to me?



#### • Will a

Web site or a CD-ROM (or a videotape)

replace your <Blank> Instructor?



# High hopes for eLearning



- Pensare teamed up with Duke.
- Click2Learn teamed with NYU Online.
- Fathom teamed with XanEdu.
- U. of Penn Wharton School teamed with Caliber, a spin-off from Sylvan Learning.
- Cornell spun of eCornell
- UNext created Cardean University and partnered with Columbia, the London School of Economics, Stanford, and the University of Chicago.
  - Reportedly Cardean had pledged to pay Columbia, and perhaps the others, \$20 million dollars if they failed within five years.
- 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."

#### And Now?



- Pensare is gone.
- Fathom had to obtain \$20 million in financing internally.
- Cardean laid off over half its work force and asked universities to restructure arrangements.
- Temple University quietly closed its spin-off without really ever activating it.
- Harcourt is gone after enrolling a total of 32 students in 2001.
- eCornell is open now, but with very small programs and drastically reduced expectations.
- Caliber has filed for bankruptcy.
- University Access has changed its name and withdrawn from higher education.



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

### Questions



- What are the advantages and disadvantages of various financial models?
- Are joint ventures between universities and for-profits viable (Pensare, Caliber, NYUOnline, U21 Global, etc)
- Can one borrow brand equity (reputation) from one institution to another: (Cardean, Pensare)
- Can one transfer brand equity (reputation) from a different business to eLearning (Harcourt)
- Given that content is a commodity, how much to invest in content?