Distance Education Everywhere

(not "online" learning)

Myths
Realities
Possibilities
It’s A Last Mile World

“Civilization is in a race between education and disaster.”

H.G. Wells
Need to Integrate Technology

“...in past focused on speed, new versions and upgrades - this is now of growing disinterest.”

Lou Gerstner
ADEC & the Distant Learner

- Consortium of 60 state universities
- Includes HSIs, HBCUs & Tribal Colleges
- NSF Project: Advanced Internet Satellite Extension Project
- USDA Rural & Remote Education and Business Enterprises
- Hybrid Networking, Applications, Learning Effectiveness
Myths

- “Promises, Promises” in the last mile
- Edges of the net have nothing to offer
- It’s mostly about technology - if we can’t easily get there it isn’t important
- Distance learning is about bandwidth and video lectures
- The Internet is about teen-agers
- All knowledge resides in U.S. cities, on campus and in government buildings
Myths (cont.)

- We are manufacturing “tools” to fit the hand
- Distance education is not as good as learning on campus
- Regulation is benign
The “Internet” best thing to happen in the technology sphere in my lifetime
Access to spectrum has been limited to rich, powerful and to the customers of the rich and powerful
Incredible amount of confusion and nonsense disseminated from those who would protect status quo and those who would speak for the public
ADEC Experience

- Consumers (all types) getting smarter
- Research agenda becoming focused on ubiquitous cyberinfrastructure
- Every person in the world is potentially an “internet” user - learner
- Auctions and Beauty Contests have been a disaster
- Set standards and regulate devices - we know how to do this
Realities

- World is full of rural scattered populations - distance learners
- People are constantly on the move - need to learn from “anyplace”
- Very interesting people, environmental laboratories, cultures, customs at the edges of the network
- Much knowledge resides in global and local communities of interest
The hand is contorted to fit the “tools”
Ergonomics are generally disregarded
Today’s networks are artifacts of monopolistic era - narrowband
It’s mostly about money and who makes it - dangerous business: picking winners and losers
More women than men learn by distance - do the shopping
Realities (cont.)

- Distance Education is as good or better than campus based (no significant difference)
- Distance Education is about learning - educational designs can be adjusted to fit the delivery modes - continuous access is more important than speed
- Integration and interoperability key; complexity and high cost will kill innovation
Possibilities

- No “strings” attached - wireless local loop, use of satellite - only game for rural/remote
- Design backwards from the edges of the network
- Focus on hybrid networking - standards and interoperability
- Cyberinfrastructure must extend everywhere
Possibilities (Cont.)

- It has to be global - value of the net far greater with greater reach
- Collaborative virtual environments require mutual understanding, sharing, trust development - it’s about people, organizations and applications
- Intellectual property, regulatory and spectrum issues are critical
Will We Change?

- How we do business?
- Our organizations?
- Our ways of learning?
- Our ways of socially networking?
- Our ways of conducting education and research?
- Improve our abilities for breadth (global) and depth (local)?
Wireless

- Key to inclusion
- Key to innovation
- Key to connectedness - we have gone from counting PCs to measuring BW to ability to be connected 24/7
- Must build better applications and appliances