
We have to start meeting like this...

Video Distant Learning for Public Libraries

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WLA La Crosse



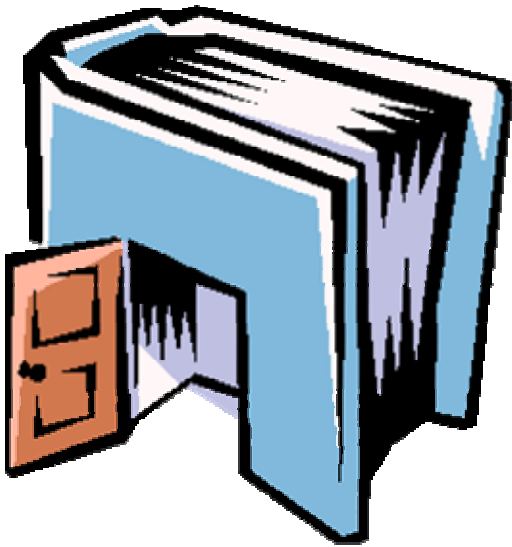
What's Video Distance Education?

- Interactive Video classes or conferences via the Teach network.
- Between two locations (1x1) or multiple locations.
- Real-time visual and audio contact between instructor and students.
- Diverse media (computers, videos, document cameras).



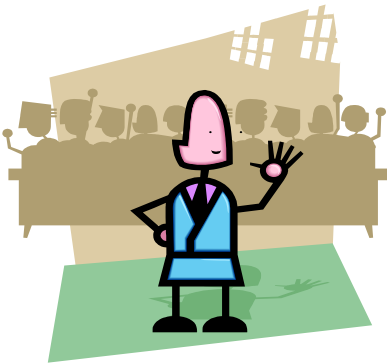
Why would we want Distance Learning?

- Overcome Distance.
- Achieve Learning.



Distance factors

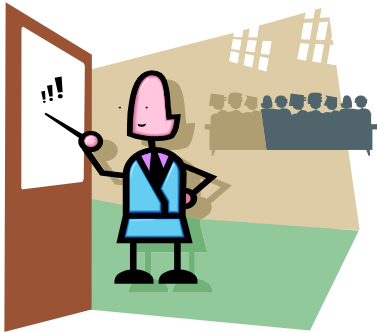
- **Time & Money:**
 - travel distance,
 - lodging,
 - meals.
- **Staffing**
 - work time lost to travel
 - cost for substitutes
- **Speaker costs**
 - lodging & travel



Learning considerations

You'll be able to:

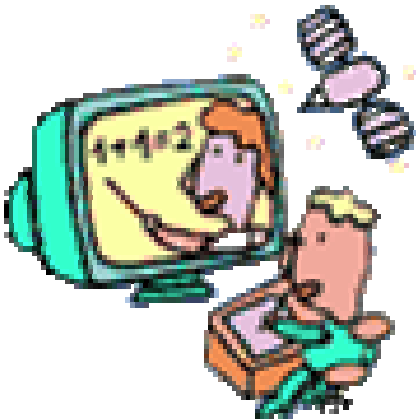
- ✓ Offer multiple locations;
- ✓ Distribute CEs over larger areas;
- ✓ Share speaker costs;
- ✓ Save money and staff time;
- ✓ Offer classes and fun programs to your patrons!



But is distance learning in our mission?

Only if we want to offer:

- *Formal adult education:* through the TEACH distance learning network
- *Informal education*
 - Workshops, information sessions
 - Author “visits” & field trips
- *Children’s programming*
 - Virtual field trips
 - Support for SLP
 - Multimedia support for programs



Hurdles overcome

- Cost: **not as much as it used to be**
 - Equipment
 - Maintenance
 - Support
- Space: **less need for dedicated room**
 - Meeting room
 - Equipment room
- Partners & content: **new possibilities**
 - New option for point-to-point classroom
 - Opportunity to establish a public library-oriented content network



BadgerNet

- Statewide video and data networks
- TEACH discounts enable affordable access to BadgerNet for K-12 and PLs
- 370 PLs have TEACH circuits
 - For broadband Internet access
 - For shared ILS connectivity
- 60% of SD are in distance ed. video networks vs. <1% of public libraries

The Need for a New BadgerNet

- Changes in networking technology
- Video contract expires 2005; data in 2006
- Current video network is
 - Not Internet (IP) based
 - Bandwidth intensive (45mbps)
 - Using some hardware no longer made
 - Comparatively expensive
- Key decision
 - Rebid both video and data networks
 - **Goal: Converge video and data into one network**
 - Have a standards-based, IP network infrastructure

New Badgernet Advantages

- Now a converged network
 - Old network model had video complexity, was costly, etc.
- IP offers more elegant network
- IP offers new video options
 - Less expensive
 - Less complex to manage
- Library system WANs facilitate video options



Video options in BCN

- Managed versus Unmanaged
- 3x1 classroom & new “cart” option



Monona Public Library



Stoughton High School



1x1 Video Cart

Economy options for the site

- No-frills video conferencing cart upgrade later or use as a student location
- Large LCD screen or projector, ceiling-mounted camera and microphones instead of the roll-about cart
- As funds permit, add options:
 - Document camera
 - Multipoint Control Unit (MCU)
 - LCD screen and software to discretely control settings and output
- Either a managed system or unmanaged.

Unmanaged Cart options:

Cart & LCD
\$3500



Polycom VSX 7000s,
About \$6600



Polycom VSX 8000



2500 Lumen XGA Multimedia
Projector
18" WXGA Whiteboard Panel
UniBar System Controller
VCR/DVD Combo Player
XGA Document Camera
Amplifier
Speaker
Audio/Video Switcher
Laptop input cable with audio
Roll-about Cart



Canon "Video
Visualizer"
document camera:
\$2300

1x1 Managed Solution from BCN Contract

Including:

- Sony EVI-D100 Integrated Camera \$1830
- LG 44" DLP HD Monitor \$2680
- Kramer VS-88V 8-way router \$1116
- ClearOne GT1524 amp/AEC \$1835
- Eastview presentation software/hub \$2290
- Mobile equipment cart \$1890
- Other misc. equipment, mics, mounts, delivery, etc., staging, installation & testing brings the total to: **\$16,620**

Benefits to a Managed System:

- State/vendor will install and maintain all telecommunications equipment
- State/vendor does scheduling and troubleshooting for sessions
- Easier connection to existing TEACH classroom facilities
- Instructors already familiar with instructional interface

Drawbacks to Managed System:

- Annual membership in a consortium
- Inflexible installation of state-owned equipment
- Tendency for K-12 dominated network to take advantage of a public site
- Higher cost to configure required equipment
- Maintenance contract costs for more robust network



DL-Navigator Instructor Interface

The screenshot displays the DL-Navigator Instructor Interface. At the top, a menu bar contains 'Options', 'Help System', and 'Version Info'. The central area is a video preview window showing a classroom scene. To the right, the 'Local Program Sources' panel includes buttons for 'Instructor', 'Student', 'Doc Cam', 'VCR DVD', and 'PC'. Below this is a time display showing 'Time is 09:50:35 AM' and a 'Local Device Control' panel with buttons for 'Instructor', 'Student', 'Doc Cam', 'Audio Settings', 'VCR DVD', 'PIP', 'Network Scheduler', 'Matrix', and 'Room Reset'. At the bottom left, a 'Site Selection' panel features buttons for 'Ashland HS', 'Bayfield HS', 'Gilman HS', and 'Washburn HS', along with 'Relay' and 'Pause Scan' buttons.

Help and Exit Section → Options Help System Version Info

Video Preview Window → [Video Feed]

Program Sources → Instructor Student Doc Cam VCR DVD PC

Time is 09:50:35 AM

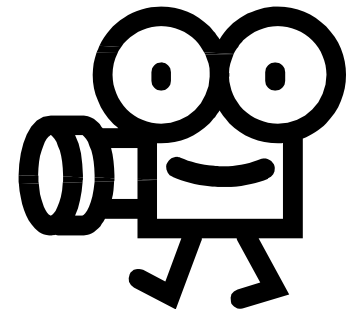
Local Device Control

Device Control → Instructor Student Doc Cam Audio Settings VCR DVD PIP Network Scheduler Matrix Room Reset

Site Selection → Ashland HS Bayfield HS Gilman HS Washburn HS Relay Pause Scan

Advantages of the Unmanaged option:

- Freedom to select equipment and vendors
- Flexibility to use video cart in any location on your local network
- Lower ongoing costs
- Option of connecting “on the fly” for impromptu sessions.



Drawbacks of the Unmanaged option:

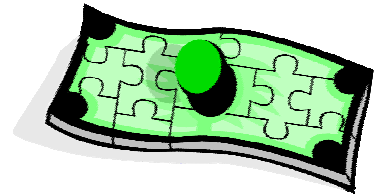
- Need to schedule sessions through BCN gateway to share classes with managed sites
- No external support to insure connection
- No protected network—possible degraded service
- Fixed equipment location for network “blue box”
- Issues for local IT staff to address periodic video load
- Need to maintain equipment or contract with a vendor

3x1 Classroom features (a managed option)

- Bigger, fixed classrooms, more students, location sensitive mics, cameras.
- Configured to see three other locations, plus instructor
- Option to use quad-split image
- Designed high-school inter-district instructional sharing
- Good for multi-regional collaborative meetings; not essential for CE instruction
- Very expensive (\$40,000 & up)



Before you get started...



- Are your board and constituents on board with the concept?
- Does your technology plan include distance learning?
- Do you plan on offering multi-site classroom instruction with the WADEN 1x3 model?
- Do you plan on joining a consortium for instructional resource sharing and support?
- Do you have ongoing funding available for future costs & upgrades?
- Do you have sufficient personnel to schedule, run, and promote the new services?
- Do you have peers who will share the cost of speakers or instructors?

Resources

- BadgerNet converged network:
<http://www.doa.state.wi.us/badgernet>
- Wisconsin Association of Distance Education Networks:
<http://www.uwex.edu/disted/waden/>
- Intro to Interactive Video from the University of Idaho:
<http://www.uidaho.edu/eo/dist10.html>

For more information contact:

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