

Cologne School: Triptych of Virgin and Child with Saints, c. 1510-1520, Oil on oak panels Central panel: Madonna and Child with saints and angel musicians within a hortus conclusus Left panel: Emperor Charlemagne, St Helena and donor

Right panel: St Peter and St Margaret

Gallery: National Gallery of Australia, Canberra, Australia; NGA 2001.19.A-C (Description)

A Distance Learning Triptych

The Music Classroom, The Internet, and Video Conferencing

Part I: Simple Models with Simple Technologies
Part II: More Advanced Models and a Survey of
Solutions and Strategies

David Williams, Illinois State University Peter Webster, Northwestern University

Classroom

Video Conferencing



Internet & Software

Saltarello



DBW

PRW

Distance Education Triptych

Classroom Context

What do you want to do with the technology in terms of your philosophy and instructional intent

Video Conferencing (VC)

To use this important tool for distance education, what technology concepts and hardware options work best for you?

Internet and Software

What Internet connections and specific software might work to support distance education?

Key threads

- Emphasis on concepts, strategies, and applications, not technical details
- Based on survey responses (N=88)
- Help in finding your own path through distance education (there's one for everyone to try)

Distance Education Profiles (Build your own profile)

Instructional Design Dimensions

- •Proportion of Instructional Content Delivered by Distance
- Use of Computer-Mediated Tools
- •A/S
- Interaction
- Locus of Content
- Assessment



Technical Design Dimensions

- Hardware
- Software
- Connectivity
- •PP/MP
- Management of Content
- Resource Assistance





Profile Handout

Distance Education Profile

		Light	Moderate	Intensive
Instructional Design	MODELS*	A, B, C, D	E, F, G	H, I, J, K
	Proportion of Instructional Content Delivered by Distance	Use of some distance techniques and tools; local clientele	Larger portions of time devoted to distance techniques and tools; mixture of clients	Entire class online with few or no scheduled meetings; remote clientele
	Use of Computer- Mediated Tools	Mostly web pages and some use of pdfs, mp3s, digital movies; short segments of video conferencing	Use of course management tools such as WebCT and Blackboard to manage web page content and digital files	Complete use of software tools to deliver all instruction by distance
	A/S	Largely Synchronous	Mixture of Synchronous/Asynchro nous	Largely Asynchronous
	Interaction	Teacher-centered with support content online	Moderate interaction between class members and instructor	Extensive interactions between class and instructor
	Locus of Content	Teacher creates nearly all material and uses some online support for archive and distribution	Content is created mostly by instructor but use is made of online material to augment; prominent use of course management software	Teacher creates core but makes extensive use of web- based resources; encourages exploration
	Assessment	In-class techniques with some online submissions	More use of online submissions paired with in-class work	All work submitted electronically
Technical Design	Hardware	Personal computer-based (low cost)	More specialized equipment (higher cost); devices from Polycom and others for video conferencing	High-end equipment with sophisticated codecs for video; knowledge of issues for lighting, audio quality, microphone and camera use
	Software	Text-based chatting, emails, web browsers, blogs	More sophisticated understanding of course management software; advanced videoconferencing	Netmeeting capabilities with whiteboard, desktop sharing
	Connectivity	Client/Server	Client/Server	Client/Server, Dedicated IP, Internet2
	PP/MP	PP	PP	PP/MP
	Management of Content	Handouts, some	Mixture of local and archived material	Extensive use of on-demand
	Resource Assistance	archive support Informal, personal	Formal help from IT support groups for testing, scheduling	Help with technical aspects of lighting, audio quality, microphone use and camera support

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Panel I: Classroom Context (More Intensive)



Models Emerging from Survey

- A. E-Presenters
- B. Collaboration/Communication

Light

- C. Field Work
- D. Online Resources
- E. Online Modules
- F. Skills Training
- G. Testing and Remediation
- H. Online Mentoring
- I. Course Delivery (Full and Dual)
- J. Team Teaching
- K. Compete Degree Programs

Moderate

Intense

Models Emerging from Survey

- H. Online Mentoring
- I. Course Delivery (Full and Dual)
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Online Mentoring

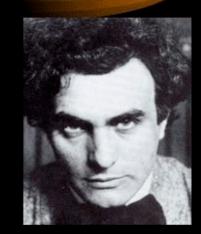


Full Course Without Live Classroom



Example: Edgard Varèse *Poème Electronique* (1958)

- Written for Philips Pavilion at 1958 Worlds Fair
- Played over loudspeakers inside building
- · Architecture by Iannis Xenakis



Jonathan Kulp, UL Lafayette

Table of Conten

Kulp Homepage

Technical

About the Class

About Exams

Problems Taking Exams Concert Attendance

ABOUT THE CLASS

Q: Does this class ever meet in person, either for lectures or for tests?

A: No.

Q: Where is the Course Syllabus?

A: I've placed a link to the .pdf file at the top of the front page of Moodle.

Q: How is the class done?

A: You will be viewing my lectures online as Flash files that are transferred to your hard drive as a progressive download. Each lesson could take anywhere from 1 minute to 10 or 15 minutes to download (depending on what type of internet connection you have), and it will begin playing as soon as it's done downloading. You can pause the file at any point and you can skip around in the lesson to view different parts of it. My Powerpoint slides will be shown to the right of the movie file, and you will have access to the Powerpoint files in outline format on Moodle (I put a link to the file under each topic heading).

ID and password.

Full Course: instructor onsite and off-site

MUS 690 Historical and Philosophical Foundations of Music Education

Aaron Copland School of Music, Queens College –CUNY

Janice P. Smith, Ph.D., instructor

Office: 252 Music Building Office phone: 718-997-3590

Office Hours: Tuesdays and Thursdays 11:00 – 12:00, and online via Blackboard on Mondays

from 8 p.m. - 9 p.m.

Email: janice.smith@qc.cuny.edu

Required text

A Philosophy of Music Education: Advancing the Vision by Bennett Reimer, third edition, 2003.

Recommended Texts

A History of American Music Education by Michael Mark and Charles Gary,

es by Joseph Labuta and Deborah Smith,

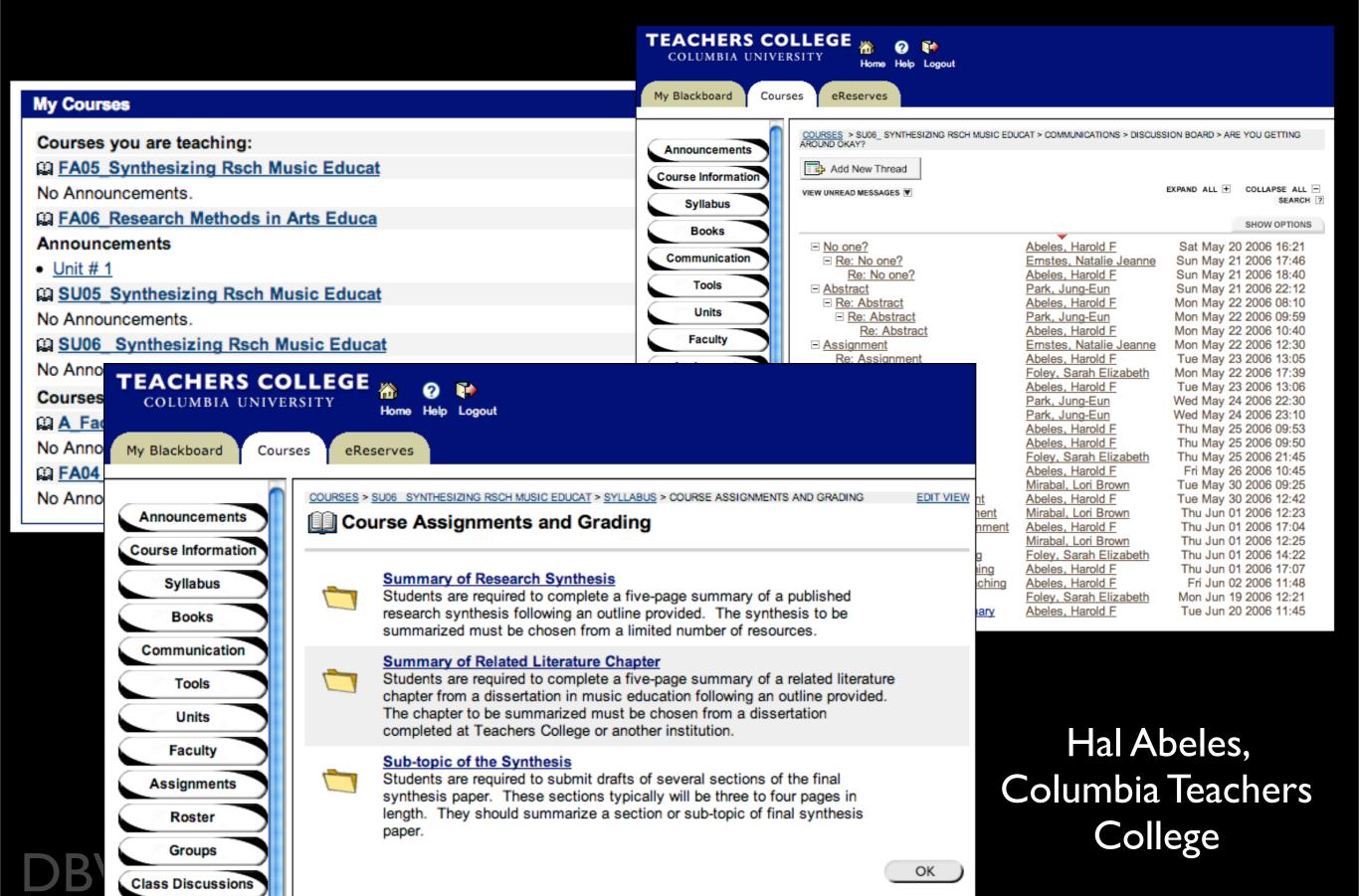
s, Charles Hoffer and Robert 995.



Jan Smith, Queens College



Full Course: Blackboard



Full Course: Commercial Content



Keith Thompson, Jacksonville FL community college

DBW

www.connect4education.com

Degree Program Online with Onsite and Off-site Students



Welcome Page
Program Description
Requirements
Courses and Schedule
Delivery Systems
Program Costs
Texts & Materials
Forms

Contact Information

Dr. Kimberly C. Walls Email: musiced@auburn.edu Phone: (334) 844-6892

Page Information

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<u>Information for Students</u> with Disabilities



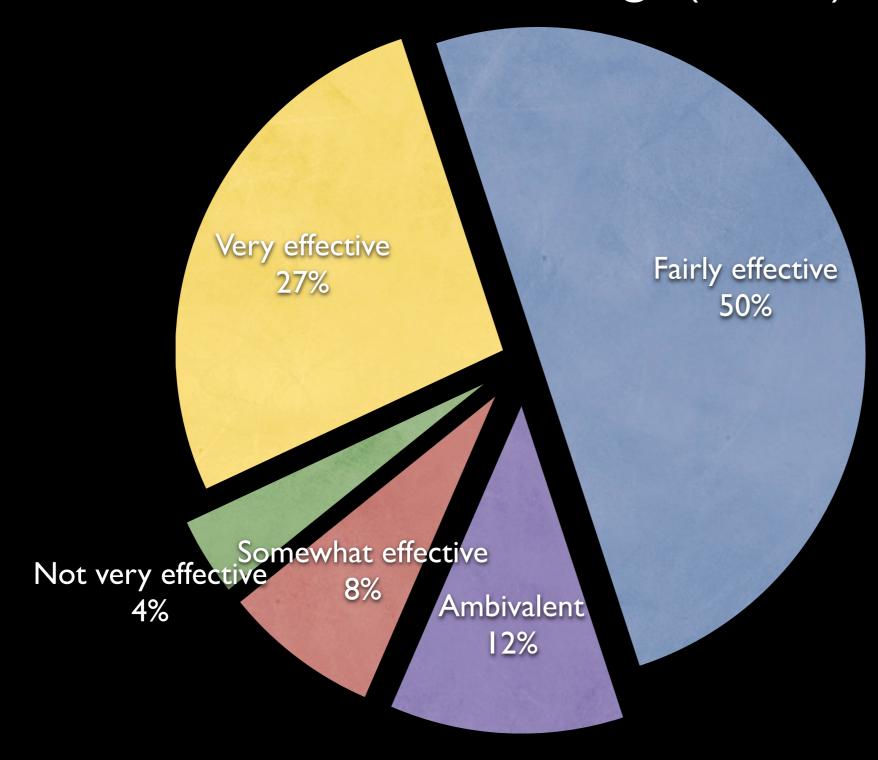


Busy music education professionals can now earn a master's degree in as little as three summers.

- Through Internet-based learning, the Auburn University M.Ed. in Music Education degree allows teachers to balance educational objectives with work and family commitments.
- · Courses emphasize practical applications and research for music instruction.
- Gain expertise from faculty who have music teaching experience as well as from fellow teacher-students.
- Courses may also apply to the Ed.S. and Ph.D. degrees in Music Education.
- The distance education M.Ed. in Music Education degree meets the same guidelines for quality as do all Auburn University programs and is fully accredited by NCATE, and NASM.



How effective is DE compared to traditional, onsite teaching? (N=28)





Panel 2: Video Conferencing (Intensive)

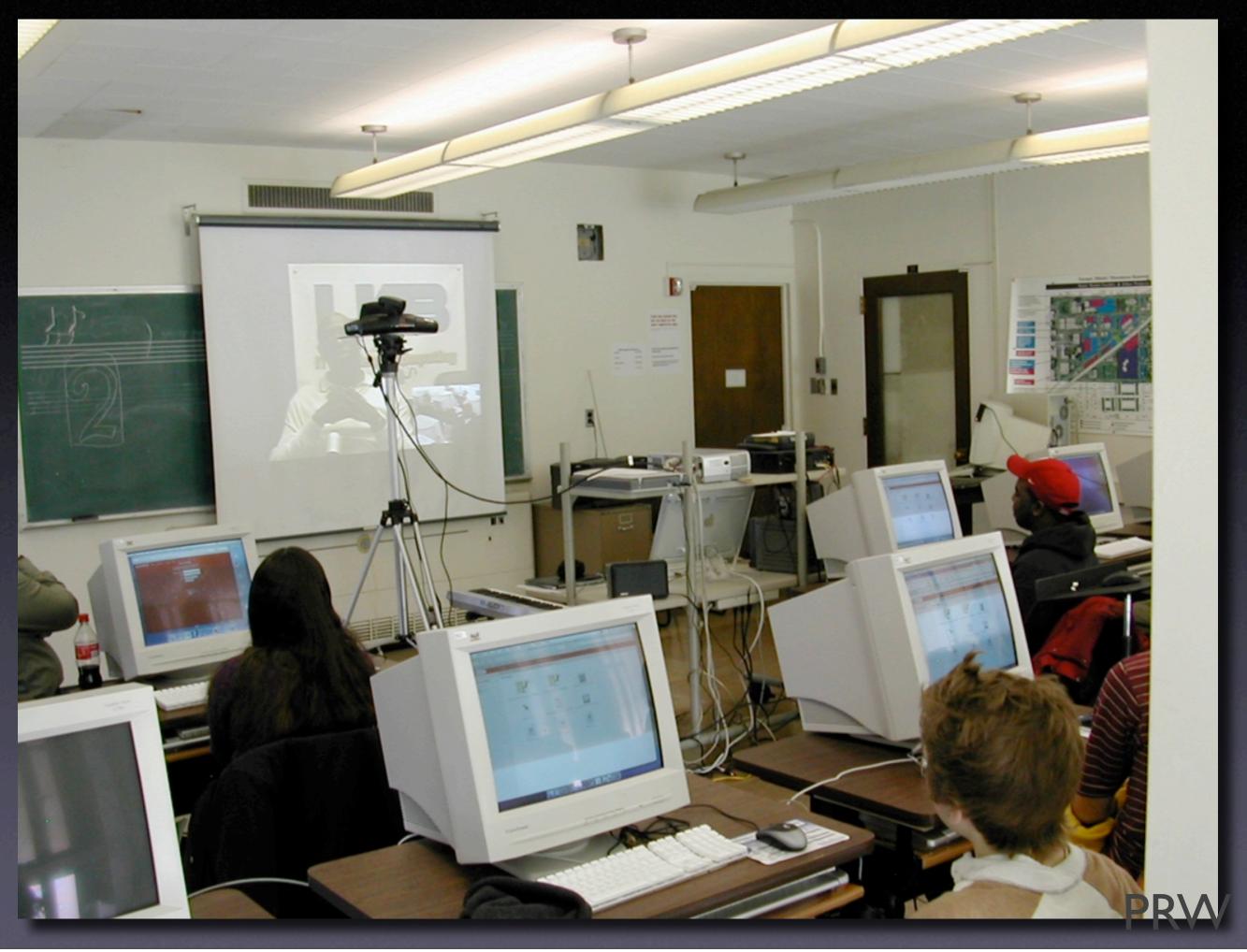


What Do You Need to Get Started with VC, Static IP, and Internet2?

- IT Support Cooperation on Campus
- Internet2 Connectivity
- Video Cameras and Software (more specialized)
- Communication with tech personnel at remote campus
- Special Room or Portable Unit
- Scheduling (time zones)
- More specialized lighting and audio
- Testing Time



PRW

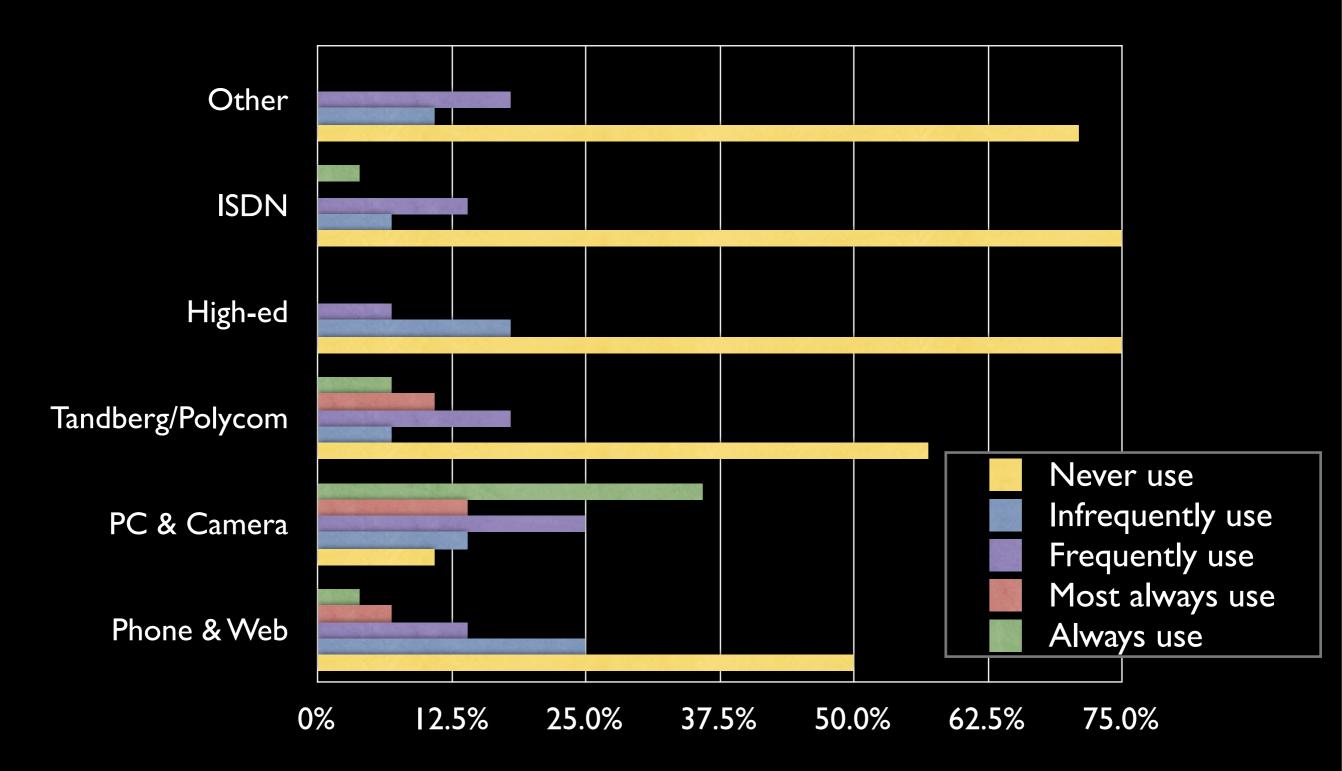




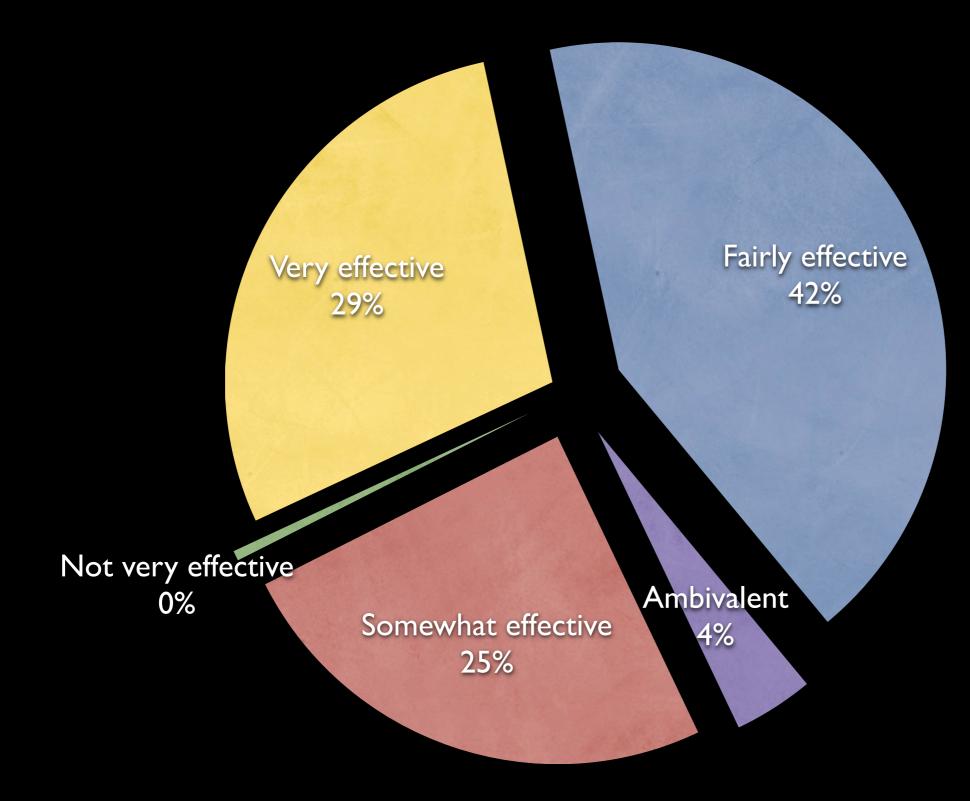


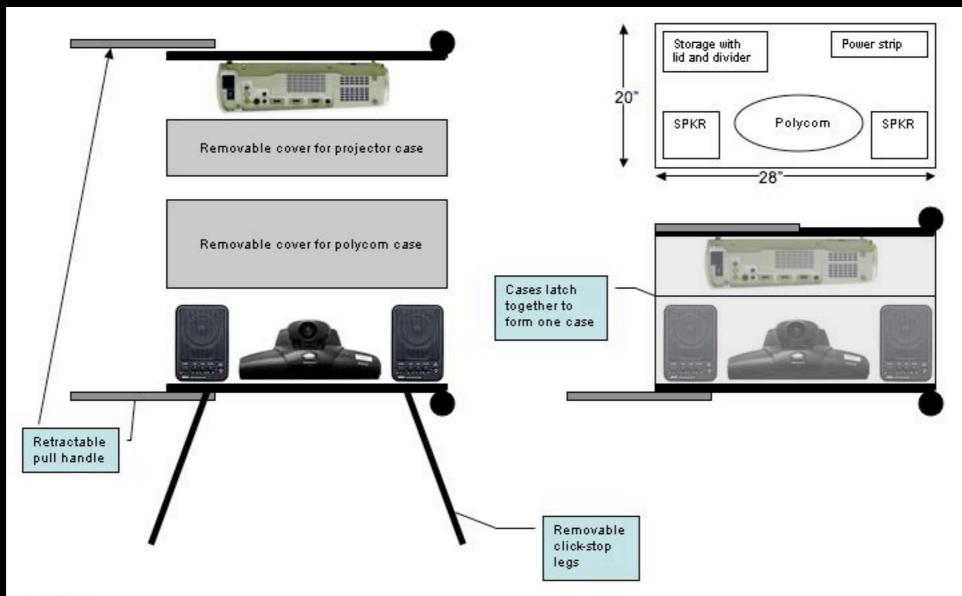
Scenario 1: High-Quality Video to Off-Campus Sites Master's Class with New World Symphony Example Cameras Local Video to Encoder DVTS Encoder IN or MPEG2 Encoder Monitor Panels Video Switcher Audlo/Video to NWS Local Audio to Encoder New World Internet Symphony Sound System Video Projector Audio/Video from NWS NWS Video to Projector DVTS Encoder OUT or Echo Canceller MPEG2 Decoder **NWS Audio to** Sound System

What VC configurations do you use? (N=28)



How effective is VC as an instructional tool? (N=28)





Narrative:

- •Trying to build a flexible case design to move video conference equipment and/or projector. Case is designed so that the two cases can be fastened together to form a single case.
- Need to mount equipment to flat bottom with removable cover.
- Bottom panels need sturdy wheels, retractable handle, storage for click-stop legs, connection points for click-stop legs.
- •Bottom panels need sturdy wheels, retractable handle, storage for click-stop legs, connection points for click-stop legs.
- Need to mount equipment to flat bottom with removable cover.

fastened together to form a single case.

VC-to-go in a Box

Panel 3: Internet and Software (Intensive)



Internet2



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- >Security
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MEMBERS

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PARTNERSHIPS

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EVENTS

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PIENTIC

- >Related Events
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VENTS



The U.S. Department of Energy's (DOE)

Energy Sciences Network (ESnet) and
Internet2 announced a partnership to
deploy a highly reliable, high capacity
nationwide network that will greatly
enhance the capabilities of researchers
across the country who participate in
the DOE's scientific research efforts.
The partnership brings together two
advanced networks which have a
combined 30 years of experience in
providing network support to thousands
of researchers around the world. Called
ESnet4, the new network created

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The partnership brings together two advanced networks which have a combined 30 years of experience in providing network support to thousands of researchers around the world. Called ESnet4, the new network created

Led by more than 200 U.S. universities, working with industry and government, Internet2 develops and deploys advanced network applications and technologies for research and higher education, accelerating the creation of tomorrow's Internet.

News

31 August 2006

ESnet and Internet2 Partner To Deploy Next Generation Network for Scientific Research and Discovery

more...

11 August 2006

Internet2 Marks Five Year Anniversary of its Sponsored Education Group Participant Program

more...

07 August 2006

Internet2 Introduces Critical Middleware Software and Tools more...

more...

07 August 2006 Internet2 Introduces Critical Middleware Software and Tools

more...

Highlights

- New Internet2 Network
- Internet2 Fall Member Meeting Call for Participation
- Job Opportunities

Events

Internet2 Events

December 2006

Fall 2006 Internet2 Member Meeting 4 - 7 Dec Chicago, IL

April 2007

Spring 2007 Internet2 Member Meeting 23 - 25 Apr Arlington, VA <past | future>

<past | future>

23 - 25 Apr Arlington, VA

Spring 2007 Internet2 Member

oril 2007

Internet2

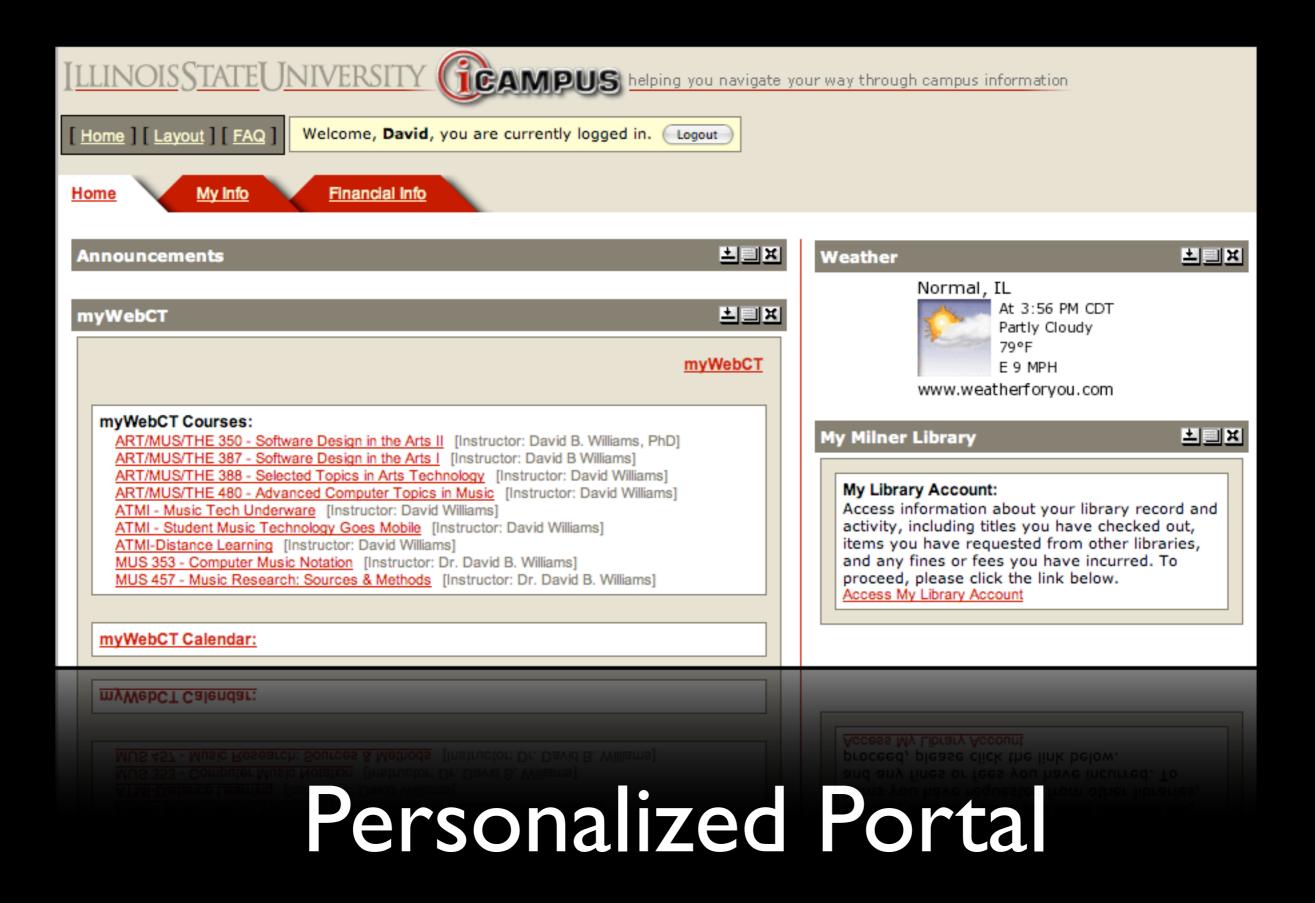
- What is it? Consortium for research and education; I2 and I2 pipes (e.g. Abilene network)
- What are its advantages? Bandwidth, predictable synchronicity, speed, and more
- Who can get connected? Anyone with I2 membership or access to ISP with membership
- Who can you connect to? Anyone on I2
 You may be on Internet 2 and Not Know It!

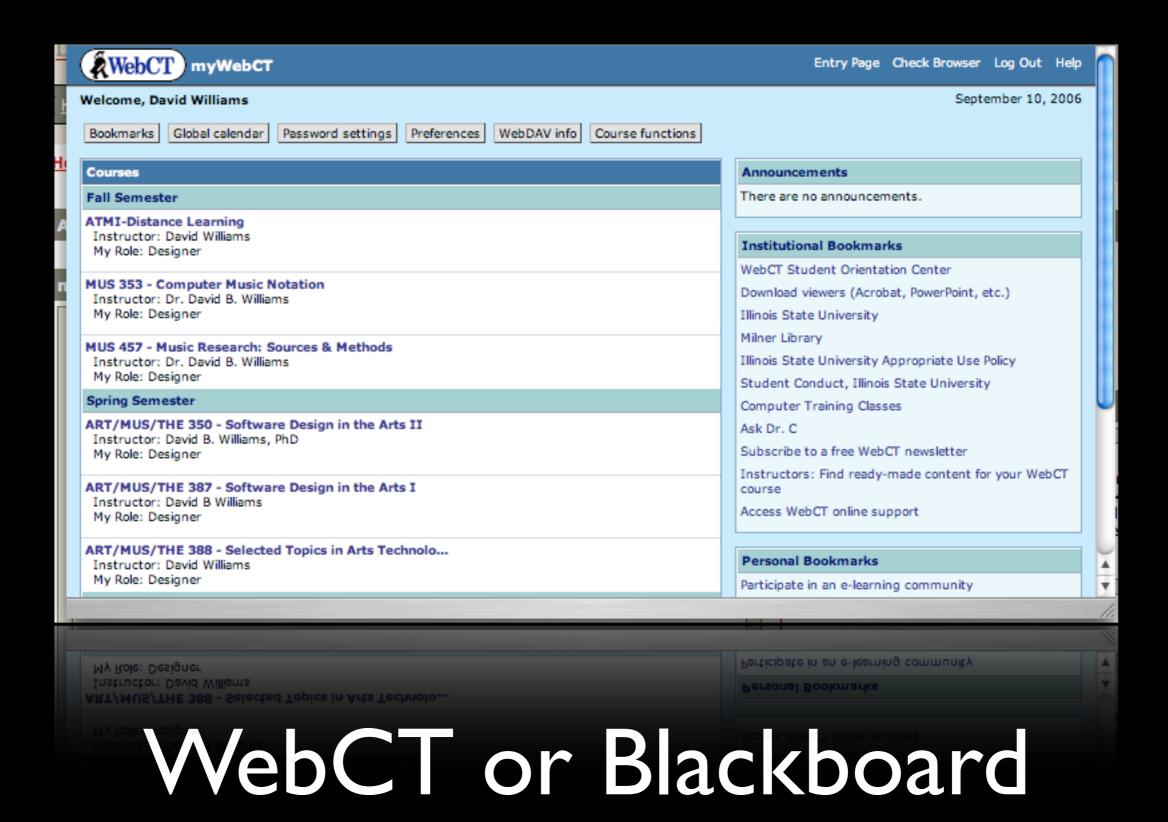


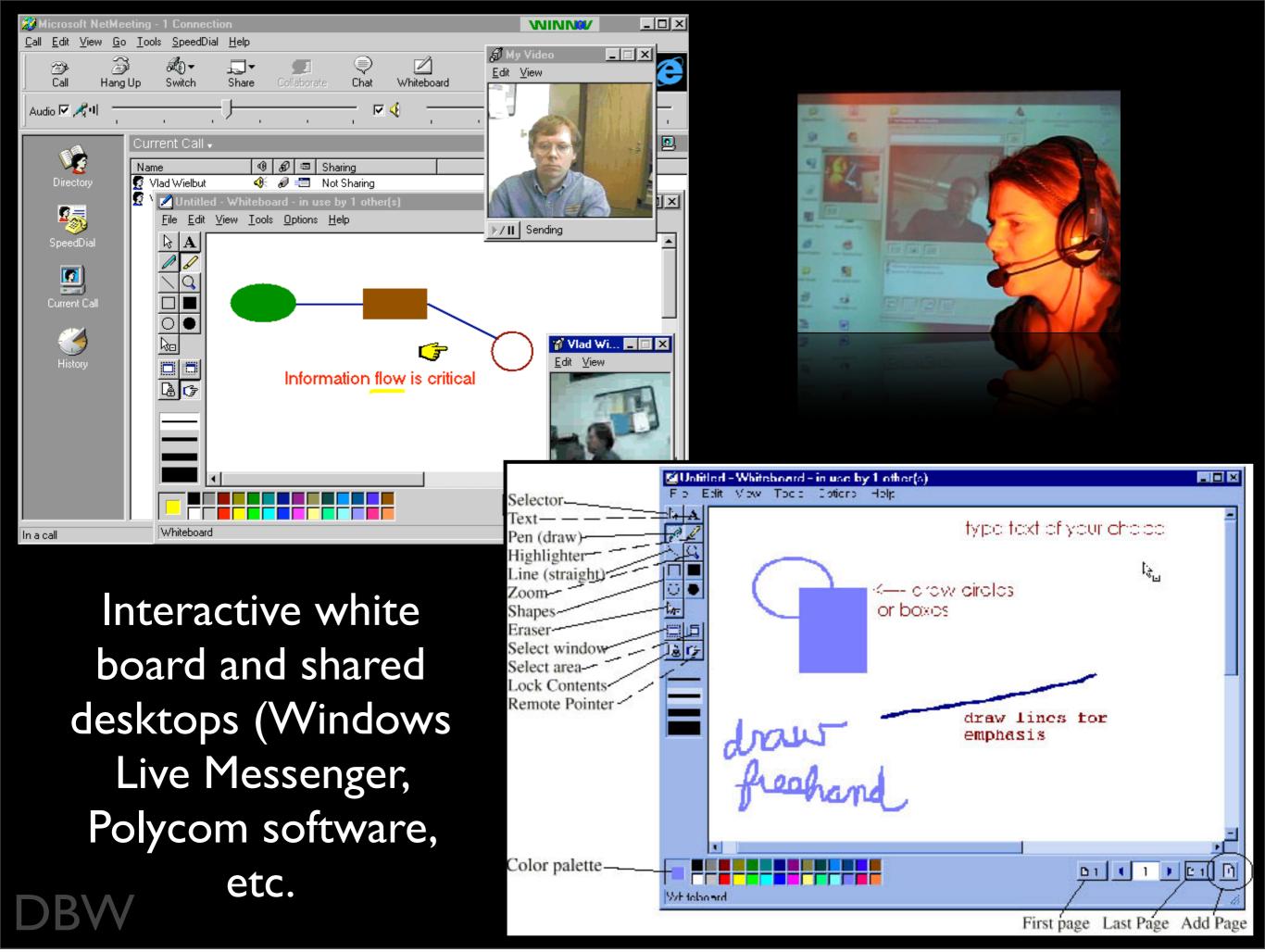
Software

- Course Management Software (WebCT/ Blackboard)
- Specialized Servers
- Web Portal
- Netmeeting-like software with whiteboards and desktop sharing









Triptych Coda

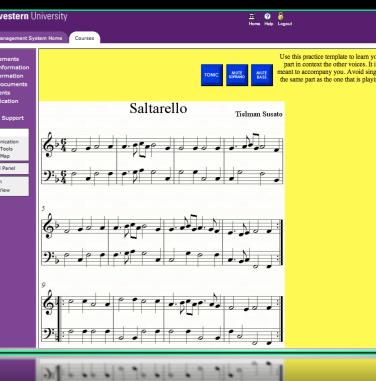
Classroom

Video Conferencing





Internet & Software



PRW

Why or Why Not Do Distance Education?

Why do it according to survey?

- Students can work at their own pace
- Reach more students
- Best way to reach remote, rural, geographically-restricted, health restricted students
- Collaboration opportunities with other schools and international contacts
- Maintain essential communication with students and colleagues
- Good opportunity for remote master classes and ensemble coaching
- Forces you to learn to organize and prepare your classes better, both on and off site
- Technology just keeps getting better
- It is so easy, especially with video built into new Macs
- We are falling behind music programs in other countries in the use of technology

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Why or Why Not Do Distance Education?

- Why NOT do it according to survey?
 - Time
 - Instruction Issues
 - Loose important interpersonal relationships with students
 - Requires more student dialogue and a change in teaching methods only works for the more "academic" content courses
 - Only for small classes
 - Support
 - Don't fully understand how it works or have a sense for its effectiveness
 - Need more tech support and training
 - Difficult to deal with technical/physical aspects of set up with remote students
 - Technology
 - Wait until technology is more advanced and reliable
 - Audio distortion for live music presentations
 - Need a lot of bandwidth

Profiles Redux

Instructional Design Dimensions

- Proportion of Instructional Content Delivered by Distance
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Technical Design Dimensions

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Discussion