Handout to Support the Presentation

A Distance Education (DE) 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

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I. Outline or Presentation—Part 1

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 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?

Distance Education Profiles (Build your own profile) (see IV. below)

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

Panel 1: Classroom Context (Basic/Moderate)
  - Models Emerging from Survey
    A. E-Presenters
    B. Collaboration/Communication
    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

Panel 2: Video Conferencing (Basic/Moderate)
  - What Do You Need to Get Started with Client/Server VC?
    Account with VC/chat Server
    Video Camera & mount/tripod
    Microphone in computer, camera, or other
    Software
    Connected to the Internet in some fashion
Computer
Someone who is on same service
Technical “Stuff”
  Client/Server
  Synchronous vs. Asynchronous
  Point to Point vs Multipoint
  Codecs or COder/DECoder (H.261, H.263, H.264, H.323
  VC/chat client-server software options (iChat, AIM, and others)
  PC (AIM) and Mac (iChat) Chat Sessions
Panel 3: Internet and Software (Basic/Moderate)
  Connectivity
    Wireless
    Direct connection through Ethernet or Wireless or other
    Internet Options
    Internet1(a.k.a. commercial, commodity, or plain-old-Internet)
    Internet2

Edgar Dale’s Cone of Experience

Graphie courtesy of Edward L. Counts, Jr.

II. Outline or Presentation—Part 2

Panel 1: Classroom Context (More Intensive)
  Online Mentoring
  Full Course Without Live Classroom
  Full Course: Instructor onsite and off-site
  Full Course: Blackboard
  Full Course: Commercial Content
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
Computer
Someone who has the same stuff
Polycom over Internet2

Synchronous Internet2 with DVTS

Scenario 1: High-Quality Video to Off-Campus Sites
Master's Class with New World Symphony Example

VC-to-go in a Box

Panel 3: Internet and Software (Intensive)
Internet2
What is it? Consortium for research and education; 12 and 12 pipes (e.g. Abilene network)
What are its advantages? Bandwidth, predictable synchronicity, speed, and more
Who can get connected? Anyone with 12 membership or access to ISP with membership
Who can you connect to? Anyone on 12
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

Personalized Portal
- WebCT or Blackboard
- Interactive white board and shared desktops

Triptych Coda
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
Why or Why Not Do Distance Education?

Why NOT do it according to survey?
Time
Wait until technology is more advanced and reliable
Need more tech support and training
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
Difficult to deal with technical/physical aspects of set up with remote students
Audio distortion for live music presentations
Need a lot of bandwidth
Don’t fully understand how it works or have a sense for its effectiveness

Discussion
### III. Distance Education Profile

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

*Note: Letters refer to the models that emerged from our online survey (see VI. below).*
IV. Survey Results

School Demographics? (N=85)

Type of school?

- K-12
- for-profit
- College < 4 years
- Private 4+ years
- Public 4+ years

Music school size?

- < 50
- 50-99
- 100-249
- > 249

Personal Demographics? (N=85)

Teaching experience?

- < 1 year
- 1-3 years
- 3-5 years
- 5-7 years
- 7-10 years
- 10-12 years
- > 12 years

Tech skills?

Which describes your use of distance education (DE)? (N=86)

- teach with all DE
- teach with portions & all DE
- teach with portions DE
- teach with wall DE
- both portions & all DE
- not use, would consider
- not use, never would

Do you currently use video conferencing? (N=88)

- No
- Yes

What best describes your use of video conferencing for? (N=88)

- Use >6 month
- Use 3-6 months
- Use 1-2 month
- Not use, would consider
- Not use, never would

How is video conferencing initiated? (N=28)

- Initiated arrangements
- Asked to join conference
- Equally A & B
- A & B but mostly A
- A & B but mostly B
V. Research Resources and Links


Distance Education in Australia[http://www.dest.gov.au](http://www.dest.gov.au)


VI. Models for Distance Education Emerging from the Questionnaire

A. E-Presenters
   • Guest lecturers for classes (Illinois State advanced computer notation class using Polycom/I2)
   • Industry representatives interacting with students in class

B. Collaboration/Communication
   • Virtual collaboration community
   • Overseas, student-exchange materials for students off-campus for a semester to stay in contact
   • Interacting with colleagues internationally
   • E-mail and Chat/Instant messaging (IM)

C. Field work
   • Observations
   • Student teaching assessment remotely, etc.
   • Asynchronous music lessons (www.musicmatters2u.com)

D. Online resources
   • WebCT materials/E-mail/Threaded discussions for onsite course or off-site course (Northwest College intro to music class; software design in the arts classes at Illinois State with WebCT; creative thinking in music class at Northwestern U with Blackboard)

E. Online modules
   • Portions of music education core curriculum for students on or off campus (Southwestern College intro to music class using Blackboard)
   • Summer workshops

F. Skills training
   • Aural skills training via Blackboard (Northwestern U undergraduate aural skills)

G. Testing and remediation
   • Online placement tests (entrance or placement music exams)
   • Online remediation or rudiments courses (e.g., music theory or fundamentals)

H. Online mentoring
   • Synchronous music lessons and master classes (New World Symphony I2 sessions; I2 music performance teaching at U of Oklahoma, Indiana U, Northwestern, Royal School of Music in London)

I. Course delivery (full)
   • Online delivery only with no live classroom events (UL Lafayette music appreciation class)
   • Online summer tech courses for teacher re-certification
   • Graduate classes for music education, often with students that are employed full time elsewhere (Queens College music education foundations class; Columbia Teachers College music education research classes)
   • Grad classes of employed music teachers
   • Course offering simultaneously with on-campus and one or more off-campus sites
   • Online courses using a required CD/DVD for media (www.connect/education.com commercially prepared music classes used a Florida community college in Jacksonville)

J. Team teaching
   • Team teaching a course online with instructors in different locations

K. Complete degree programs online (Auburn, IUPUI, Boston University, Duquesne, Conservatorium in Sydney, Australia)

*This list of models and examples was compiled from the survey conducted for this presentation along with examples from the presenters’ use of distance education techniques; it is not meant to be comprehensive in any way. If you have examples to share please do; e-mail them to davedbw@mac.com or pwebster@northwestern.edu.