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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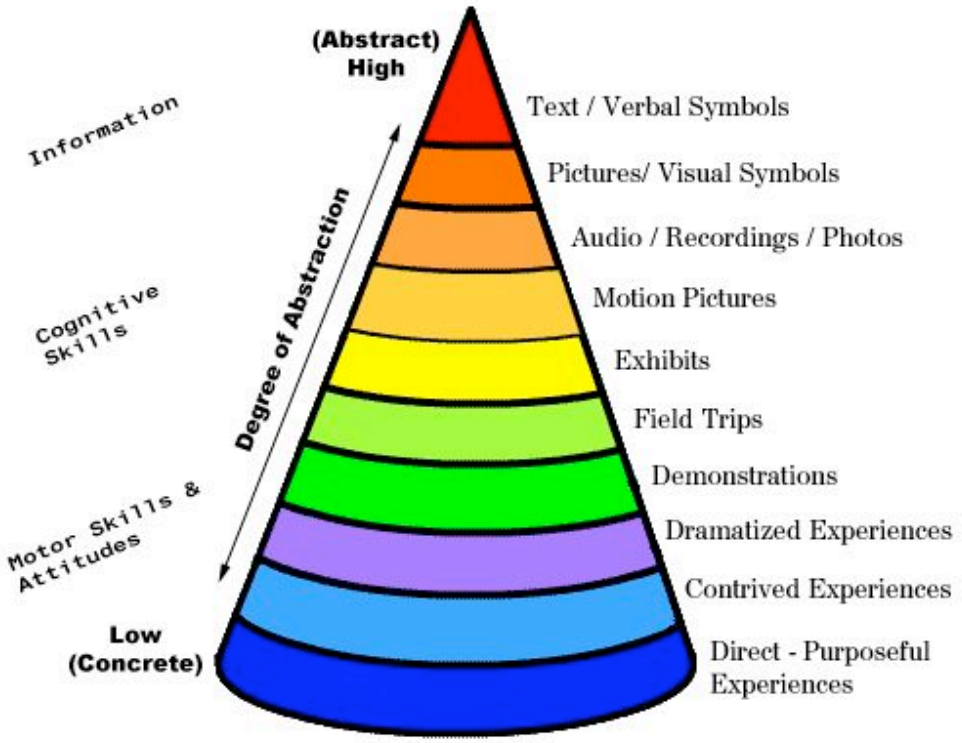
## I. Outline or Presentation—Part 1

- 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

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## II. Outline or Presentation—Part 2

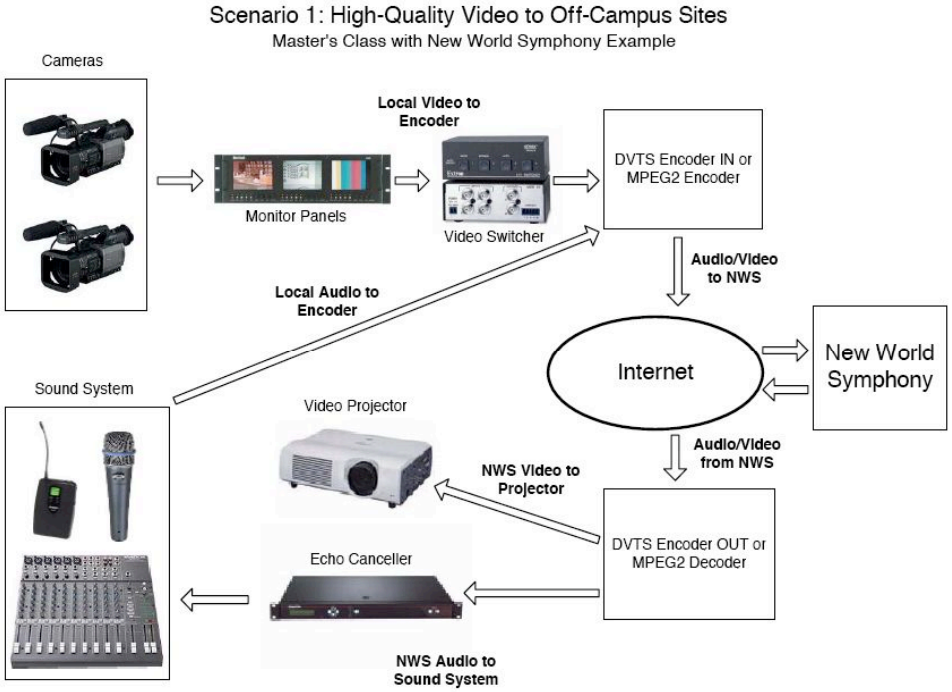
Panel 1: Classroom Context (More Intensive)
Online Mentoring
Full Course Without Live Classroom
Full Course: Instructor onsite and off-site
Full Course: Blackboard
Full Course: Commercial Content

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)

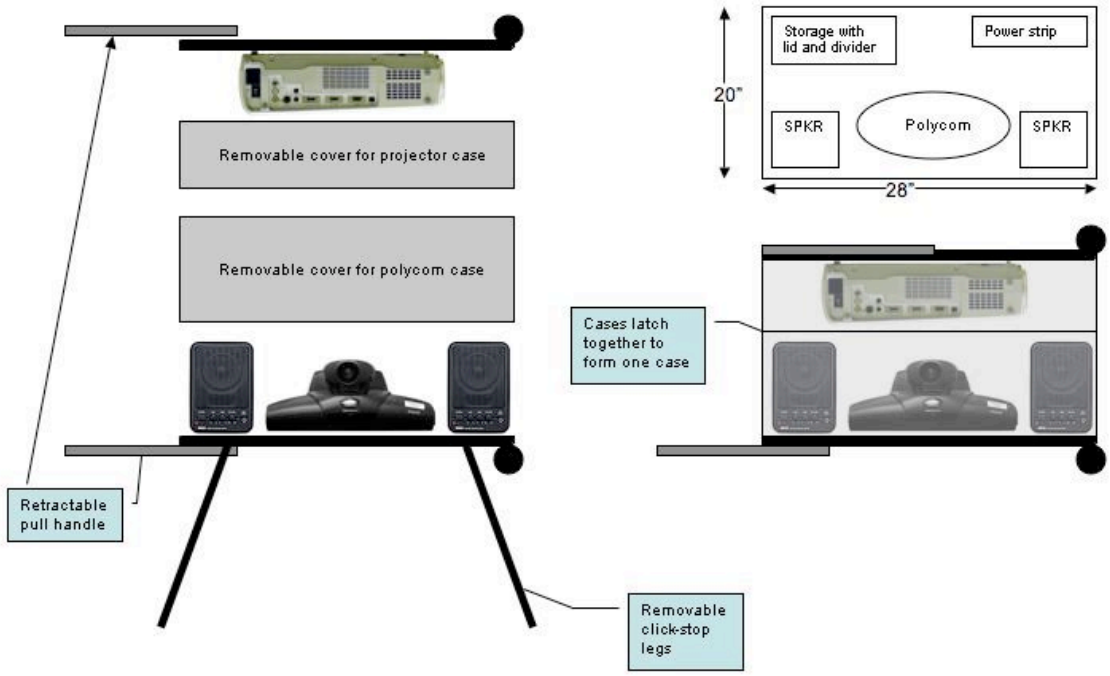
More specialized lighting and audio
Testing Time
Computer
Someone who has the same stuff

Polycom over Internet2

Synchronous Internet2 with DVTS




VC-to-go in a Box




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.

Panel 3: Internet and Software (Intensive)

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

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

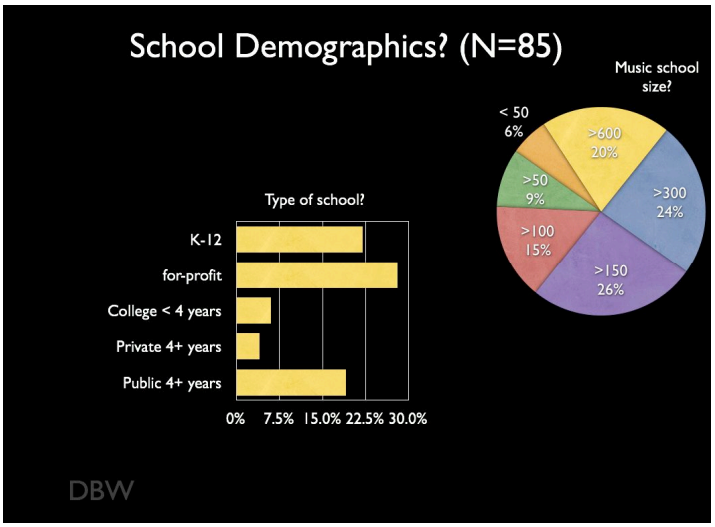
Discussion

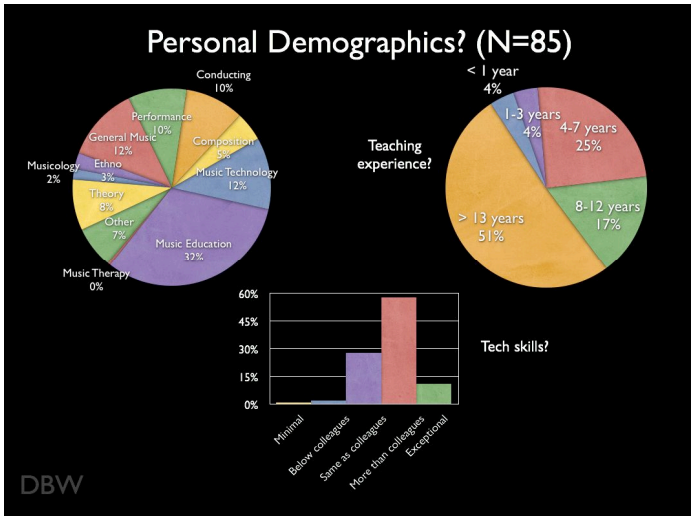
III. Distance Education Profile

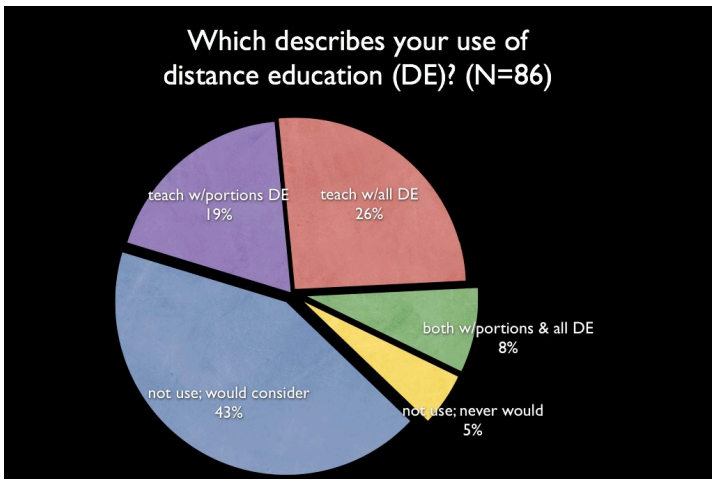
| | | Light | Moderate | Intensive |
|---|---|---|---|---|
| | MODELS* | A, B, C, D | E, F, G | H, I, J, K |
| Instructional Design | **Proportion of Instructional Content Delivered by Distance** | Use of some distance techniques and tools; local clientele | Larger portions of time devoted to distance 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/Asynchronous | 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 archive support | Mixture of local and archived material | Extensive use of on-demand content |
| | **Resource Assistance** | Informal, personal | Formal help from IT support groups for testing, scheduling | Help with technical aspects of lighting, audio quality, microphone use and camera support |

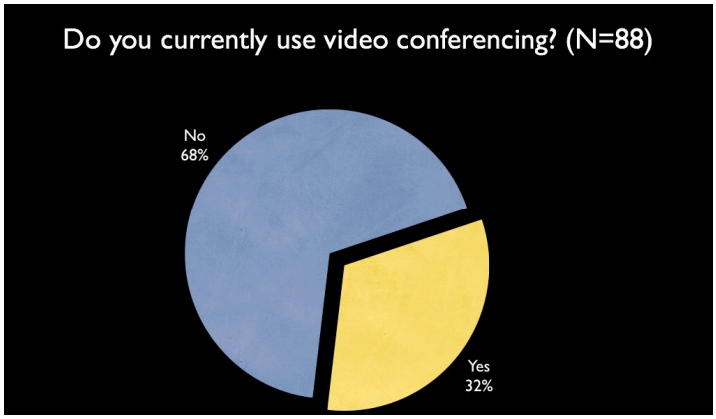
*Note: Letters refer to the models that emerged from our online survey (see VI. below).

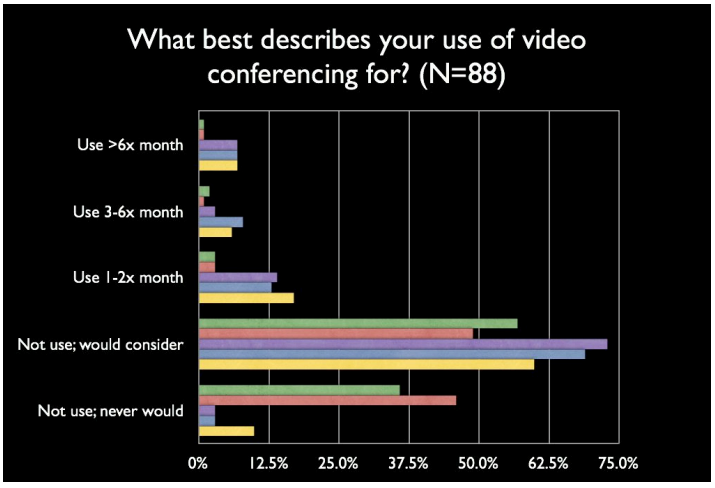
# IV. Survey Results

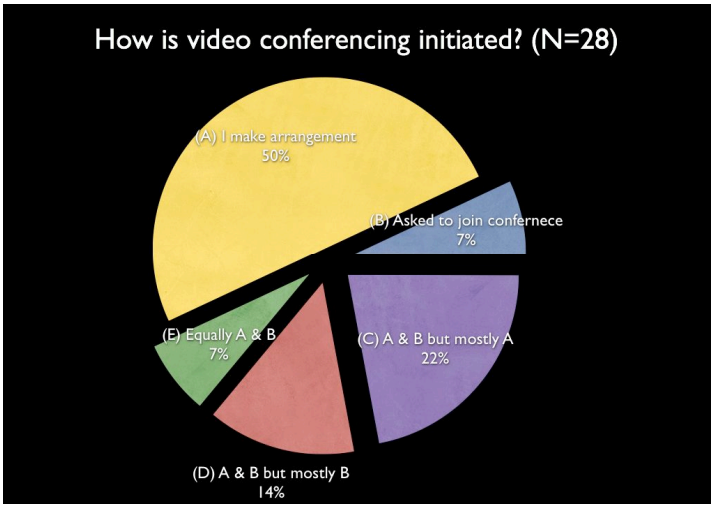


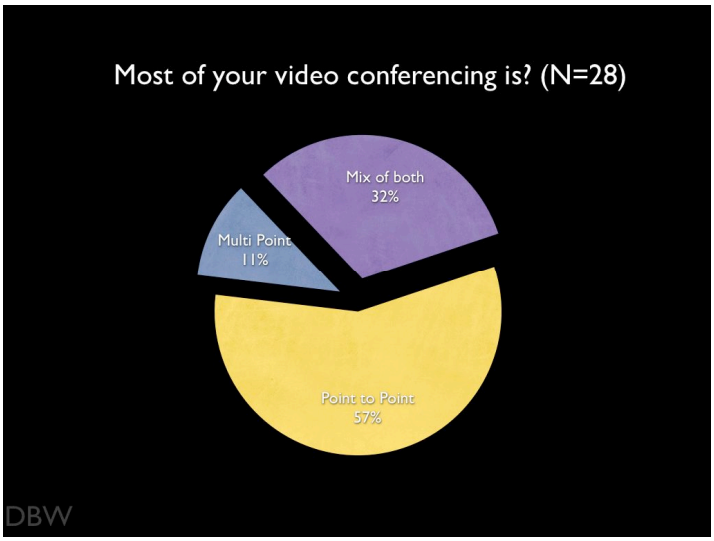



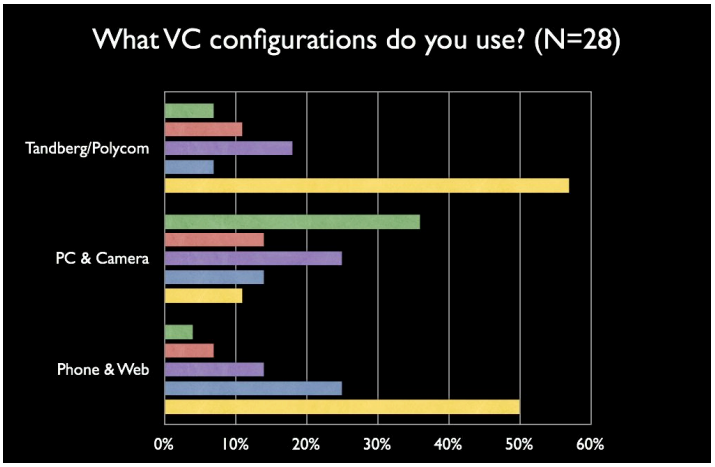



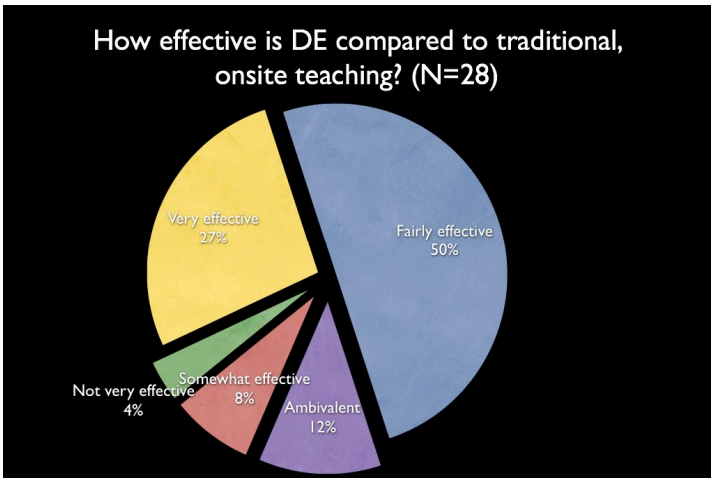



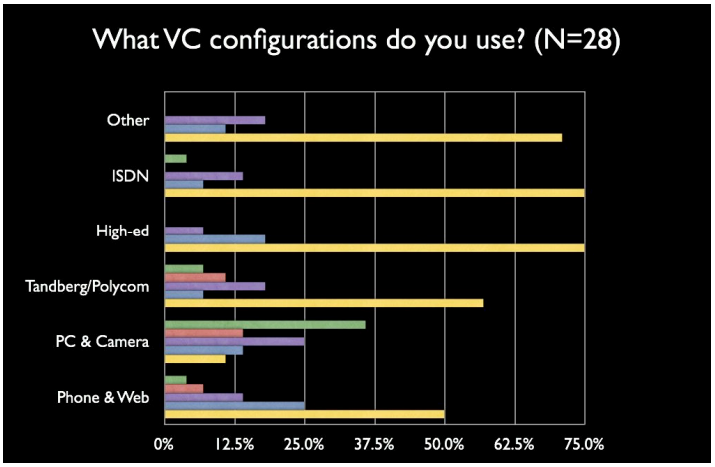



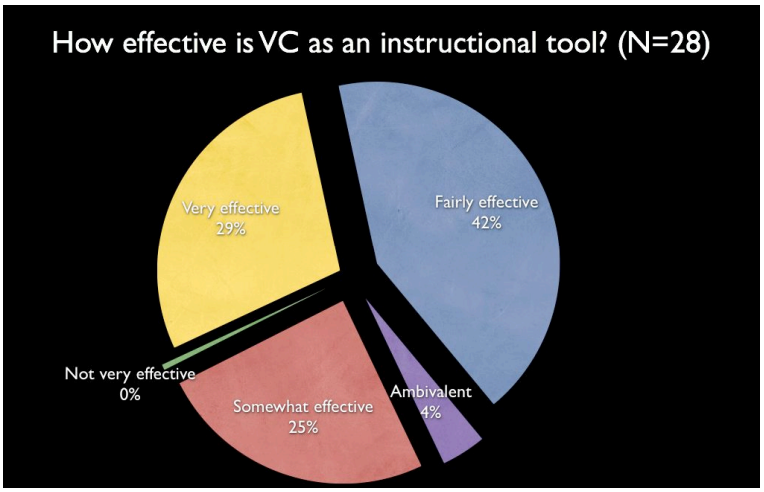






## V. Research Resources and Links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Distance Education in Australiahttp://www.dest.gov.au

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## 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.connect4education.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 Sidney, 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.