Technology Notes

by Justina Brown

Ensuring the various technologies at play during the web-conferencing discussions worked flawlessly was of paramount importance to the project. Without the video signal, the web-conference would not differ from the earlier teleconferences and without a clear audio signal, the goals of the meetings would be undermined. At WWU, the technology team consisted of the staff at the Center for Instructional Innovation and Assessment, including Karen Casto, program developer, and Justina Brown, then graduate program assistant, who undertook this project for independent study credit in her instructional technology program.

We communicated tirelessly with various campus personnel as well as the technology support staff at UNO. Many aspects of the project required research, including finding the best kind of microphone to use in this setting (special thanks to ATUS Media Services). The following checklist is a result of our communication and research efforts on this project.

Classroom Requirements

- Network Connection
- Projection Screen

These two items are the minimum requirements for each site location launching a web-conference. This is what we worked with at WWU. Here, we found it was important for the graduate students in the course to meet in their usual classroom, which was not fully mediated. Ideally, a fully mediated classroom would also include an overhead data projector, an on-site computer with an internal capture card, and a connected sound system. We covered these items in the portable requirements section of this checklist. We also discovered another important aspect of the classroom was the ability to move the desks into a configuration that allowed capture of the entire class on video whilst the students were able to view the other class on the projection screen.

Internet Requirements

- Access to a server with NetMeeting server components installed.

Portable Equipment Requirements

- Portable Computer (with an internal capture card, significant RAM and processing ability, and the NetMeeting software installed)
  - Keyboard
  - Mouse
  - Power Cord
  - Network Connection Cable
  - IP Address (for classroom site)
- Portable Data Projector (with built-in speakers)
  - Cable to connect to computer
- Microphone (preferably a unidirectional microphone as to avoid background noise-including the audio being received from the remote location)
  - Balanced to Unbalanced Microphone Adapter (CXX X/3300 extender)
  - Mini-to-Mini Cable (to connect to computer's capture card)
  - Desktop Microphone Stand
- Video Camera and Tripod (or desktop video camera)
  - RCA Cable to connect to computer's capture card
  - AC Adapter/Power Cord (and extension cord if needed)
  - Videotape
- Cell Phone (if no telephone is available on site)

Personnel Requirements

In addition to the course instructors, set up and operation at each site required a minimum of one technology assistant, preferably two. At UNO, a desktop videocamera was used to capture video and

was easily moved around to focus on the individuals active in the discussion, though the movement appeared very rough on the transported video signal. At WWU, one technology assistant managed a VHS video camera set on a tripod in front of the class, resulting in smoother transitions among the class members and the ability to zoom in on individuals active in the discussion. In the back of the room, it was helpful to have another person standing by the computer to catch any glitches that could arise, communicate with technology support at the remote site via the chat board, and manage the audio (volume and gain) levels. In both classes, the students handled and passed around the microphone with increasing ease in each session.

Overall, each of the four web-conferencing sessions resulted in increased satisfaction with regard to the quality of the communication technologies and the ability of the graduate students to engage in active discussions without becoming distracted by the technology. We learned to allow at least 45 minutes to transport across campus and set up all our portable equipment so as not to lose any of the valuable discussion time available to the two classes as they overlapped. We also developed the preceding detailed checklist to make sure we always showed up with every last cable.

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