Tech advice for making an online seminar work

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The importance of testing & back-up plans

• We’ve listed this first, because we cannot emphasize enough that both all-up testing in advance and back-up plans are critical.
• Do a test session to make sure that everyone knows how to sign in and use the conferencing platform you’ve chosen.
• Test all aspects of the system at all sites. Check especially for audio feedback issues, and re-test if anyone makes hardware changes. Make notes on the computer audio and video settings and cable configurations so that you can easily get back to the right configuration if someone messes with the computer before your session.
• Check the quality of the environment as well. Is lighting adequate? Is anyone back-lit? Can everyone be seen in the webcam views?
• Be sure to test at the same time of day as you will run your session – bandwidth might be great at some times of the day and poor at others. In the evenings, you will likely be competing with people using the Internet for Skype, Netflix, etc. During the day, you may benefit from or be hindered by how each institution has set priorities for “bandwidth shaping” (i.e., how the institution allocates bandwidth).
• On the day of the session, have people sign in about 15 minutes early so that you’ll have time to fix any issues. Be sure to have cell phone numbers for each site so that you can troubleshoot easily if the audio fails to connect.
• Have back-up plans ready. Video freezes more commonly than audio. If everyone has a copy of a PowerPoint to be presented, for example, someone can watch the PowerPoint locally while listening to the audio and contributing to discussion on line even if the video freezes.
• If you have a participant on a low-bandwidth connection (especially someone in another country), both audio and video may be spotty. Be prepared to record the session so that the person can listen later.

The technology

Best general advice: Talk with your campus IT people to see what is already available, what they support, and what has worked successfully for others.

Choice of web conferencing platform

Skype/Google Hangouts

Our experience: we have run two full semesters of seminars where people connected via Skype.

Pros:
• These services are free (Skype now has free group chat). Skype and Google Hangouts can handle multipoint sessions (25 for Skype and 10 for Google Hangouts).
• Screen sharing is possible.

Cons:
• At the time we ran these seminars (2011 and 2012), we had serious connectivity issues. We had many seminars where the audio from one site was fine but the video was frozen for the entire seminar. Bringing in participants from Egypt was not possible at all.

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• The problem was particularly severe in the evenings when lots of students were on line and downloading Netflix, etc. Our ITS assigned us some dedicated bandwidth, but that didn’t solve the bandwidth issues beyond Hamilton.

WebEx/Adobe Connect/GotoMeeting/Blackboard Collaborate

Our experience: we are currently running a seminar with four sites using WebEx, and one of us (Tewksbury) has used Adobe Connect, GotoMeeting, and Blackboard Collaborate for guest speakers and one-off web seminars.

Pros:
• Quality - much better connectivity. We have had no issues of video freeze or audio cut-outs. This is huge for us – the frustrations of previous seminars is completely gone. We also successfully added an Egyptian participant for one seminar.
• It is very easy to share desktops or show PowerPoints and to transfer the presenter role to a person at a different site to share his/her screen.
• Meeting scheduling and notification is easy, and emails are automatically sent (including reminders) to all participants by the conferencing platform.

Cons:
• These services are not free. Hamilton is in a 6-institution consortium that currently provides WebEx for interested faculty.
• With WebEx, there is no way to have all sites appear on the screen as windows of the same size. The site with the biggest window is the site where the person is currently talking. During discussion, the big window changes from one speaker to the next. Non-speakers are minimized.

Audio

Problem: the speaker’s voice echoes back because the microphones on the receiving computers hear the voice broadcast through the computer speakers and then re-broadcast the audio back to the other computers.

Solution: isolate the audio output and input at each place.
• If you have only one person at a particular site, a headset or earbuds connected to the computer allows the person to hear the audio but prevents the computer microphone from picking up and re-broadcasting the audio from other sites. The computer microphone is used as the audio input from the individual sites.
• If you have a group of people at one site, everyone needs to be able to both talk and listen. Use a high-quality noise-canceling microphone to capture the voices of the participants. In our set-up, participants hear the sound through ceiling speakers, but the microphone on the table picks up only the voices of the participants and not the ambient noise/voices from the speakers.

Video

A computer with a standard built-in web cam works fine for one or two people at a site. For a larger group, an inexpensive wide angle webcam allows the entire group to be seen at the other sites.

Recording

Many options exist for recording entire sessions, including programs such as Camtasia. We have found that typical in-platform screencast recording options do not produce a video component of sufficiently high quality for PowerPoint presentations that have detailed graphics or satellite imagery. We have gone a simpler route and used an audio recorder app on an iPad and posted both ppt slides and the audio to DropBox. Remember to obtain permission from speakers before recording.

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