

## Foreword

The purpose of this Videoconferencing Instructor Manual is to familiarize Adelphi professors with the steps necessary to employ this technology into their teaching. This document answers questions instructors may have on videoconferencing, providing guidance in both the pedagogical and practical issues an instructor will encounter in this process.

## 1. Why Videoconferencing?

Let us assume you are asked to teach a course by your Dean that may involve classes at two locations, or wish to connect with a guest speaker. By using videoconferencing (VC) technology, two or more groups at disparate sites can hear and speak to each other at the same time, sometimes sharing computer applications for collaboration. This rich communications technology offers possibilities to Adelphi University for the purpose of instruction, connecting with experts and outside programs, professional development, and community forums. This interactive, two-way medium allows participants to “almost be there” without having to negotiate the complicated logistics of transporting persons to a distant program site. With the growth of satellite campuses, Adelphi can link two classrooms at one or more locations with the same instructor.

Some of the other benefits of videoconferencing include:

- A. Linking satellite campuses with instructors
- B. Inviting speakers from elsewhere into your classroom
- C. Appeal to a variety of learning styles using diverse media such as video or audio clips, graphics, animations, computer applications
- D. Eliminate or reducing travel
- E. Improving participants presentation skills
- F. Increasing resources in the classroom
- G. Learning new communications technologies.

## 2. How can I use Videoconferencing for my classes?

Primarily, videoconferencing will be used to connect two Adelphi locations. In addition, some examples of other uses for this technology may be:

- an English class speaking with the author of poetry they are reading
- a biology class taking a virtual field trip to marine institute
- a collaboration (e.g. Knowledge Workers Educational Alliance) or cooperative learning between schools via a multi-point conference
- students enrolled in education courses can observe teaching practices in classrooms

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- a political science class can conduct a moot court competition with another school, or
- an evaluation of social work or nursing students at their required field site placements.

### **3. What are the first steps?**

In order to have a successful videoconference, it is imperative that all parties to the conference are informed as to their roles and responsibilities. By its nature, videoconference requires some planning, coordination, scripting, training and testing for things to work well. But what are some of the first steps an instructor needs to take? Some of the major questions are answered in this manual, and will help to ensuring successful videoconferencing. An instructor needs to:

- a. understand the equipment
- b. develop classroom strategies and prepared materials
- c. be aware of the support available to them, and
- d. be knowledgeable in how to conduct the session.

As a first step, if an instructor is seriously contemplating using videoconferencing in his/her class, they should contact FCPE (X4221) to get the process started. The FCPE will provide documentation, training, and information to help you use this technology effectively in your class. It is highly beneficial to arrange a meeting of all principal parties (IT department, instructor, FCPE) to make sure everyone knows their roles and what expectations can be realistically met. This meeting should take place a few months prior to the start of the semester in order to have sufficient time to address all issues.

### **4. What must I know in order to teach using VC?**

This section reviews the nuts and bolts of using videoconferencing in the classroom.

#### **a. What Classrooms are available?**

Currently there is only one “smart classroom” that can be used for videoconferencing on the Garden City campus, residing in Hagedorn building, room 209, plus additional rooms at a satellite campus in Hauppauge and Manhattan Center (in Soho). In each of these classrooms, there are video cameras, monitors, and audio devices. You talk into a microphone, and address the remote class via a camera. The audio and video will be sent over the net using Internet protocols.

Each device on the network is assigned a specific IP address. At Adelphi, our high speed bandwidth (T3 lines) carries the data between devices which are assigned the specific address below. The current VC sites at Adelphi, with their respective seating capacity include:



done well in advance of the semester beginning in order that there is time for proper testing.

A technician at the remote site may be provided for the first videoconference if the instructor requests. A remote site facilitator, like a graduate student can also help the class at the remote location. The need for trained technicians to support videoconferencing cannot be underestimated. If the instructor is comfortable with the technology, handholding can be minimized. However, for ad-hoc requests, and for the first initial classes, support personnel will be needed. In time, this full-time support technician can be phased-out of being physically present for each videoconference session.

Instructors need to be trained in both the mechanics of operating the videoconferencing equipment (IT department), as well as in the pedagogy that goes along with the technology (FCPE). The FCPE will work with the professor to explain effective instructional strategies, as well as the logistics of the various cameras and equipment. In addition, staff from the FCPE can videotape the second class (or class of instructor's choosing) at both ends of the videoconference. In this manner, the professor can get immediate feedback on how their class is going, and make any adjustments to their instruction as needed.

## **5. Teaching with Videoconferencing**

Our initial experience with videoconferencing at Adelphi involves linking satellite campuses in Soho and Hauppauge to Garden City. There is also the potential for ad-hoc requests for remote speakers, virtual field trips, professional activities or community events, but these are quite do-able given the right program. The issue then becomes, how is teaching different using VC in my classroom, and what adjustments should I make for this technology?

### **A. How do I prepare teaching materials?**

Instructors prepare their class materials as they would for any class, except that there may be additional preparation time needed to ensure that students (and facilitator) at the remote site are fully engaged in the learning process. Attention needs to be paid to coordination between the instructor and facilitator at the remote site. It may be useful to write a rough script for your class, and what will happen at the remote site. It is good to have questions for the remote site, and exercises that engage them. In advance of the class, Blackboard can be used to distribute materials, and you may use a VCR of computer to deliver video clips or computer source (like PowerPoint presentations).

The FCPE can help with instructional strategies (see subsequent sections) and with designing the Blackboard component for the class/course. It may be advisable for the professor to visit the remote site at least once in the beginning

of the term, in order to test the logistics of the videoconference, e.g. camera presets, camera angles, and sight lines.

In addition, you have the capability of showing a video, instructor computer screen and other source inputs depending on the configuration of the room. Whatever the local source is, this will be transmitted to the remote site, and the instructor can switch back and forth between the camera, video, and computer (e.g. PowerPoint presentations etc.). The instructor needs to allow for more planning if several media will be incorporated into a lesson, and he/ she will need to be aware of the capabilities and limitations of VC technology in multiple locations.

### Videoc Conferencing Model for Adelphi

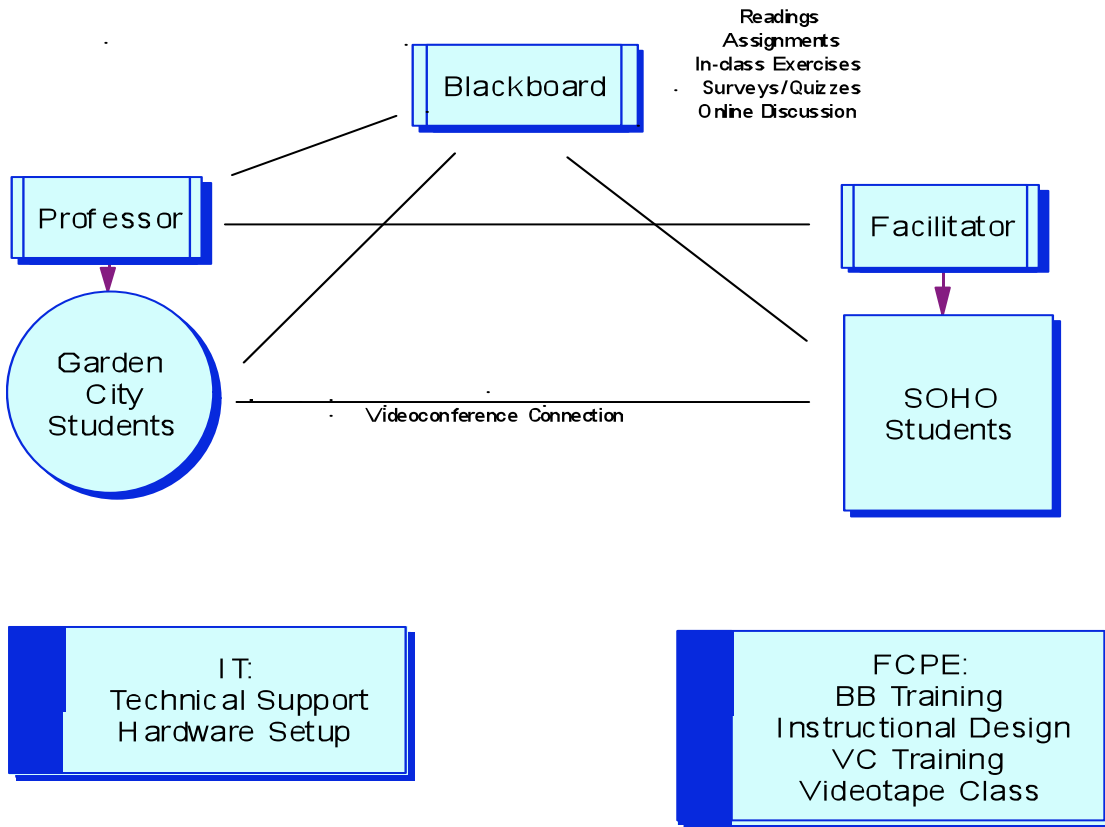


Figure 1

### B. What teaching model can I use during a videoconference?

**Figure 1** outlines the basic components of a videoconferencing model, which is described in this section. Effective use of videoconferencing technology for interactive learning requires practice and planning as well as attention to a few

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important instructional strategies. Using effective interaction and feedback strategies will enable the instructor to identify and meet individual student needs while providing a forum for suggesting course improvements. Toward this end, the model recommends a facilitator, Blackboard usage, advanced organizers, videotaping a class for instructor feedback, and interactive strategies for engaging students.

A **facilitator** at the remote site is highly recommended, and/or the instructor can visit the remote site for a few classes. This facilitator can be a graduate assistant, teaching assistant, co-teacher, or any other arrangement that the department and instructor deem acceptable. The facilitator needs to be informed exactly what will be covered in each class, and what his/her expected role will be. Typically, you may assign a facilitator to run group activities and report back on the group's progress. The facilitator can be the "eyes and ears" for the professor, as well as helping with any communication issues between sites. In addition, it is advisable for the facilitator to have basic working knowledge of the videoconferencing equipment in order to assist in adjusting a camera or turning on the equipment if the need arises.

It is highly recommended to use **Blackboard**, to supplement class activities, particularly to foster "classroom learning communities" via discussions, virtual office hours, online testing, and group projects. Via Blackboard, communication can be established for distribution of course materials, for tests/surveys, and for sending files to the professor via the digital dropbox.

Use of **pre-class study questions and advance organizers** to encourage critical thinking and informed participation on the part of all learners is recommended. Suggest students bring these materials to class as an aid to note taking. Students are then more likely to be prepared for the planned group activity, which may include a group exercise or discussion.

**Example for History class:**

Next class we will cover the Civil War-- its causes and consequences. When doing the reading, please be on the lookout for the following:

What was the environment prior to the war? the economics? the politics?  
Who were the major figures of the day and their viewpoint regarding slavery?  
What specific incidents precipitated the war?

**Questions to ponder...** (pre-class study questions)

Could the war have been prevented? If so, how?  
Is the war still being played out today? What is the current context?

In another scenerio, as part of the homework assignment, you might have students read an online journal article, about the pros and cons of capital punishment, and respond via the discussion board to questions you pose. Then,

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in-class, divide students into small pro and con groups and have them debate the issue. Blackboard is an excellent product to prepare students for in-class assignments.

The remote site receives the class via a monitor or screen. There is a tendency when people watch TV (screens) to be very passive, which is a mode to which students at the remote site can easily succumb to. To avoid this, make group activities **engaging and interactive**. Suggested approaches include:

- Know names of students, and call on individual students at remote site with questions in order to ensure participation by all, and discourage individual students from monopolizing class discussion.
- At the first class, have a frank discussion to set rules, guidelines, and standards for class conduct during a videoconference. Insist that students take an active role and participate in class discussions.
- Use the remote site facilitator as your “eyes and ears” to detect any students who are struggling or having other problems.
- Develop strategies for student reinforcement, review, and remediation. Towards this end, one-on-one phone discussions, e- mail, Blackboard virtual office hours are tools that can be especially effective.
- Add some interactive elements like a Flash animation or simulation, exercises, theatrics, visual effects, case studies etc. may dramatically improve the conventional “talking head” type of videoconferences that we are all too familiar with.
- Use Blackboard surveys and quizzes to elicit student feedback throughout the course and determine learning effectiveness.

Note: The FCPE is ready to assist faculty in using Blackboard and suggest other teaching techniques to engage students.

### **C. What other pointers or strategies are useful?**

For the most part, effective distance teaching requires the enhancement of existing skills, rather than developing new abilities. Faculty need to pay special attention to the following:

- Realistically assess the amount of content that can be effectively delivered in the course. Because of the logistics involved, presenting content at a distance may be more time consuming than presenting the same content in a traditional classroom.

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- Be aware that student participants will have different learning styles. Some will learn easily in group settings, while others will excel when working independently or with the use of visuals.
- Diversify and pace course activities and avoid long lectures. Intersperse content presentations with discussions and student-centered exercises.
- Be prepared for technical glitches with handouts or some type of backup plan. Don't let some inevitable glitches throw off your lecture—have a backup plan.
- Bounce ideas off FCPE staff and others interested in distance learning at your institution. In this manner, a best practices group can develop instructional strategies further than a lone instructor.
- Encourage students to interact among themselves via online discussions and group projects in order to foster class cohesiveness.
- It may be necessary to repeat a question so that the remote site can hear it, and minimize the time where your back is to the camera. It takes some time to adjust your movement so that you can see the remote sites, and both they and your local class can see you.
- And finally...relax. Participants will quickly grow comfortable with the process of distance education and the natural rhythm of effective teaching will return.

#### **D. What about assessment?**

Any new technology needs to be evaluated for efficacy. Such evaluation may take place in the first few weeks, mid-semester, and prior to the semester ending. All instructors, class facilitators, and students should be surveyed to document and resolve any issues, and in order to improve future videoconferences.

Blackboard can be used to do quick and effective pre-class/post class surveys as needed. For example, you can have check off boxes and ask questions about instructor effectiveness, etc. and ask some more open-ended questions like "What did you like about the videoconference? What did you learn? How could the presentation have been improved?"

The Faculty Center for Professional Excellence will offer to videotape your class in order for the instructor to assess his/her teaching strategies and effectiveness. These videotaped segments can be very useful in making adjustments early in the semester that would improve the experience for students and faculty alike.

### **Experience of Dr. James Mullin**

James Mullin is Assistant Professor in the School of Social Work, and is the Director of the Undergraduate Social Work Program. During several semesters Dr. Mullin taught a course to students in Garden City and in the Manhattan Center using videoconferencing technology. His experience is as follows....

*“Throughout the course, class exercises were designed and incorporated to cause the interaction and cooperation between students at the two sites. Some class projects involved work performed and decisions made sequentially across the two sites. For example, one project required one group of students in Garden City to perform preliminary work and then “hand off” their results to the Manhattan students. The Manhattan students then utilized this information to complete their part of the project, and then referred their results to another group at Garden City. At the conclusion of this round of work, the product was presented to all students who then had to decide, collectively, on a desired course of action.*

*Collectively and separately, the students at both sites agreed that course objectives were achieved, they had ample access to the instructor, they were encouraged to interact with each other, the instructor responded to them to their satisfaction, and that they had the opportunity to learn as much as they would in a traditionally taught course. The Manhattan responses, of course, are of particular interest, given that Prof Mullin was physically present there for only 2 of the 15 classes. The fact that their views of the learning environment were positive and consistent with those of the Garden City students is testimony to the viability of a distance learning format.*

*The results of this experience in distance learning support the conclusion that it is an effective format that can become a part of Adelphi’s learning array. Both students and the instructor affirm that a learning environment that applies equally to both sites can be created and, through technology and teaching techniques, both groups of students can participate actively in it. A sense of “one classroom” can be approximated, if not achieved.”*

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## E. Videoconferencing Preparation

A videoconference can have a greater impact on participants by additional planning at each site. Such planning may include some of the suggestions below, which are far from exhaustive.

Create a good learning environment— Prepare the room so that students are comfortable, can clearly see the screen, and can easily hear the instructor. Sound proofing and other room adjustments are often needed to create a good learning environment. These preparations need to be coordinated with the IT department.

Lighting—As part of the pre-test process, issues of proper lighting need to be addressed. Too much light, or insufficient light can make seeing the students or facilitator at a remote site problematic. With the use of shades, improved camera, and direct or indirect lightening, a poor picture can be substantially improved.

Familiarize yourself with all course materials, handouts, assignments. Maybe preparing a script could be useful so you can be in a position to assist the moderator, answer student's questions, and prepare the audience.

Prepare the Audience—For any event, a little audience preparation goes a long way toward ensuring a smooth and effective conference. The site coordinator can hand out materials and get the attendees seated prior to "going live". In addition, the coordinator can brief attendees to the content and format of the conference, the time they can ask questions, and proper conference etiquette. Better yet, have attendees arrive 10 minutes early so enough time is allowed for setting up and getting the attendees ready.

Engage participants in the learning experience—Possibly some pre/post program learning activities or discussion, a local content expert or panel discussion, or other learning activities can add depth and enjoyment to the learning experience. And by all means, encourage participants to share their ideas and comments.

On the **day of the videoconference**, several things need to be addressed:

- a. All equipment and lines need to be tested
- b. The remote site facilitator needs to know lesson plan, have materials for distribution, and understand role the role they will play
- c. Technical support persons must be present at remote site and initially at instructor site
- d. BB materials, syllabus, and class assignments must be posted.
- e. Instructor may need a basic script of class to get a sense of how much time is needed, what will be discussed, group work, handouts etc.
- f. Problem resolution procedures need to be in place with phone numbers to call, backup lines, and steps to take when problems arise.

## F. Videoconference Pointers

A successful videoconference involves attending to technical, program, and logistical issues. Many of these issues are discussed below.

**Conference Etiquette**—Extraneous noise and talking by students are very disruptive in a videoconference. It is very important for the sites which do not “have the floor”, to mute their audio in order for the speaker to get the clearest sound. For most systems, there is a mute button in their teleconferencing software. Activating the mute feature will allow a site to hear the conference, without transmitting any background noise. The professor will be responsible for signaling which site gets the floor and establishing ground rules at the start of the videoconference. The more interactions between sites, the more structure is needed to properly conduct the conference.

**Speaking Points**--Students need to identify themselves when they speak, and with many sites, it may be necessary to identify the site. For example, “This is Bruce Rosenbloom at Adelphi University and I wanted to comment on...” goes a long way to helping other sites follow the discussion. It is also useful to speak slowly and clearly so that even with an occasional audio distortion, you will be understood.

Concerning the issue of how loudly to speak, if you have any doubt, you might ask for feedback from the other sites or moderator, e.g. “Am I speaking too softly?” or “Can you hear me at this voice level?”

**Limit to 3-4 Points**—If the videoconference will be instructional in nature, plan on 3-4 main points for a one- hour session. Although you may have several sub-points, by limiting the number of major points, you allow for a focused approach that may have greater impact than a longer list. Summarize these points at the end of the session.