

Chapter 7

ISSUES RELATED TO TEACHING VIA DISTANCE EDUCATION

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It was mentioned in Chapter One that this guide would consider distance education as a combination of distance teaching (an act of teachers) and distance learning (what students do). There has been a relatively large amount of information recently on what constitutes effective teaching practice for distance education systems. Not surprisingly, there is little information on what students need to know to succeed with the distance learning process. Currently, meeting expected norms for achievement and attitude are indicators that the student was successful in distance learning. To that end, most of the suggested teaching techniques for distance education are structured around overcoming the limitations that technology-intensive distance education environments present to both teacher and student. The purpose of this chapter is to offer a catalog of practices that apply to most distance education system formats (audioconference, one-way video, two-way video or audio, interactive formats, etc).

En masse, the various suggestions from the literature appear overwhelming. Mastery of distance teaching is an evolutionary process. The distance teaching practitioner is encouraged to start out with the techniques that seem most logical and then add to their repertoire as their comfort level increases. Certainly, experience will provide new situations and new opportunities to incorporate more technique. While distance teaching requires adapting

a new skill set, all the characteristics that are indicative of successful teaching in any situation will still apply.

In most distance education systems, the instructor will function in several capacities. Dooley and Greule (1995) describe the role of the instructor as having four components.

1. *Classroom Manager*: As the classroom manager, the teacher must coordinate activities to ensure effective delivery of the instruction. Telecommunication teaching requires additional planning and organization from the instructor, both to increase the independent learning opportunities of off-campus students, and to maximize the interactive capabilities of the communication system.
2. *Subject Matter Expert*: The instructor obviously is the content specialist in course design, but must modify the content and visuals for the distant environment. Visuals and demonstrations greatly enhance the delivery of content for this media.
3. *Instructional Designer*: This person has the educational pedagogy to help with the teaching specifics of the course. If there is not an opportunity for collaboration between a subject matter expert and instructional designer, then the instructor must assume both roles (which is usually the case). You may still want to share your ideas with a colleague who has prior experience with distance education courses and who can give you feedback and suggestions.
4. *Producer*: Working with both technical support personnel and site facilitators, the teacher acts as a producer to coordinate the effective delivery of the instruction (Dooley & Greule, 1995, p. 7).

Approaches to Interactive System Teaching

Willis (1993) offers a three-step approach to the process of instruction in an interactive environment. The steps rotate around preparatory work before the lesson, the actual teaching session and, follow-up activities.

1. Set the Stage

- ⌘ Inform participants about the system-related terminology and explain or demonstrate the various system components how they will be used during the remaining sessions.
- ⌘ Explain the role of any technical support personal if they will actively be involved in the operation of the hardware.
- ⌘ Ensure that questions are addressed to all participants (remote and local site). Repeat a student initiated question for the benefit of those that did not hear or might not understand the question.
- ⌘ Organize all material before the session begins. A rehearsal or practice run of any situations requiring a special effort is suggested.
- ⌘ Understand the limitations of any presentation technology (i.e. document cameras, computer graphics, etc.) and preview all materials before the session.
- ⌘ Ensure that students have necessary materials before the start of the session.
- ⌘ Practice your on-camera technique beforehand. Consider taping your practice session or having an experienced colleague act as an evaluator.
- ⌘ Prepare students for any outside speakers before class. Also, provide specific expectations for the guest speaker. Inform the guest about the student background characteristics.
- ⌘ Keep in mind that distance instruction requires more time than traditional class content delivery. Plan accordingly.
- ⌘ Guide students in order to create generalizations and form conclusions on the content.

2. During Interactive Session

- ⌘ Present yourself as involved, interested and enthused in the process. Students will sense your excitement. They will also sense your lack of interest!
- ⌘ Use questioning, examples, demonstrations, case studies, etc. to increase student motivation and interest.
- ⌘ Point out key concepts to help focus viewing.
- ⌘ Review concepts and clarify misconceptions where appropriate during the session.

- ⌘ Reinforce course content through varied activities. Look for methods other than lecture.
- ⌘ Limit individual concept presentations to 10 - 15 minutes. Build in opportunities for student interaction.

3. Following the Session

- ⌘ Review your performance and look for areas of improvement that can be incorporated in the next session.
- ⌘ Ask students for their reactions and suggestions for improvement.
- ⌘ Be open and flexible to new techniques and methods of delivery of the content.

In investigating student perception of teaching behaviors necessary for effectively delivering courses both conventionally and via teleconferencing, Haaland and Newby (1984) observed five statistically significant differences in the frequency of effective teaching behaviors of those teaching by teleconference. Effective teleconference teachers: 1) used students' names, 2) set out clear statements of purpose, 3) made use of printed material, 4) encouraged discussion, and 5) did not speak in a monotone. The authors concluded that the delivery mode has no effect on students' overall rating of the courses or on ratings of instructors' ability.

Many instructor behaviors which contribute to effective teaching are visual behaviors: eye contact, gestures, facial expression, etc. Distance education instructors in many media must replace such behaviors with alternative actions; they must also develop a repertoire of behaviors unique to the distance teaching experience in order to enhance the overall teaching/learning transaction. The literature reflects general agreement that most of these skills are necessary and appropriate for teachers at any level of instruction.

Bronstein, Gill, and Koneman (1982) contend that those teaching via teleconferencing must make adjustments in their delivery style in order to enhance their instruction. They provide the following guidelines for instructional delivery:

- ⌘ Be prompt in coming on the line. The program must start on time.
- ⌘ Use a natural style of delivery; speak slowly and enunciate clearly.
- ⌘ Maintain spontaneity; avoid reading from a script.
- ⌘ Use visuals effectively and verbalize appropriate guideposts.
- ⌘ Use frequent change of pace or stimuli to maintain interest.
- ⌘ Make frequent attempts to draw participants into discussions.
- ⌘ Always refer to participants by name.
- ⌘ Give a short concluding summary of concepts presented.

A number of other authors list similar skills needed by successful teleconferencing teachers (Moore & Kearsley, 1996; Willis, 1993; Monson, 1980; Pereyra 1982; Boone & Bassett 1983).

Boone and Bassett (1983) point out that identification of specific skills appropriate to distance teaching has been based primarily on personal opinions rather than on systematic evaluations. Yet, as noted above, similar or identical skills are listed as important to the success of teleconferencing by many different authors. To discover the extent to which this “common wisdom” regarding necessary skills is well-founded, Boone and Bassett conducted a study in which “expert opinion” was used to verify the appropriateness of skills identified by an extensive examination of the literature. In looking at the categories of facilitator skills (before, during, and after a meeting or class) and participant skills, they found a high correlation between skills identified as

important in the literature and those identified by teleconferencing experts. Additionally, they identified which skills, based on empirical evidence, could effectively be taught. Specific oral communication skills identified include:

- 1) pronunciation and articulation,
- 2) fluency,
- 3) rate of speech,
- 4) inflection,
- 5) volume of speech,
- 6) pausing,
- 7) positive feedback statements,
- 8) conversational questions,
- 9) compliments and appreciation statements,
- 10) anecdotes,
- 11) latency of response time, and
- 12) duration of oral statements.

In a follow-up study, Boone (1984) attempted to operationalize some of the more “ambiguous” teleconferencing skills mentioned in the literature. Analysis of tapes of actual audioconferences provided specific examples of such skills, which include the abilities to:

- ⌘ Provide structure (uses authority; controls verbal traffic);
- ⌘ Provide socio-emotional support (integrates late group member; encourages humor);
- ⌘ Establish a democratic atmosphere (shares authority; asks for participation);
- ⌘ Create a sense of shared space (describes environment; creates a sense of shared history, when possible).
- ⌘ Model appropriate behavior (models conciseness);
- ⌘ Clarify (asks for confirmation; seeks common definition of terms);
- ⌘ Repair sessions threatening to go awry (explains absence of group member; repairs interruptions);

- ⌘ Set an appropriate pace (asks for conciseness; directs questions to a limited audience).

Boone concludes that any teleconferencing experience is only as effective as its facilitator; for this reason major emphasis should be placed on the appropriate training of instructors who teach via teleconferencing.

A handbook developed by the Public Broadcasting System (PBS) for use by faculty planning to use broadcast television also provides a useful skill set that can be easily generalized to any video-based distance education system. The following are some of the required skills and knowledge requirements:

- ⌘ the strengths and limitations of television
- ⌘ the particular equipment used and how it works
- ⌘ description of the different people involved and their roles
- ⌘ general planning steps and procedures
- ⌘ how to prepare visuals for use with an overhead camera
- ⌘ how to use the blackboard on camera
- ⌘ techniques to facilitate student participation/interaction
- ⌘ considerations associated with the use of video, film or slides
- ⌘ on-camera behavior including eye contact, voice, clothing, and movement
- ⌘ how to respond to technical problems
- ⌘ copyright considerations
- ⌘ glossary of television terminology (cited in Moore & Kearsley, 1996, p. 141).

Willis (1993) suggests several strategies that will lead to overall effective course delivery. They involve techniques related to meeting student needs, teaching, and building interaction.

Distance education systems represent a learning environment to students much the same way that it is a new teaching environment for the instructor. And, similar to the needs of the instructor, students will also need to be comfortable with the technology and techniques of distance education. Willis (1993) suggests that teachers need to:

- ⌘ Explain the nature of new patterns of information delivery provided by distance education systems.
- ⌘ Understand the background and experiences of the students. The background and experience of the teacher should be shared with the students.
- ⌘ Understand that interconnected groups may bring different cultural backgrounds and learning styles to the class. Remember that humor and other language-specific communication may not have meaning to all students from all backgrounds.
- ⌘ Students must be active participants in a distance education course and that they will have to take more responsibility for learning.
- ⌘ Explain the how's and why's of the hardware and what procedures will be used in case of hardware failure or related technical difficulties.
- ⌘ Be sensitive to the fact that students may have to adapt to a new system of deadlines or procedures for submitting work that may be unfamiliar to them.

Teaching Strategies

All the normal behaviors that teachers incorporate into their daily course delivery in a traditional classroom setting are necessary for the effective delivery of distance education courses. However intuitive those behaviors may be for most teachers, it is necessary for them to become overt behaviors to compensate for the unique situation presented by distance education systems. According to Willis (1993):

- ⌘ Course goals and objectives should be presented to students orally and in writing. Start each session with a

review of the previous session's material and end each session with an indication of the next session's content.

- ⌘ Develop and utilize strategies that will provide reinforcement, review, repetition and remediation for students.
- ⌘ Presenting content at a distance takes more time, so realistically assess the amount of content that can be delivered in each session. Remember, various interactive teaching techniques and hardware manipulation can reduce available time for content delivery.
- ⌘ Look for methods to diversify the content delivery. Avoid extensive lecturing.
- ⌘ Remember that some students will learn better in group activities and some students will be better suited to individual pursuits. Various learning patterns are more difficult to assess at a distance.
- ⌘ Focusing on the students and not the hardware system will humanize the course.
- ⌘ Provide additional materials to support the content delivery.
- ⌘ Try to incorporate activities that are relevant to the students and their local experiences.
- ⌘ Personalize instructor involvement, realizing that distant teaching does not replace the importance of face-to-face contact and small group interaction. If budget and time permit, teach at least one session from each site. Typically, the earlier in the course this is done, the better (Willis, 1993, p. 108).
- ⌘ Ask short, concise questions and strive for clear, cohesive statements. This applies to both teacher and student.
- ⌘ Deliver new material more slowly and strive to pick up the pace during reviews.
- ⌘ Adopt a comfortable, relaxed delivery style. It is important for the instructor and the students to feel comfortable.

Interactive teaching techniques and building provisions for student feedback are perhaps the most discussed difference between teaching at a distance and teaching in a traditional classroom setting. And, as mentioned in many places, traditional

**Strategies for
Interaction and
Feedback**

classroom settings would be greatly enhanced if techniques considered appropriate for distance education were applied as part of the normal routine. Braucher (cited in Moore & Thompson et al, 1990) suggests that “developing a friendly atmosphere, accurately transmitting feelings by tone of voice, carefully selecting words, appropriately using silences, ... and thoughtfully integrating new students are skills which distinguish effective teachers in any setting or delivery situation.”(p. 24). Willis (1993) indicates that some useful techniques are:

- ⌘ Contact distance students or sites on a weekly basis. Identify students that don't participate and try to contact them. This is especially important at the beginning of a course.
- ⌘ Grade and return assignments and tests as soon as possible. Use electronic means in order to speed the process.
- ⌘ Strive to include detailed and meaningful written comments on all student work. Perhaps suggest additional sources of information.
- ⌘ Establish a useful office hours system that include mail, toll-free phone numbers, e-mail, chat rooms and web pages. Consider making some sort of student-teacher interaction mandatory in order to make students learn the system.
- ⌘ Develop and use strategies that encourage critical thinking and informed participation.
- ⌘ Implement a system of student-created journals that may help focus learners on the content. Create provisions for students to express their experiences with the new learning patterns presented by distance education systems.
- ⌘ Provide systems such as post cards, e-mail, phone conferences, etc., that allow students to express any content delivery (pace, relevancy, etc.) problems. Invite constructive feedback on both strengths and weaknesses of the course.
- ⌘ Look for methods to meet students. Encourage them to stop by and visit. This is especially important for remote site students that may have occasion to visit the origination site.
- ⌘ Routinely encourage students to ask questions in order to facilitate understanding. One or two students that do not

understand a point in the content may be an indication that several other students do not understand either!

- ⌘ Be polite in controlling one student or site that may be dominating the discussion times in class.
- ⌘ Provide activities that promote student interaction within an individual site.
- ⌘ Train and encourage the remote site facilitator(s) to provide some guidance on the procedures for asking questions or generally participating in class.

Some other hints related to actual on-camera delivery are suggested by Dooley and Greule (1995) in their handbook prepared for students enrolled in distance education training sponsored by Texas A&M University. Some suggestions regarding movement and facial expressions are:

- ⌘ Facial expression and upper body movement is appropriate and effective.
- ⌘ There are limitations in movement due to lighting, cameras and microphone arrangements.
- ⌘ Make movements slow, smooth, and confined to a certain area.
- ⌘ Be careful of blocking visuals or other people speaking.
- ⌘ Be aware of how you are framed up before moving. Big sweeping gestures don't work well on the small screen. Small subtle gestures are not seen unless you are on an extreme close-up.
- ⌘ Avoid gestures that may be offensive to some cultures.
- ⌘ Avoid distracting mannerisms (fussing with hair, scratching face, tapping your pen, or jingling change in your pocket).

Some suggestions related to speaking and eye contact are:

- ⌘ Look into the camera to establish eye contact at the remote site. Pretend the camera is one of the students at your site. Also remember to scan the entire group when you speak to involve all students.
- ⌘ Concentrate on interaction and remember that pauses, questions and discussion are appropriate in the interactive videoconferencing classroom environment.

- ⌘ Speak in a normal, conversational tone, but more slowly and clearly.
- ⌘ Vary vocal pitch, volume and flow of delivery.
- ⌘ Add variety to your presentation through facial expressions and hand gestures.
- ⌘ Use proper grammar and avoid meaningless linking responses such as “uh”, “yeah”, “you know”, etc. Most people do not realize how often they use such distracting utterances. Watch a video of your teaching to see if you have mannerisms that are annoying and work on eliminating them.

Some items related to clothing and appearance are:

- ⌘ Cameras have some difficulty responding to solid, stark colors.
- ⌘ Avoid clothing with small or busy patterns.
- ⌘ Shiny, reflective surfaces create annoying light patterns.
- ⌘ Additional make-up is not required; powder is recommended.
- ⌘ Wear clothes that make you feel comfortable and look at ease.
- ⌘ Avoid white, black and other extreme colors.
- ⌘ Avoid bright or noisy jewelry; don't wear a watch that beeps (Dooley & Greule, 1995, 40-41).

Who Should Teach?

At this point it appears that the necessary teaching skills required for the effective delivery of content via distance education systems will require specialized training. It also seems safe to assume that successful distance teaching requires a personality that is willing to do the extra work involved and find the experience rewarding. Dillon and Walsh (1992) investigated distance teaching from the faculty perspective and found:

- ⌘ Faculty indicate that distance teaching requires a personalized and empathetic rapport with students.
- ⌘ Communication skills (voice quality, body language, clarity) are critical for distance teachers.

- ⌘ Faculty who teach at a distance are generally positive toward distance education, and their attitudes tend to become more positive with experience.
- ⌘ Faculty motivation for teaching at a distance comes from intrinsic (e.g., challenge) rather than extrinsic (e.g., financial rewards) motivation.
- ⌘ Faculty believe that distance teaching experience improves their traditional teaching as well (cited in Moore & Kearsley, 1996, pp. 150-151).

Moore and Kearsley (1996) summarize the discussion regarding distance teaching in the following fashion:

- ⌘ One of the major prerequisites for effective distance teaching is mastery of the particular delivery technology or technologies involved. Usually the instructor using audio, audiographic, computer, and even some forms of videoconferencing is alone when actually conducting a conference. Instructors must be able to manipulate the technology confidently and skillfully as a prerequisite to using it creatively in their instruction. In all cases a knowledge of the program planning and development process for the medium is needed.
- ⌘ In all forms of teleconference teaching, the ability to humanize or personalize the class is important . . .
- ⌘ Learning how to use a delivery system to make a class of distant groups highly interactive is one of the biggest challenges for any teacher new to distance teaching . . .
- ⌘ Surveys of faculty show a demand for training in distance teaching methods. On the basis of the preceding discussion, it can be concluded that a good training program for distance teaching should have at least four ingredients: (1) practice in designing, producing, and presenting content information; (2) ample hands-on practice with the delivery technologies involved; (3) practice with the techniques for humanizing a course; and (4) practice with techniques for facilitating student participation (pp. 151-152).

Additional discussion of the issue of teacher training can be found in Chapter Five of this publication.

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