

# Telecourse Modification Guidelines

## KEY POINTS

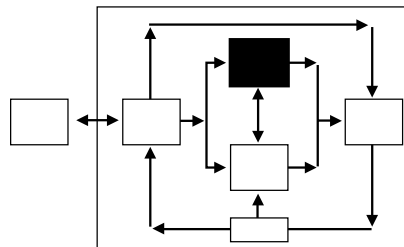
- Traditional courses cannot be transported to an interactive television classroom or computer classroom without significant modification.
- Students do not learn from the physical technology. They learn from competent instructors that teach through the technology.

## LEARNING PERFORMANCE OBJECTIVES

- Describe those components of a traditional course that should be modified for interactive television and computer teaching.
- Explain what the research informs us about the effectiveness of teaching via television.

## NEW TERMINOLOGY

- Reconfiguration
- Channel
- Transition statement
- Student manual
- Physical technology
- Messages
- Pacing



WHAT DO YOU MEAN that teaching on television is different from my traditional teaching? I use lots of overhead transparencies; I use some video clips; I involve my students in activities during my classes; I use handouts; and I have received excellent student evaluations. *What do I have to do differently? I thought I could teach as I have always taught.*"

*"I don't have the time for this kind of preparation!"*

*"I'll never teach this course again, so why bother?"*

*"I don't have any release time for planning and I have only five weeks before the course begins."*

*"I have been told that I have to teach on ITV. I have no interest in teaching this way, but I guess I must."*

These questions and statements are frequently uttered by practicing traditional instructors. There are many faculty and administrators who honestly believe that teaching at a distance, especially on interactive television, is just the same as traditional teaching. This chapter responds to these questions and comments and can help an instructor make major decisions about teaching at a distance.

- Should you simply transport a traditional podium-based course to an interactive television environment, or should the course be modified to take advantage of the special qualities that the technology offers?
- Which components of a course should be modified if needed?
- Does the institution value high-quality telecourses or bare minimum "talking head" telecourses?

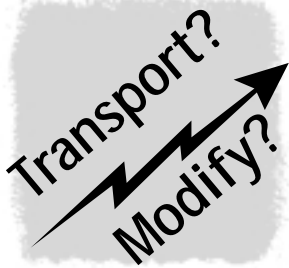
Answers to these questions will impact on the quality of the telecourses produced by an institution.

If a course is simply transported to an interactive television environment, what will probably result? One way to find out is to turn the video off or turn your back to the television set and see if you can get a good set of notes. Transport of a traditional course means that there will probably be a talking head, minimal visualization, little or no involvement of students in their learning, and no study guides.

Courses, short and long, require modification for any distance delivery system in order to take advantage of the special characteristics of that medium, such as high levels of visualization and interactivity, and minimize the limitations of the medium, such as no visualization (audioconferencing), or the inability to see the students (one-way video/two-way audio).

Keep in mind that *students do not learn from the physical technology*. Technologies are only conduits that allow us to reach more students at greater distances with a variety of sensory inputs. Students learn from the way that instructors send messages through the technological conduits.

Today we are using the new and innovative conduits (Information Superhighway, WWW, Internet, multimedia) to send the messages the same ways that we have always sent them—teacher-centered and aural/oral. Do we need to begin to do things differently?



## Modification guidelines

These modification guidelines are applicable to all delivery technologies—audio, video, computing, and print—in some way. Some guidelines, such as presentation skills, apply primarily to interactive television, but will eventually be incorporated into multimedia in the near future as applications like CU-SeeMe™ are improved.

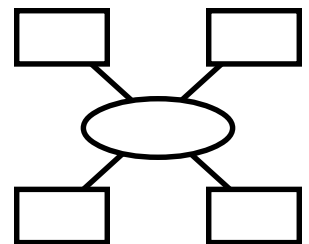
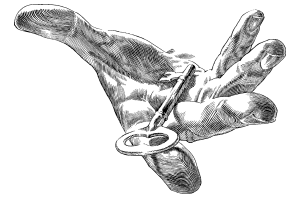
- **Provide training, practice, and critique sessions** as frequently as possible for instructors who will be teaching at a distance.
- **Identify 3–4 key points per telelesson.** There can be a number of subpoints, but limit the content coverage to 3–4 key points per 50-minute telelesson. These key points should be reinforced with stories, anecdotes, magic illusion, and other involvement activities. Explain and validate the source of these key points: Other instructors at your institution and/or other institutions, work related, textbooks, and current research literature.
- **Base the selection of key teaching points on a learning performance objective.** Classify each learning performance objective as primarily cognitive, affective, or psychomotor. If cognitive, determine the intended intellectual level as knowledge, comprehension, application, or critical thinking.
- **Motivate students by:**
  - Telling them why the objectives are important to them and why they need to master them. Explain how these objectives relate to other courses and how they might relate to other professional skills;
  - Explaining to the students how they can benefit by mastering the objectives. Tell them what is in it for them;
  - Explaining how the students can apply the data or skill immediately in their lives; or
  - Using attention focusing techniques such as grabbers, multiple examples, magical illusion, storytelling, and personal anecdotes.
- **Use multiple examples** (for instance) **and non-examples** (don't confuse A with B).
- **Transition statements** are needed for the benefit of field site students between a presentation and initiation of activities, exercises, stories, anecdotes, magic illusion or demonstrations. The student must understand the relevance of each component and how it contributes to the learning performance objective. The instructor must minimize confusion and the need for any type of clarification. This can take time and possibly confuse the students even more.
- **Put the telelesson in context.** Tell them where they have been, where they are going, and what will come next.
- **Visualize** as much as possible with pictures, graphics, video clips, word pictures, and other visualization techniques. Review Chapter 21, *Constructing Visual Analogies for Teleteaching*, on visual indicators.
  - Use 3 times as many visuals for interactive television and computer presentations than you would use in traditional teaching.
  - Use video clips, if available, to reinforce key points.
  - Put all visuals into a 3 x 4 aspect ratio for television and computer screens.
  - Reinforce every point and subpoint with as many visuals as possible. Use color liberally. Cue and reinforce with it.
  - Use word pictures, clip art, and presentation graphics as frequently as possible.

---

An optimist goes to the window every morning and says, "Good morning, God."

The pessimist goes to the window and says, "Good God, it's morning!"

---



- Correlate every visual on the television or computer screen with the student study guide by numbering each segment for easy and quick reference.
- **Divide the topic** into 5 ten-minute or 10 five-minute segments within a 50-minute teleclass with closure at the end of each segment.
- **Plan all questions. Talk no longer than 8–10 minutes** before asking for a question, comment, or opinion. Use why and how questions.
  - Match all questions to a learning performance objective.
  - Begin with questions that most students can answer. These might be factual recall questions. Then graduate to higher level questions.
  - Classify every question as knowledge, comprehension, application, or critical thinking.
  - Allow adequate response time (called wait time) of at least 3–5 seconds.
  - Provide as much positive feedback as possible.
- **Involve students in activities or exercises** at least 30 (preferably 50) percent of the teleclass time.
  - Include 3–5 planned two- to five-minute activities per teleclass hour.
  - Provide student handouts that are correlated with the television or computer screen. If audioconferencing is used, number each segment of a handout for easy reference.
  - Involve students by name and site location.
  - Refer to the 156+ activities and exercises in Chapter 14 for ideas.
- **Change your pacing**—slow for new concepts and faster when reviewing. Use voice modulation in conjunction with pacing for a dramatic effect.
- **Develop a personal signature** that is consistent from class to class. This could be a graphic, what you are doing when the teleclass opens, music, or a video clip on location.
- **Develop effective verbal and nonverbal presentation skills.** Show a sense of enthusiasm for what you are teaching.
- **Time all activities and exercises** with a countdown clock shown on the television or computer screen. Show a slide and play music at a very low volume in the background.
- **Define all new vocabulary** for each telelesson. This can be included at the end of each interactive study guide or in a separate glossary given out at the beginning of a telecourse.
- **Plan every telelesson** with a telelesson plan that helps you to organize what is taught, the sequence in which it is taught, the amount of time to allocate for each content segment, what will go on the television or computer screen, what the students will do at the field sites, and how student activities will be facilitated.
- **Develop a short student manual** that explains what a telecourse is and how it is different from a traditional course. Include a section on how the student should take a telecourse and the level of responsibility that s/he will have to accept.



During the period of 1990–1992 the U.S. Army TRADOC, Futures Training Command, in collaboration with Engineering, Economics, Research, Inc., of Virginia, explored the concept of visualization with word pictures and interactivity in one-way

and two-way instructional television called VTT or video teletraining. This author conducted a number of intensive seminars in television training for these groups and reviewed all of the final training materials. Several courses were reconfigured from traditional training materials and evaluated by a separate U.S. Army evaluation team at White Sands Missile Range (1992, April). The results were very encouraging. The evaluators concluded that

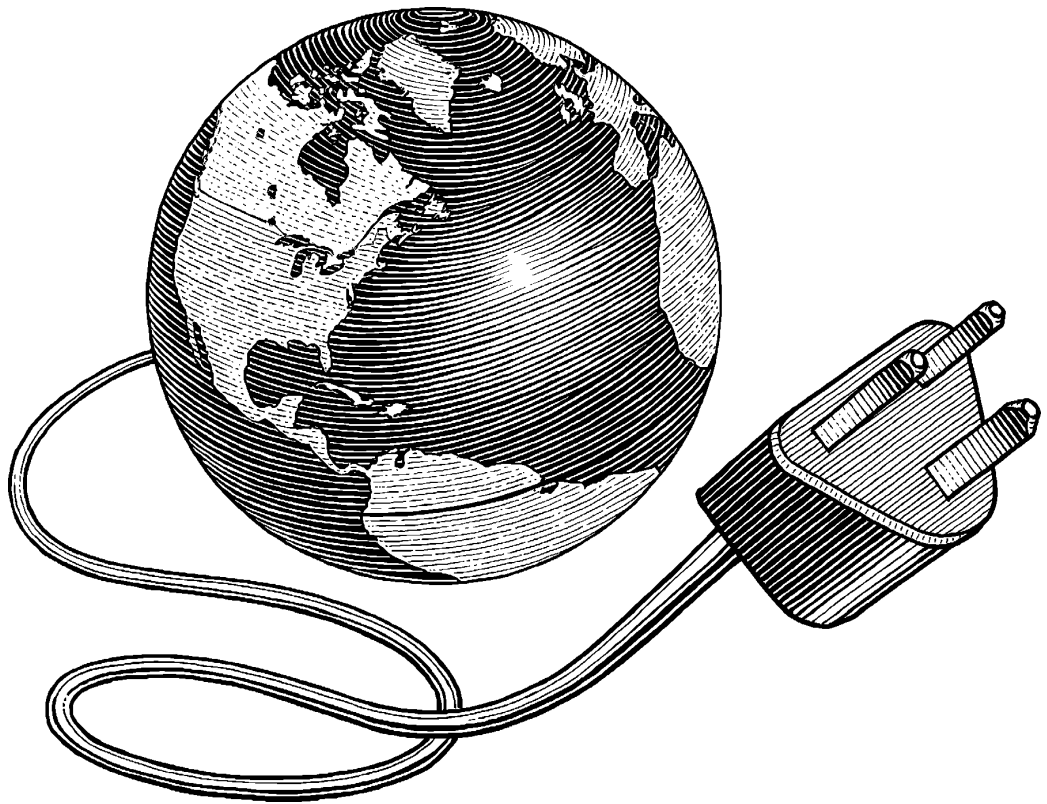
Students in the one-way reconfigured VTT condition performed significantly better (.05 level) than students in the two-way group. ... Students receiving traditional reconfigured instruction performed significantly better (.05 level) than students receiving traditional instruction which had not been reconfigured for VTT (p. 3-3).

---

If you can dream it,  
you can do it.

*Walt Disney*

---



## Ideas to Apply in Faculty Development Workshops



- **Hats:** Engineers, surgeons, architect, and athletic teams have to plan in detail if they are to succeed.
- **Puppets:** The beaver is a master planner. What other animals symbolize planning?

### Discussion: Modifying courses for distance delivery

Topics that can be used with a small groups of 3–5 participants include:

- Why can traditional courses not be transported to interactive television without modification?
- What is the problem with “talking heads?”
- Why are many of the existing telecourses really “radio programs?”
- What criteria are used to select interactive television, or the Internet and the World Wide Web, or audioconferencing? Why is one preferred over the other?
- Why are higher levels of visualization needed for telecourses?
- How interactive should interactive television be?
- Why are handouts important for telecourses in any format?
- How much training do faculty need to produce top quality telecourses?
- Does your institution want: a) top quality telecourses, b) very good quality telecourses, c) good quality telecourses, d) moderate quality telecourses, or e) no one has discussed quality.
- How can the best of all of the delivery systems be used in a telecourse?
- Is it true that the Internet and the Web are free for faculty?