ABSTRACT

Designed to assist California State University at Chico (CSU) faculty to utilize educational television effectively for long-distance instruction, this handbook provides suggestions, procedures, and production techniques for successful television teaching. A brief introduction discusses the interactive nature of educational television at CSU. Guidelines are then given for on-camera techniques; proper pacing or timing; clothing and make-up; audio interaction; and teaching students you can't see. Answers are provided to some questions by instructors, and the campus services of the CSU Instructional Media Center are briefly described. Guidelines given for pacing and timing cover the presentation of ideas; the flow of words, timing, and pauses; volume and pitch of voice; emphasis; body movement; audiovisual aids; use of resource people; and production techniques. A list of references completes the document.

(JB)
A Handbook for ITFS Teachers

by

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California State University, Chico
TEACHING OVER TELEVISION
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Fall 1984
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I. Introduction

Welcome to the CSU, Chico Instructional Television for Students Program (ITFS*). Started in 1975, the ITFS system has expanded to serve a number of regional learning centers. You are now one of an expanding group of CSU, Chico faculty who offer long-distance instruction through this unique system. The purpose of this handbook is to acquaint you with TV standards and provide you with some procedures and production techniques to help you teach over television with the same ease you use in your other classes.
First of all, there are some things that you will need to become aware of. Although many of your students will be familiar with the ITFS system, some of your students in MLIB 27B and at the learning centers may be taking classes via ITFS for the first time. Both students and faculty should understand that the ITFS system is a unique system and ITFS telecasts should not be compared with commercial television programs. Production work centers around instructional needs, not detailed scenery, or acting; plots are replaced by defined content, instructional objectives and sequential development. While commercial broadcasts are meant to be relaxing and entertaining, ITFS telecasts are meant to be stimulating and informative, with commitment by the viewer to learn from the instructor.

The CSU, Chico ITFS system is most unique because students at the off-campus sites can interact with the campus classroom “live.” The talkback system allows off-campus students to ask questions, give answers, and participate in classroom discussions. Teachers and students interact with each other just as in regular classroom settings.

The principles outlined in this handbook are based on the strength of live and interactive teaching over television.

*ITFS officially stands for designated Federal Communications Commission broadcast frequencies called Instructional Television Fixed Service. CSU, Chico uses the letters for Instructional Television For Students.*
II. On-Camera Techniques

Although television is a visual medium, visuals are not always necessary. For good classroom teaching, as well as for ITFS teaching, the single question which determines whether a visual or graphic should be used, is "Will it add to the point I wish to make?" If it won't, don't use it. A well-presented lecture over the ITFS system, with live interaction between the campus classroom and distant learners, can be very effective. Don't sell yourself short as a presenter.

The ITFS teacher is not only the center of activity: he or she is also the director of the program. Teaching over ITFS is an extension of your regular classroom teaching. It is not a pre-recorded or tightly-scripted instructional television program. Instructors, therefore, should work so that the camera operator takes cues from them as progress is made from step to step. The ITFS teacher is in control insofar as he or she can guide, by obvious cues, the direction of the cameras.

Teachers should not feel restricted to a fixed or small area if a change in position would add to the general pacing of the class. Feel free to express your personality and make the total picture "natural" by casual, normal movements. Move and "stage" yourself in much the same way you do in a classroom setting, keeping in mind that the camera operator must follow your movements in order for the off-campus students to see what is happening. Again, give the camera operator as much information and cues as possible. Shortly after the semester begins you and the ITFS operator should become an effective team.

The two cameras that face you from the ITFS operator's booth are the eyes of the off-campus students. Students see as if in a one-to-one situation. Periodically direct your attention to the camera lens—to one student, not to many students. By "teaching the camera" like this, you treat the off-campus student as part of the total class. Don't forget the student who sees you through the camera.

Don't memorize or read from a script. Just work with your lecture notes as you normally would. Don't be concerned about the natural pauses that result from looking at an outline phrase, thinking about it and then proceeding to speak about it. This is a natural occurrence. People stop, think and speak in all forms of conversation. Pauses indicate the speaker is thinking, and spontaneous pauses reflect sincerity.
III. Key to Success — Proper Pacing or Timing

An important element in any phase of communication is pacing or timing. When communication is over TV this element is even more important.

In almost all cases, newcomers to TV move and talk too fast. Nervousness makes one speak and move more rapidly than in the ordinary situation. (If you feel nervous, take deeper, slower breaths through your mouth.) It is not necessary that a teacher talk continuously for the full length of time "on the air." As in any teaching situation, the use of prepared audio/visual aids offer many opportunities for pausing or thinking. For TV, slow your pace down a bit, but keep the material flowing. Pacing usually involves a purposeful change in:

A. Presentation of ideas
B. The flow of words, timing, pauses
C. Volume of voice (stress and force)
D. Pitch of voice
E. Emphasis
F. Body movement
G. Use of A-V aids
H. Use of resource people
I. Production techniques
A. Presentation of Ideas. In maintaining a slower pace, it is most important to hold down the pacing of ideas. All teachers must judge how fast the learners can grasp the ideas which are being presented. In the case of television, the successful conveying of ideas requires that they be presented a bit more slowly than in a regular classroom.

The pacing of ideas begins with the planning of the lesson.
- Limit the number of ideas to be presented
- Develop each idea thoroughly
- Relate one idea to another
- Build on the preceding idea
- Inter-relate all the ideas to one another

The lesson is more important than the "self on camera." Self-consciousness brings on poor pacing and is the result of not enough concern with what is to be said. Self-consciousness distracts from the ideas being presented. Put another way, fight the impulse to restrain yourself when it comes to movement, gestures, or expressions of any kind. A good performer is one who, through enthusiasm, projects voice and personality as a result of interest in the ideas being discussed. A good teacher is a good performer.

The animation of the teacher is very important to maintain student interest in the classroom and is especially important for the TV learner. Below are some techniques for maintaining student interest. Use any, all or a combination of the following:

- By manner or attitude: Be poised and confident; use a positive approach.
- By what is said: Excite interest by speaking of things that directly reach experiences of the viewer; refer to a prop, situation, familiar thing, person, or subject of current importance to the learner; use striking facts, dramatics, questions, or humor to arouse curiosity.
- By approach: Show warmth, friendliness and sincerity.

B. The Flow of Words, Timing, Pauses. A teacher's confidence is shown by variety and pace.

- Change the speed of words according to the lesson content. (Rapid for excitement. Slow and deliberate for highlighting mood, etc.)
- Avoid mumbling by projecting your voice. Move your lips, tongue and jaw freely.
- Avoid monotony and dullness in your presentation by utilizing various changes in timing and tempo. For example, the word in the following sentence will be emphasized by the simple device of a pause before it is said: "Today we are going to talk about -- -- -- -- fishing."
C. Volume of Voice. (Force of Stress) Adequate volume raises the loudness of your voice, but also maintains the pleasant, resonant qualities your voice possesses in speaking softly. Adequate volume is accomplished by remaining relatively relaxed, particularly in the throat area.

Voice quality is partly determined by breath control. A deep breath through the nose and its slow exhalation through partly opened lips (or in speech) tends to check nervousness since the metabolism of the body will slow down as will the pumping of the heart. (This is one trick for controlling nervousness.) Adequate projection of voice (through breath) communicates self-confidence and authority.

The transmission of the volume of your voice through the microphone or the ITFS system is controlled by the operator. The operator will show you the proper placement of the microphone. Once the microphone is in place, forget about it. Just speak to the class as you normally would.

D. Pitch of Voice. The use of various pitches in voice can lend a vividness to any lecture. A variety in pitch helps eliminate monotony.
- Low voices are naturally used in situations of profundity, bigness, greatness, depth, darkness, etc.
- Mid-range voices (average conversation tones) are used for general discussion, narration and talk.
- High voices are used naturally and dramatically to show excitement, height, beauty, tiny things, speed, etc. (Let your voice do what descriptive words suggest.)
- Any change of pitch can make any word or sentence important. Raise or lower the voice on the bold word and you will hear the emphasis. "There is no medium quite like educational TV."

E. Emphasis. Proper speech emphasis can add variety and excitement to any oral presentation. To achieve this, make use of any, all or a combination of stress, pitch and tempo.

F. Body Movement. As stated earlier, don't hesitate to move about the classroom—rise, sit down, raise your hand when you wish viewers to respond, etc. Keep in mind where the cameras are positioned relative to their view of what you are doing. Also, remember that for the off-campus students to see what is happening, the camera must be able to keep up with your movements. As the camera operator becomes more familiar with your particular style of presentation, he or she will better be able to follow your movements. At the beginning of the semester, however, talk with your operator about your style of movement so the operator is not caught off guard.

You should be aware that the camera mechanism itself does not allow for quick movements while "zoomed" in close. The TV monitor facing you at the rear of the classroom shows the picture that is on the air. If it shows a "close-up," you will need to move slower and more deliberate than you would normally.

Special care is necessary when showing objects or printed materials. Don't block writing or other visuals with your body as you point to or stand near them. The camera must be able to see what you are pointing out. Point with the arm that is away from the camera. Check the TV monitor facing you to make sure what you intend to be seen is clear to the TV student.
G. Audio-Visual Aids. The use of A-V aids, including graphics, helps to make a good teaching situation and should be paced according to specific purpose. Graphics should not, however, be on camera longer than necessary.

To promote better program pacing for the TV student, it is helpful to use a variety of visual devices or graphics to accentuate and point up important ideas. The ITFS system can show films, slides, film strips, video tapes, handwriting, overhead transparencies, graphics, etc., just as in the regular classroom. It is important, however, that you give the TV operator advance notice of your intended use of A-V.

- **Writing on TV** should principally be in outline form. Lettering should be **LARGE AND DARK**. All handwriting should be done with a large felt tip pen or with large chalk (which are provided in the ITFS classroom). Manuscript is better than cursive. The TV screen has a horizontal ratio of three by four, which allows about five words per line, and about five lines per “page” to be easily read by the viewer. ITFS teachers can write on the chalk board or the large pad which is placed under the overhead camera.

- **The printed page** cannot easily be read on the television screen. A portion of a full-printed page can be seen if “zoomed” into, but do not expect to show text material unless copies are also sent out to the viewers for reference.

- **Illustrations and graphics** should be simple in design. The TV screen cannot be studied as closely as the page of a text book might be. Only the important elements of the message should be put in the picture. Complicated pictures or maps should be re-done to simplify them. When a “handled” article is to be shown, determine in advance with the operator where the specific staging will be and place the object in that area. Keep other objects out of the picture. Don’t move it around. Remember, the camera cannot follow quick movement when showing close-ups.

- **The TV picture is horizontal with a ratio of three units high and four units wide** (6x8 or 9x12 or 12x16). Slides, overhead transparencies, objects, pictures, etc. that do not have this ratio will not easily fit for close-up view on the screen.

- **Slides** (35mm) should have a horizontal format if used on TV equipment. Because slides are not a 3x4 ratio you will loose about 10 percent around the edges. Vertical slides are cropped drastically at the top or the bottom. Slides that have a high contrast of light value between the elements within the picture cannot be used. Also, dark slides are not usable. Slides should be pre-arranged and in trays when you come in for class. Check with the ITFS operator if you have any questions about slides. Students in the classroom view the slides on the TV monitor in the classroom.

- **Film** (16mm or super 8mm) shot at a speed of 24 frames per second is used on TV equipment. Either silent or sound films are fine. Advance ordering from the IMC should be arranged. Because 16mm film is not a 3x4 format, you will lose about five percent around the edge. Students in the classroom can view the films on the TV monitors in the classroom.

- **When using camera cards, the writing pad under the overhead camera, and the chalk board** keep in mind the 3x4 ratio. Make a border of at least one and a half inches on the overhead camera pad.
Standard Card Sizes  Viewer Sees
11" x 14"  8 1/2" x 11"
20" x 30"  15" x 20"
30" x 40"  24" x 32"

- Photos should be non-gloss and horizontal. Avoid varied shapes and sizes when using in sequence unless you allow time for camera re-adjustment.

- Overhead transparencies are not usable when projected on screen. They do, however, work fine with the overhead camera. Just place the transparencies directly on the desk pad. Students in the classroom can then view the transparencies on the TV monitors in the classroom.

- Computer generated graphics are especially designed for use on television. All letter sizes, colors, ratios, etc. are proper. ITFS teachers are encouraged to use this format to enhance the important points of instruction. Computer generated graphics can be for still or motion pictures.
H. Use of Resource People. Try bringing in a resource person during a particular instructional program or anytime during a semester's class for a change of pace. This is especially encouraged for instructional television.

- Guests can be video taped for play during the class period if their schedule does not permit a "live" visit.

- Whenever possible, guests should be oriented to the system before they appear.

- Visual materials should be checked and planned for.

- The ITFS operator should be informed in advance so that extra microphones, chairs, etc. can be set up.

I. Production Techniques. Use of split screen, special video tape productions, special effects, film and video clips, mini-documentaries, slide/tape shows, music, etc. are all possible. It does, however, take planning to accomplish this. Please feel free to consult with, and receive aid from your operator or the IMC's Instructional Development Office.
IV. Clothing and Make-Up

No special clothing and make-up are necessary. Just dress as you would for your regular class. If, however, you would like to know what is advisable for television, here are some suggestions:

- Avoid: extreme contrast in clothing; black or white clothing; busy patterns (e.g. horizontally-lined patterns, small checks, or large prints); and reflective jewelry.

- The wall behind you is gold. You could consider this background in choosing colors.
V. Audio Interaction

The ITFS system handles all audio interaction between the classroom and the learning centers with microphones and speakers.

- **Off-campus students use either radio talkback (microphones) or telephones** to call into the classroom. When an off-campus student "calls in" they are heard over a speaker at the rear of the classroom. They hear what is happening in all the other classrooms through their television receivers.

- **On-campus students push button microphones** placed at their desks so that they can be heard throughout the system. Until the students get used to these, be sure to remind them to "push the button" when they talk. Otherwise, the TV students can't hear. Also, be sure students don't inadvertently keep their buttons down with books or notes.

- **The teacher's microphone** should be attached to clothing or hung around the neck, and should be placed as close to the throat as comfortable. Tie clasps, buttons, and other jewelry in the general area of the microphone placement should be removed or adjusted. While using the microphone be aware that folds in your clothing, bending over, etc. can muffle your voice. Be careful about holding a visual which is near enough to the microphone to cause noise through contact.

There are two types of microphones that can be used — a cordless microphone or a corded microphone.

- **If you wear the cordless microphone** be sure to turn it off during any class break. You will still be heard if it is not turned off.

- **With the corded microphone** you can keep the cord from bouncing on the chest by tucking it behind a belt or under a jacket. The cord should be free enough, however, so that moving about the set can be smooth. Grasping the microphone cord to move away from the direction in which you intend to walk is acceptable procedure. Don't fiddle with the microphone cord, however, since this causes noise which can be transmitted over the system.
Currently the ITFS system only allows the teacher to hear the off-campus students, not to see them. Future plans will allow all participants to see as well as hear each other, however, for now, the teacher must deal with students that aren't seen. Although this can be frustrating at times, below are several suggestions for dealing with this aspect of ITFS teaching.

- **Require interaction from your off-campus students.** Call out names and ask for responses, i.e., "Does anyone in Redding know the answer?" or "Can anyone in Colusa add to this idea?"

- **Encourage the TV students to visit the campus.** Make your office hour clearly open. Ask students to call you to get better acquainted.

- **Let the off-campus students know that you expect them to be responsible, self-directed learners.** The learning center classrooms are generally less formal than the campus classroom. Remember, however, that TV students are usually older and more mature than the campus student.

- **Ask students to send pictures or a paragraph or two about themselves.**

- **Use any extra time after class, or take special time during class (excuse the on-campus students) to talk to all the sites, to selected sites, or to individuals.**

- **Visit the learning centers.** You can video tape a "telelesson" for playback while you are at a learning center. You can still run the class from the visited site by using the talkback system.

- **Talk with experienced teachers about how they handle the unseen student.** Share ideas.
VII. Commonly Asked Questions

How do I find out what students are attending the off-campus sites? There is a monitor at each of the sites for the first week of classes from 8 a.m. to 4 p.m. and for the first two weeks of classes from 4 p.m. to 10 p.m. Part of the monitor's duties is to complete an "Enrollment Sheet" for each class. These are mailed to the Continuing Education office daily. Thus, by the end of the second week of classes, you will be provided with an unofficial enrollment list of your off-campus students.

Due to the nature of mailing in ITFS registrations, it takes longer for these students to appear on your official roll sheet. The Continuing Education office tracks all ITFS registrations and they will be glad to assist you with any discrepancies you may note on your roll sheet.

How are class handouts handled? When you have class handouts, please provide the Continuing Education office with sufficient copies for your off-campus students and they will mail the materials directly to the students' homes. Please allow one week for the mail to reach the students. Assignments that need to be returned to your off-campus students are also mailed from the Continuing Education office.

How are examinations handled at the off-campus sites? The Continuing Education office handles the mailing of your exams to your off-campus students/sites and arranges for exam proctors. At the beginning of the semester you are asked to complete an Examination Schedule form so that all arrangements for your exams are scheduled.
How do the off-campus students get their books? Students are provided with a book list (including prices) and a book order form for ordering books through the mail. Once the order has been received in the Continuing Education office the books will be mailed to the student's home (via UPS) within 24 hours.

What happens if there are transmission problems? Each ITFS class is video taped as a precaution in case there is a system failure and some sites are unable to receive the live class. ITFS students are told to report transmission problems to the ITFS operator immediately during class. At the end of your class, be sure to tell the ITFS operator if a video tape needs to be sent to the sites for the students to view.

What happens to the tapes of my class otherwise? The video tapes of ITFS classes are automatically erased unless there is a system failure requiring that tapes be sent to the off-campus sites.

If a student is unable to attend a class, can a tape of the class be sent for the student to view? NO. Tapes are only sent to the sites when there is a system failure.

How are holidays handled? ITFS students are informed which holidays CSU, Chico observes and which holidays we do not observe. They are expected to attend class according to the CSU, Chico calendar. When the site location observes a holiday that CSU, Chico does not observe either arrangements have been made to keep the ITFS site open or students are redirected to an alternate site. (in general, all sites are kept open except Anderson students are redirected to the Shasta County Schools Office and Yreka students are redirected to the College of the Siskiyous.)
VIII. Campus Services

A. The Instructional Media Center is prepared to help with any additional production needs you might have to enhance your ITFS teaching.

- Computer graphics for charts, graphics, animation, printed outlines, illustrations, etc.
- Instructional development for mini-documentaries, special programs, field work, and demonstrations.
- TV services for interviews, special ITFS taping sessions. Use of special equipment such as computers or phone connections.
- Photography for copy stand work, slide/tape productions, and field photography.
- Media Preparation Lab for assistance on quick graphics and recording.
- Mailing of video tapes of your class in case of a system failure.

B. The Center for Regional and Continuing Education coordinates all the ITFS activities on this campus, and handles much of the communications between you and your TV students.

- Admissions and registration process at the learning center sites.
- Book orders for TV students.
- Mailing of all class handouts, exams, etc. to TV students.
- Test proctors at learning center sites.
- See also Section VII, Commonly Asked Questions, beginning on page 15.

C. The Library makes special effort to service the TV student. ITFS is more than just the transmission of classroom teaching. Faculty should expect TV students to use the library as you would any other student.

- Reference librarians are ready to take calls from learning center students to help with normal reference questions and research strategies. Learning centers have automatic dialing telephones connected directly to the library Reference Department.
- On-line computer access to the campus catalog is available directly from some learning centers by calling the Reference Department.
- Materials are found and sent through interlibrary loan to the TV students.
- Students are also encouraged to come to the campus library.

D. Other campus offices give the same service to the TV students as regular on-campus students receive. The following offices' telephone numbers are listed on the direct dial telephones at the learning centers:

- Advising
- Disabled Student Services
- Financial Aids
- Graduate School
- Records and Admissions
IX. Other References

Other references to help you prepare teaching over CSU, Chico's ITFS system are listed below. These are available through the Center for Regional and Continuing Education or the Instructional Media Center.

- **ITFS STUDENT HANDBOOK**, California State University, Chico.

- **CLOSED-CIRCUIT EDUCATIONAL TELEVISION (ITFS) IN NORTHEASTERN CALIFORNIA: THE 33,000 SQUARE MILE CAMPUS**, Meuter, Wright, Urbanowicz. California State University, Chico.


- **OPERATIONS MANUAL FOR INSTRUCTIONAL TELEVISION FIXED SERVICE**, California State University, Chico.

- **ITFS ORIENTATION**, a video tape presentation on ITFS (seven minutes).

- **ON-CAMPUS BENEFITS FROM AN INNOVATIVE EXTENDED CAMPUS LIBRARY SERVICE HANDBOOK**, Cookingham, Robert M., California State University, Chico.

- **DELIVERING OFF-CAMPUS LIBRARY SERVICES IN NORTHERN CALIFORNIA**, Cookingham, Robert M., California State University, Chico.

- Attend ITFS Orientation sessions scheduled at the beginning of each semester.
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