

Why Instructional Television?

Instructional television (ITV), is an effective distance education delivery system that can be integrated into the curriculum at three basic levels:

- Single lesson - Programs address one specific topic or concept, providing a lesson introduction, overview, or summary.
- Selected unit - A series of programs providing the content foundation for a learning unit in the course curriculum.
- Full course - Programs from one or more ITV series may be integrated into a full semester course typically in conjunction with instructional print materials.

ITV may be either passive or interactive. Passive ITV typically involves pre-produced programs which are distributed by video cassette or by video-based technologies such as broadcast, cable, or satellite. In contrast, interactive ITV provides opportunities for viewer interaction, either with a live instructor or a participating student site. For example, two-way television with two-way audio allows all students to view and interact with the teacher (see Lochte, 1993). At the same time, cameras at remote sites allow the teacher to view all participating students. It is also possible to configure the system so that all student sites may view one another.

Advantages of Instructional Television

- Since most people have watched television, the medium is familiar.
- Motion and visuals can be combined in a single format so that complex or abstract concepts can be illustrated through visual simulation. The old cliché "a picture is worth a thousand words" rings true.
- Instructional television is an effective way to take students to new environments (the moon, a foreign country, or through the lens of a microscope).
- Time and space can be collapsed, so that events can be captured and relayed as they happen.
- It is very effective for introducing, summarizing, and reviewing concepts.
- It can be used effectively as a motivational tool.

Limitations of Instructional Television

- Broadcast quality ITV is expensive to create.
- Video production is time consuming and can be technically demanding, often requiring relatively sophisticated production facilities and equipment.
- Sites choosing to interactively participate in an ITV program may require specialized equipment, facilities, and staffing.
- Most prepackaged ITV courses use a mass media approach to instruction aimed at the average student. As a result, they can be ineffective in serving students with special needs.
- When used passively, without interaction, its instructional effectiveness can be limited.

- Unless professionally produced, completed ITV programs often look amateurish.
- Once completed, ITV programs can be difficult to revise and update.

Designing Instruction for ITV

In designing instruction for ITV, the challenge is to think in visual terms. Taking advantage of the visual imagery of ITV can counter an over-reliance on lecturing. Carefully planning ways to *show* instead of *tell* may improve the instructional effectiveness of ITV. It may be helpful to visually represent:

- Outlines or lists
- Key points
- Complex material in a step-by-step fashion
- Relationships
- Information that needs to be summarized for retention and recall

Make use of:

- Pictures -- to show what things look like.
- Diagrams -- to illustrate conceptual relationships, organizations, and structure of content material.
- Maps -- to show spatial relationships.
- Graphs, tables, and charts -- to summarize information.

Take advantage of video's ability to show movement to:

- Demonstrate the operation of tools and equipment.
- Demonstrate skills that learners are expected to emulate.
- Conduct experiments in which the processes must be observed.
- Analyze change over time using animation, slow motion, or time lapse photography.
- Reveal the spatial, three-dimensional qualities of an object or structure.
- Transport learners to places or situations not otherwise in their experience.
- Present primary source materials for analysis, such as film of historical events or naturally occurring situations.

Conducting ITV Lessons

Because teachers and students are physically separated by a distance, the teacher's challenge is to psychologically reduce the gap not only through the appropriate use of technology but also through the use of effective teaching practices. Good teaching ensures that a rapport develops between students and teacher. Once basic teaching methods are considered, try employing the following three step strategy for conducting ITV lessons:

1. Set the Stage

- Remember that it takes longer to deliver instruction at a distance than in a traditional face-to-face setting. Plan lessons accordingly.

- ❑ Practice in front of a live camera prior to class. If possible, have a colleague, a few target students, or a media technician view your presentation and on-camera presence, offering suggestions for improvement.
- ❑ Organize all class materials and visuals before the start of the class. It is best to have a trial run with technical staff so that all participants know the role they are expected to play.
- ❑ If using an overhead camera to electronically project visuals, understand its operation and limitations prior to the start of the class.
- ❑ Prepare viewers for new terminology to be used in the program, and answer any questions regarding the technical equipment being used, such as cameras, television monitors, audio equipment, etc.
- ❑ Inform students if there will be camera operators or technicians in the classroom. Although the students may be initially curious, this will fade as the class progresses. In-class technicians are trained to be as unobtrusive as possible.
- ❑ Students should have the necessary background materials to make the best use of televised lessons. Consider the use of study questions to assist in focusing discussions.
- ❑ Consider team teaching to maintain viewer interest with a change of voice, image, and presentation style. If using guest speakers, give students necessary background information prior to the class. Do the same for the guest speakers. Let them know the specific purpose of their session, what is expected of them, and the general background of participating students.

2. During the ITV Session

- ❑ Vary facial expressions, tone of voice, body movements, and eye contact with the camera to enhance verbal communication.
- ❑ Engage students by using humor, asking questions, involving students, and praising student contributions.
- ❑ Maintain energy and dynamism to attract and hold the distant learners' attention. Remember, enthusiasm is contagious. So is boredom.
- ❑ Present content in five to ten minute blocks interspersed with discussion. Alternate between instruction and interaction.
- ❑ Keep lecture sessions simple and clear. To help focus viewing, indicate key points to look for.
- ❑ Do not read material.
- ❑ Maintain a moderate speaking pace.
- ❑ Do not digress -- keep students on track.
- ❑ Include different kinds of student involvement-- watching, reading, writing, and talking.
- ❑ Vary the center of focus for activities from the on-camera presenter to a receive site group or individual.

- ❑ Incorporate timely breaks as a respite from the television monitor.
- ❑ Motivate peer learning and support by encouraging students to work together both in and out of class.
- ❑ Review the concepts discussed in the program and clarify any misunderstandings by asking focused questions.
- ❑ Integrate activities to reinforce the content presentation. These activities might include quizzes, worksheets, role-playing, and experiments. Make sure opportunities are included to enhance student interaction by:
 - ❑ Planning a block of time for interaction and then letting students know in advance that interaction is anticipated. Initiating an interaction within the first twenty minutes will get students motivated to participate in learning rather than lulling them into just watching.
 - ❑ Designating students at distant sites to lead discussions or survey the room for questions.
 - ❑ Clearly defining discussion topics or questions and then allowing time for students to prepare responses. Assigning discussion questions in advance of the television session will help students prepare for the interaction. Have the questions appear in writing on the screen so students see and hear the questions.
 - ❑ Encouraging student-to-student interaction by asking an in-class student or a student from a distant site to respond to questions. The instructor does not always have to answer questions.
 - ❑ Functioning as content facilitator not just content provider.

3. Following the Session

- ❑ Review the taped recordings of the presentation, either with technical staff, a colleague, or by yourself. Take notes for improving presentation, style, and delivery methods.
- ❑ Seek student feedback on the strengths and weaknesses of the instructional materials and the teaching strategies being used.
- ❑ Be open to new ideas and delivery techniques for improving instructional effectiveness.

References

- ❑ Lochte, R.H. (1993). *Interactive television and instruction*. Englewood Cliffs, NJ: Educational Technology Publications.
- ❑ Wileman, R. (1993). *Visual communicating*. Englewood Cliffs, NJ: Educational Technology Publications.

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