

INTRODUCTION

Welcome to the start of a new school year. As a library media specialist, your many duties include the coordination of instructional television usage in your school. If you are a new appointee, you will find that there is much to learn. This handbook/calendar is designed to serve as a handy reference for you throughout the school year. And, if needed, additional help is as near as the regional technology center serving your area (see the listing on page 3).

BLOCK FEEDS

Every ITV series will be block fed several times during the year. Block feed schedules are no longer printed in the *Instructional Television Resources* book, but are announced in the *ITV Monthly Update*, which lists the current month's schedule, plus the block feeds for the next month. The *ITV Monthly Update* is mailed to school principals and media specialists, but it may also be found on the ITV Web site (URL: <http://www.itv.sctv.org>) by the 25th of the preceding month. Also available on the ITV Web site is the Updated Block Feed Summary. Click on the bullet to access an alphabetical list of all block feed schedules announced through the current date.

Block feeds of staff development offerings and recertification courses are also announced in the *ITV Monthly Update*.

TEACHER'S GUIDES

Teacher's guides are provided at no charge by the South Carolina Department of Education and ETV; order forms may be found in the ITV Resources Book. Please encourage teachers to save the guides from year to year to avoid costly reprinting. Guides are good as long as the series is offered or until it is revised.

ITV WEB SITE

Since the ITV schedules were compiled in Spring, they are subject to change. Although as many changes as possible will be announced in the *ITV Monthly Update*, changes occur after the update has been printed. For the most up-to-date schedule information, visit the ITV Web site (URL: <http://www.itv.sctv.org>).

ITV MONTHLY UPDATES

The *ITV Monthly Update* provides updates on existing series' schedules or use rights, new series or programs that become available, special activities, holiday viewing, staff development resources, and the monthly block feed schedule. It is mailed to schools at the beginning of each month and is available on the ITV Web site by the 25th of the preceding month.

NETWORK TECHNICAL SERVICES

Technicians are responsible for the upkeep of the building's system (not the school's equipment—TVs, VCRs, etc.). Whenever you have a technical problem or question, call 1/800/922-4848 or go to the NTS Web site (URL: <http://www.sctv.org/nts/>) and report your problem electronically. You can also check on the status of a reported problem at this location. Please remember that if you call, you will not be able to talk to a technician directly. Your request will be forwarded to the technician serving your area. Please be sure to provide detailed information about the problem you are experiencing.

A RESOURCE FOR IN-SERVICE PLANNING

Using general ITV in-service sessions for better utilization of instructional television.

- ❖ **General Awareness:** A one- to two-hour presentation, by grade level and subject area, showing portions of ITV programs on videotape.
- ❖ **Program Update:** A 30- to 60-minute presentation, including videotaped segments, of all the new programs offered on ITV. It is designed to inform teachers of new ITV resources, as well as changes in scheduling.
- ❖ **Critical Television-Viewing Skills:** A 30- to 60-minute workshop presenting activities designed to promote a positive learning experience as a result of television viewing at home or in the classroom.
- ❖ **Equipment Training:** One- to three-hour workshops concerning the use of your school's video equipment. These can be conducted either individually or in small groups.

Using ITV in in-service sessions for special staff groups. If a goal of your in-service plan is directed to one group, but is not applicable to others, ITV may fill the gap for several of these groups. Workshops of varying lengths may be held for many special groups, including counselors, library media specialists, and teachers of any specific curriculum. Don't let people be bored by a presentation that doesn't apply to them. Let ITV help you individualize your in-service.

Using ITV presentations as an in-service activity to support the instructional goals and objectives of a master in-service plan.

Example

- Goal:** To provide district-wide planning for career education.
- Objective:** To expose teachers at each grade level to available resources in career education.
- Resources:** One representative from the in-service committee, one teacher from each grade level, an ITV representative, and representatives from other agencies/organizations.
- Activity:** Workshop by an ITV representative and three local teachers to present to teachers career education programs on resources, by grade level.
- NOTE:** Other sessions by other agencies/organizations could be running concurrently with these ITV sessions.

Using ITV presentations to increase public awareness. Technology specialists are available to address PTA/PTO groups, civic clubs, and other organizations.

INSTRUCTIONAL TELEVISION

Instructional television programs are created specifically for use in K–12 classrooms. They are curriculum-based, accompanied by lesson guides, and designed to fit your educational plans. Many of PBS' programs for K–12 provide extended school taping rights of at least one year, and come with teacher's guides, activities, and other resources. Many programs can accompany some of the online projects. Check out the PBS Resource Finder at the following URL: <http://www.pbs.org/learn/learnsearch.html>. Here you will be able to find information on integrating PBS and Internet resources into your curriculum.

PLANNING FOR THE USE OF INSTRUCTIONAL TELEVISION

- ❖ Become familiar with ETV's broadcasting channels and the ITV schedules for your area.
- ❖ Become knowledgeable in the particular resources useful in the grade levels of your school and in ordering the appropriate teacher guide materials needed for effective curriculum implementation.
- ❖ Promote ITV.
 - ❖ Assist your school principal by providing the necessary information and help to all faculty members.
 - ❖ Develop in the faculty favorable attitudes toward ITV. Form a committee of supporters to keep up with trends, ideas, etc.
 - ❖ Develop good community relations toward ITV, particularly in the PTA/PTO.
- ❖ Provide information.
 - ❖ Assist teachers in learning about new resources. Accommodate teachers' requests to preview the resources they believe will be useful in their teaching.
 - ❖ Distribute to teachers monthly staff development schedules and teacher lesson guides.
 - ❖ Display announcements and posters in prominent places.
- ❖ Encourage staff development.
 - ❖ Encourage staff members to participate in your region's Teacher Training Institute (TTI).
 - ❖ Alert principals and teachers to special ITV staff development programs. If necessary, arrange to tape the programs for later playback.
 - ❖ Encourage teachers to share ITV/audioutilization ideas. Give recognition to innovators.
 - ❖ Experiment with new ideas for the use of television and audiotapes. Encourage teachers to use listening stations to individualize, etc.
 - ❖ Develop a resource shelf on instructional television for teachers, to include supplementary materials for ITV series and staff development offerings.
 - ❖ Hold training sessions to instruct interested faculty and students.



Louise Moss, operator at the York DELC, uses a character generator to broadcast the weekly schedule.

NEW PROGRAM: EFFECTIVE USE OF INSTRUCTIONAL VIDEO IN THE CLASSROOM

Effective Use of Instructional Video in the Classroom is a new program produced by Martha Alewine and directed by Pat Henry, a producer/director at ETV. The 11-minute program provides important information for teachers on how to find out about video resources and how to use them effectively in the classroom. Media specialists will find this short program a very useful tool for promoting the proper use of instructional video. (Unlimited rights granted.)

PHYSICAL CONSIDERATIONS FOR USING INSTRUCTIONAL TELEVISION

Since the abilities to see, hear, and react are basic needs for learning, it follows that the physical facilities in the school have a great deal to do with whether a teacher can reach students on even the most basic levels of communication. Can students see and hear what is going on? Are lighting, acoustics, ventilation, and furnishings proper for the task?

All of these physical and environmental factors are common problems regardless of whether the "teaching image" is in the person of a teacher in the classroom, or is coming to the students via television, radio, tapes, film, or other A-V equipment. Special care should be taken to arrange seating and place equipment properly for optimum viewing.

MAXIMUM VIEWING DISTANCE

The maximum viewing distance is directly proportional to the size of the television screen. This may be determined by measuring the TV screen diagonally.

MINIMUM VIEWING DISTANCE

The minimum viewing distance is directly related to the size of the TV screen, as follows.

- ❖ 17- to 19-inch screen—5 to 6 feet
- ❖ 21- to 23-inch screen—6 to 7 feet
- ❖ 24- to 25-inch screen—7 to 8 feet

MAXIMUM VERTICAL VIEWING ANGLE

The maximum vertical angle for comfortable viewing is 30 degrees. The television should be elevated to a height of 4 to 6 feet.

MAXIMUM HORIZONTAL VIEWING ANGLE

Image distortion and legibility must be considered to determine the horizontal viewing angle. A line of vision not more than 45 degrees from the axis is the maximum angle recommended for viewing most material without objectionable distortion.



Judy Lambert, Rock Hill DELC coordinator, schedules another week of ITV lessons.

LISTING OF TELEVISION AND CABLE NETWORKS

The following list of television and cable networks should prove valuable as you request permission to secure licenses of programs that have been taped off-air under the Guidelines.

Please bear in mind that the Guidelines do not include cable programming. It is advisable that you contact each cable network in order to determine the nature of their policies regarding off-air taping for educational purposes. Under no circumstances should you request this information from individual stations or cable operators, as they do not have the right to grant permission unless they own the program.

Network	Phone	Address
ABC	212/456-7777	77 W. 66th St., New York, NY 10023
CBS	212/975-4321	51 W. 52nd St., New York, NY 10019
Fox	213/277-2211	P.O. Box 900, Beverly Hills, CA 90213
NBC	212/664-4444	30 Rockefeller Plaza, New York, NY 10020
PBS	703/739-5000	1320 Braddock Place, Alexandria, VA 22314
A&E (Arts & Entertainment Network)	212/661-4500	555 5th Ave., New York, NY 10017
AMC (American Movie Classics)	516/364-2222	150 Crossways Park West, Woodbury, NY 11797
BET (Black Entertainment Television)	202/337-5260	1232 31st St., NW, Washington, DC 20007
BRV (Bravo)	516/364-2222	150 Crossways Park West, Woodbury, NY 11797
CNBC (Consumer News and Business Channel)	201/585-2622	2200 Fletcher Ave., Ft. Lee, NJ 07024
CNN (Cable News Network)	404/827-1500	1 CNN Center, Box 105366, Atlanta, GA 30348
COM (Comedy Central)	212/408-8500	1775 Broadway, New York, NY 10019
C-SPAN (Cable-Satellite Public Affairs Networks)	202/737-3220	444 N. Capitol St., NW, Suite 412, Washington, DC 20001
DIS (Disney Channel)	818/569-7500	3800 W. Alameda Ave., Burbank, CA 91505
DISC (Discovery Channel)	301/577-1999	8201 Corporate Dr., Landover, MD 20785
ENC (Encore)	213/393-3745	100 Wilshire Blvd., Suite 1600, Santa Monica, CA 90401
ESPN (Entertainment and Sports Network)	203/585-2236	ESPN Plaza, 935 Middle St., Bristol, CT 06010
FAM (The Family Channel)	804/523-7301	1000 Centerville Turnpike, Virginia Beach, VA 23463
The Food Network	212/398-8836	1177 Avenue of the Americas, 31st Floor, New York, NY 10036
GALA (Galavision)	213/286-0122	2121 Avenue of the Stars, Suite 2300, Los Angeles, CA 90067
HBO (Home Box Office)	212/512-1000	1100 Avenue of the Americas, New York, NY 10036
The History Channel	212/210-1400	235 East 45th St., New York, NY 10017
LIFE (Lifetime)	718/452-4000	36-12 35th Ave., Astoria, NY 11106
MAX (Cinemax)	212/512-1000	1100 Avenue of the Americas, New York, NY 10036
MTV (Music TV)	212/713-6400	1775 Broadway, New York, NY 10019
NICK (Nickelodeon)	212/713-6400	1133 Avenue of the Americas, New York, NY 10036
SC (Sports Channel)	716/524-9444	820 W. Madison, Oak Park, IL 60302
SHO (Showtime)	312/983-0100	444 N. Lakeshore Dr., Chicago, IL 60611; or 1633 Broadway, New York, NY 10019
TBS (Turner Broadcasting System)	404/827-1500	1050 Techwood Dr., Atlanta, GA 90318
TLC (The Learning Channel)	202/276-0881	1525 Wilson Blvd., Roselyn, VA 22209
TMC (The Movie Channel)	212/708-1600	1633 Broadway, New York, NY 10019
TNN (The Nashville Network)	615/883-7000	2806 Opryland Dr., Nashville, TN 37214
TNT (Turner Network Television)	404/827-1990	1 CNN Center, Box 105366, Atlanta, GA 30348
TRAV (The Travel Channel)	212/603-4549	1370 Avenue of the Americas, New York, NY 10019
USA (USA Network)	212/408-9100	1230 Avenue of the Americas, New York, NY 10020
VH-1 (Video Hits 1)	212/713-6458	1775 Broadway, New York, NY 10019
WOR	201/330-2154	9 Broadcast Plaza, Secaucus, NJ 07096

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REQUEST FOR INSTRUCTIONAL TELEVISION SCHEDULING

Name _____

School and County _____

	Title of Resource to Be Scheduled	Requested Playback Times	
		Beginning of Period	End of Period
1.	_____		
2.	_____		
3.	_____		
4.	_____		
5.	_____		
6.	_____		
7.	_____		
8.	_____		
9.	_____		
10.	_____		



FOR OPERATOR'S USE

	Series	Time Scheduled	Channel	Day(s) Scheduled
1.	_____			
2.	_____			
3.	_____			
4.	_____			
5.	_____			
6.	_____			
7.	_____			
8.	_____			
9.	_____			
10.	_____			

ETV cannot repair TV sets or VCRs. Repair and maintenance are the responsibilities of the school district. Find your local policy and record the repair service number: _____.

Non-repairable or salvage equipment should be removed from your inventory list as soon as possible. A standard form is available from ETV for this purpose. Each district should properly dispose of non-repairable equipment based on individual district policies.

CORDS AND CABLES

Set cords, which connect the television to the wall outlet, are available from ETV's Network Technical Services (phone: 1/800/922-4848). Patch cords, which connect the television and the VCR, are available from commercial electronic sources.

IDENTIFICATION AND PROTECTION

Theft of television, audio, and computer equipment in the public schools is a continuing major concern. Proper identification of audiovisual equipment is the most important element of an effective security program. Identification deters a would-be thief, aids inventory control, simplifies reporting to insurance companies, and assures a better chance of recovering stolen equipment.

To protect your television equipment, take these simple security precautions.

- ❖ Bolt the television and VCR to the cart or mount them in the classroom.
- ❖ In plain sight, etch or paint the name of the school on each piece of equipment and record serial numbers.
- ❖ Lock equipment in a windowless storage closet (locked separately from any master key system) or purchase carts with VCR storage cabinets that can be locked.
- ❖ Develop policies and procedures for equipment and tape storage and check out.

EQUIPMENT SAFETY

Fatal accidents can occur when children are allowed to move large audio-visual equipment. A seven-year-old girl in Ohio was killed when a television and a cart fell on her. Similar accidents have happened elsewhere. Attention to a few safety rules can prevent this from happening.

- ❖ Purchase carts with large wheels (such as 4-inch) and be sure the cart provides a power strip with a functional three-wire plug.
- ❖ For stability, always use a cart compatible with the size of the television.
- ❖ Do not allow elementary-school children to move TV/VCR carts to and from classrooms. Only adults should move carts in elementary schools.
- ❖ In middle, junior, and high schools, only authorized (trained) persons 16 years of age or older should move A-V carts.
- ❖ Be sure that the television set and the VCR are securely bolted or strapped to the cart. Straps that fasten the television receiver to the stand are available from ETV. Call 1/800/922-4848 for more information.
- ❖ To maintain stability when moving the cart, **push** (rather than pull) the cart in a sideways direction.
- ❖ Make certain that all cords and cables are secured on the cart before moving it.
- ❖ Televisions should be removed from carts when moving up or down stairs. (This seems obvious, but spills have occurred while moving TV carts down steps.)

- ❖ Do not allow anyone to step on or ride on the TV/A-V cart.
- ❖ Check the wheels on the carts on a regular basis to see that they are firmly attached.

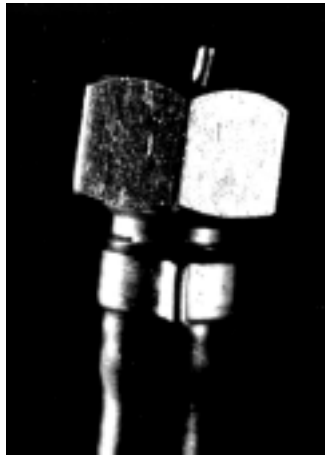
DAVID'S LEGACY

David's Legacy, a 14-minute videotape designed to heighten awareness of TV cart safety, offers suggestions for the protection of South Carolina's most valuable resource—her children. Because local educators ultimately determine the precautions implemented to protect children and the liability of the school district, it is essential that they be aware of the need for TV cart safety, as promoted in this videotape. The program was produced by the International Communications Industries Association and the North Carolina Center for Public Television. It is broadcast over ETV with full broadcast rights, unlimited school record rights, and no tape duplication rights. Refer to the staff development section of the *ITV Monthly Update* and the ITV Web site for the broadcast schedule.

EQUIPMENT REFERENCE

When calling Network Technical Services for assistance or to report trouble, it may be useful to have these pages on hand to assist you in identifying particular pieces of equipment.

1. F-connector. Used for most modern 75-ohm cable connections. Commonly seen on set cords, either on one end or sometimes on both ends—both ends when used to interconnect a VCR and a TV, or a VCR and a wall receptacle for playback over a building distribution system.



4. PL-259 connector. Found on cameras, TV video (in and out) on old VCRs. Also occasionally found as older-type set cord connectors in early telco-wired schools. For use with older-type wall receptacles. (See example, picture 7.)

2. Auto or "Motorola" plug. Most often used as one end on the newer set cords. For use with B-T wall receptacle. (See example, picture 5.)



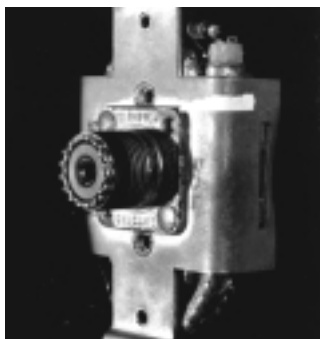
5. Newer B-T RF receptacle (wall outlet).

3. G-connector plug. Found in use as the set cord for some older wall receptacles. (See example, picture 6.)

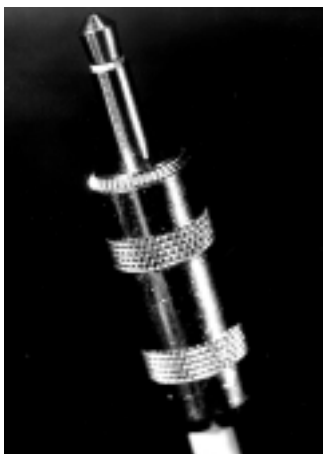


6. Older "G" receptacle (wall outlet).

7. Old PL-259 receptacle (wall outlet).



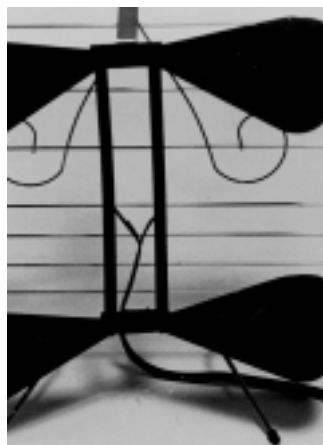
8. 3.5mm mini phone. Found as audio or ear-phone plug.



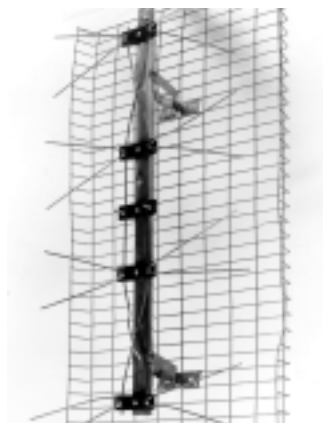
9. Phone. The most popular audio plug in the A-V department. Approximately 1" x 1/2" (listening station headphones).



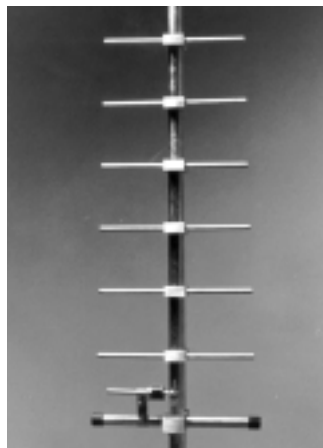
10. RCA plug. Used as audio in and out on VCRs, video on some Panasonics. (The plug that interconnects stereo equipment.)



11. Older-type top-of-set UHF "butterfly" antenna. For indoor use as a TV set antenna only. Not for use with a VCR.



12. Outdoor 4-bay UHF antenna. For rooftop or mast outdoor use only. Open-circuit stations: 7, 14, 29, 33, 35, 16, 23, 27, 30, and 49.



13. YAGI 10-element directional-cut UHF antenna. For open-circuit rooftop or mast outdoor use. Provides reception for a building distribution system from SCETV. Open-circuit stations: 7, 14, 29, 33, 35, 16, 23, 27, 30, and 49.



14. Set cord. Connects television set to building distribution system.

SOUTH CAROLINA DEPARTMENT OF EDUCATION POLICY ON THE USE OF NON-ITV RESOURCES

State-owned and supplied equipment may be used to record, transmit, or broadcast:

- ❖ State Board of Education-approved resources (those contained each year in the *Instructional Television Resources* book or otherwise added during a year to the ITV schedule by the Office of Technology);
- ❖ Any resource for which the school has obtained copyright clearance for such an in-school broadcast;
- ❖ Any resource for which "fair use" guidelines have been followed in acquiring the resource.

For additional information regarding this policy, call your regional technology specialist.

COPYRIGHT

COPYRIGHT RESTRICTIONS

With the growth of videocassette recorder use, both in schools and at home, copyright has become a very serious concern. And, as the person in a gatekeeper position (the operator of television record and broadcast equipment), you will more than likely be asked to duplicate program material that is not approved. **It cannot be stressed too strongly that you must be informed.**

The series listed in the *Instructional Television Resources* book have specific instructions on how each may be used. These instructions should be observed. If any questions arise concerning interpretation, call your local technology specialist or the Columbia office for clarification.

GUIDELINES FOR OFF-AIR RECORDING OF BROADCAST PROGRAMMING FOR EDUCATIONAL USE

*The following information is excerpted from **Copyright: School and "Fair Use"** (pages 8–9).*

In March 1979, Congressman Robert Kastenmeier, chairman of the House Subcommittee on Courts, Civil Liberties, and Administration of Justice, appointed a Negotiating Committee consisting of representatives of education organizations, copyright proprietors, and creative guilds and unions. The following guidelines reflect the Negotiating Committee's consensus as to the application of "fair use" to the recording, retention, and use of television broadcast programs for educational purposes. They specify periods of retention and use of such off-air recordings in classrooms and similar places devoted to instruction and homebound instruction. The purpose of establishing these guidelines is to provide standards for both owners and users of copyrighted television programs.

The off-air taping guidelines govern only copyrighted television programs broadcast by commercial and noncommercial stations for reception by the general public without charge. They do not apply to retransmissions and to cable if the latter is the only redistribution means available in the area. Programs produced before January 1, 1978 will bear a copyright notice (the symbol "c," the word "Copyright," or the abbreviation "Copr.") and the year; otherwise, they are unprotected. Since 1978, broadcast programs are not required to bear the copyright notice; however, the absence of the copyright notice does not necessarily mean that the works are in the public domain. The local broadcasting agency will provide, upon request, information concerning copyright.

As a result of a March 10, 1983, Federal Court decision, extreme caution is urged in off-air taping of copyrighted materials. The United States District Court of Western New York ruled that "any temporary videotaping and playback in classrooms of copyrighted materials readily available by rental, lease, or license duplicating agreement is infringement and is not fair use."

Although the defendants requested the court to permit temporary videotaping and playback for 10 days under the guidelines, the court ruled that, since licensing agreements were "clearly available," the guidelines do not apply. Educators should note that a classroom showing a videotape constitutes a "public performance," and that each "performance" in a classroom from illegal copies is a separate instance of infringement of the law.

Educators are advised to seek written authorization prior to copying or playback. Most producers offer works for short- or long-term use either by rental or license, and will supply details concerning terms and other options. Call or write for the producer's policy—do not assume!

1. The fair use guidelines were developed to apply to off-air recording by nonprofit educational institutions.
2. A broadcast program may be recorded off-air simultaneously with broadcast transmission and retained by a nonprofit educational institution for a period not to exceed the first 45 consecutive calendar days after the date of recording. Upon conclusion of such retention period, all off-air recordings must be erased

or destroyed immediately. "Broadcast programs" are television programs transmitted by television stations for reception by the general public without charge.

3. Off-air recordings may be made only at the request of and use by individual teachers of relevant teaching activities, and repeated once only when instructional reinforcement is necessary, in classrooms and similar places devoted to instruction within a single building, cluster of campus, as well as in the homes of students receiving formalized home instruction, during the first 10 consecutive school days in the 45-calendar-day retention period. "School days" are school session days—not counting weekends, holidays, vacations, examination periods, or other scheduled interruptions—within the 45-calendar-day retention period.
4. Off-air recordings may be made only at the request of and use by individual teachers and may not be regularly recorded in anticipation of requests. No broadcast program may be recorded off-air more than once at the request of the same teacher, regardless of the number of times the program may be broadcast.
5. A limited number of copies may be reproduced from each off-air recording to meet the legitimate needs of teachers under these guidelines. Each such additional copy shall be subject to all provisions governing the original recording.
6. After the first 10 consecutive school days, off-air recordings may be used up to the end of the 45-calendar-day retention period only for teacher evaluation purposes, i.e., to determine whether or not to include the broadcast program in the teaching curriculum, and may not be used in the recording institution for student exhibition or any other nonevaluation purpose without authorization.
7. Off-air recordings need not be used in their entirety, but the recorded programs may not be altered from their original content. Off-air recordings may not be physically or electronically combined or merged to constitute teaching anthologies or compilations.
8. All copies of off-air recordings must include the copyright notice as recorded on the broadcast program.
9. Educational institutions are expected to establish appropriate control procedures in order to maintain the integrity of these guidelines.

COPYRIGHT GUIDELINES FOR SCHOOLS SERVED BY ITFS

Schools served by district taping centers or state ITFS operations should not expect personnel in these operations to record and/or play back programs from either commercial networks, PBS, or other sources unless copyright permission is first obtained by the teacher or school. Questions regarding this policy may be addressed to your regional technology specialist or to our administrative offices at the South Carolina Department of Education in Columbia.

COPYRIGHT PROGRAMMING FOR SCHOOL PERSONNEL

South Carolina has produced two programs dealing with copyright issues—**Copyright: Why Can't I?** (video applications) and **Copyright: Why Can't I?** (computer applications). Refer to the staff development section of the ITV Web site for broadcast dates. To order support print material for these programs, call 803/737-3340 or refer to the ITV Web site.

Available from the A-V Library is **Copyright Law: What Every School, College, and Public Library Should Know**, by AIME (21 minutes).

COPYRIGHT POLICY

Educators must consider copyright laws when getting involved in the local distribution or use of non-ITV videocassettes. Following are some questions on copyright frequently asked by teachers. **The answers apply to playback over school-owned building distribution systems (BDS), TV sets, and VCRs and where local district or school policy does not preclude use of video from commercial sources.**

Q: Can videotapes that are purchased (or leased or recorded) from commercial companies be used?

A: Such programs may be used if written copyright clearance is provided with the tape or upon request.

Q: Can a film or videotape be used for entertainment or as a reward for good work?

A: No. Such a program must be closely related to the teacher's lesson plan and not be used as a time-filler, entertainment, or other such use.

Q: Do the Kastenmeier Committee guidelines apply to PBS programming broadcast over ETV?

A: Yes. Copyright rights specified for such programming as **Nova** and **Nature** must be followed. If such rights are not known, specific permission to use the programs or information about their rights should be sought by educators.

Q: Interactive video systems allow for production of lessons from still pictures and video segments. How does this technology fit into copyright law?

A: Permission must be sought from the publisher to use such material.

Q: The S.C. Department of Education leans toward a conservative interpretation of copyright laws. Are South Carolina educators to use Kastenmeier guidelines or not?

A: Yes. Educators should follow copyright policy guidelines using Kastenmeier's guidelines for non-ITV or commercial programs to be used when district or school policy permits such use.

Q: If a student purchases a videotape and brings it to school, may the librarian play it over the building distribution system for classroom use?

A: Not unless the videotape is used for face-to-face instruction over school-owned TV sets, VCRs, and building distribution systems and such use does not violate local policy. Generally, such tapes are intended for entertainment by consumers, not for educational use by teachers. It doesn't matter who bought it—a student or the school.

Q: May a teacher- or school-owned copy of a video, such as *Lady and the Tramp* or *Dumbo*, be shown over the state-owned building distribution system for entertainment?

A: No. Such videos clearly are performances for viewing by consumers in a home or non-educational setting. Such a program could not be used at school for entertainment whether or not it were shown over state- or school-owned TV equipment. Even one student in a media center could not legally see it at school. The state-owned building distribution system does limit use to videos for approved **instructional** activities only, unless the school holds public performance rights for the video.

COPYRIGHT GUIDELINES FOR THE USE OF HOME-TAPED PROGRAMS

For the protection of administration and faculty, local district and school policymakers should establish copyright guidelines that cover the use of home-taped television programs. The Office of Technology does not encourage the use of home-taped programs at school. The use of such programs not only curtails the use of State Board of Education-approved ITV programs, but could also easily be a source of abuse that results in a local court case. Teachers must be aware of copyright restrictions for which they are legally accountable when they request use of home-taped programs in schools where such use is permitted.

- ❖ Rules for spontaneity must be observed. (Systematic recordings must not be made. For example, some educators feel they can tape all of the episodes of **60 Minutes** or other commercial programs for social studies classes. However, recordings should be made in advance of getting copyright clearance only when it is too late to obtain permission.)
- ❖ Home-taped programs do not have greater flexibility for use than school-taped programs. (As an example, specified copyright rules for ITV programs, such as seven-day record rights, must be adhered to; for home programs, fair-use guidelines specifying use once within 10 days must be followed.) Such programs must be used in relation to a teacher's lesson plan—not for entertainment.

- ❖ A monitoring system is recommended to show that tapes are erased after 45 days. (If the decision of the local school administration is to permit use of home-taped video programs, a monitoring system is recommended to help curtail illegal multi-use of programs. As a minimum, records should be kept on playback dates, program titles, requesting teachers, and classes viewing the program.)

AIME PURSUES ALLEGATIONS OF COPYRIGHT VIOLATION AND ESTABLISHES A COPYRIGHT HOTLINE

Reprinted with permission from AIME, PO Box 865, Elkader, Iowa 52043 (phone: 319/245-1361).

An integral part of the copyright program of the Association for Information Media and Equipment (AIME) focuses on infringing acts committed by schools or libraries and others within the traditional area known as the non-theatrical market. Although most educational institutions have increased their knowledge and appreciation for the rights of copyright owners, there are others who pay little or no attention to the requirements of the law.

The mission of AIME in the area of copyright is twofold: first, to conduct an education campaign directed at users regarding the law, and at the same time, assist in preparing copyright policies; and second, to enforce the law on behalf of its members and, when necessary, to seek out violators and pursue remedial action. Both aims were accomplished in the Parker Case.

When AIME first learned of allegations of infringing acts being committed by Parker, Arizona, schools, it received verifiable information that certain videos in the school's collection belonged to several AIME members. It was evident that Parker had not purchased these materials from any authorized source.

AIME took immediate action to confront Parker. In mid-October 1990, a letter was sent to the superintendent of Parker Schools that reviewed the allegations and made several demands, among which were demands for an immediate "cease and desist" and the impoundment of any illegally made videotapes. Parker responded through their attorneys in Tucson. They indicated a willingness to cease any illegal acts and also promised that Parker would adopt a copyright policy and submit it to AIME for approval.

Following several letters and telephone conversations, AIME made its final decision to seek monetary damages, while retaining its option to pursue court action. AIME arrived at a settlement of \$10,000 based upon its knowledge of the extent of the infringing acts and what the copyright law provided in the way of remedies. In AIME's view, Parker School District committed serious copyright violations.

To protect its members and to educate the public, AIME has established a copyright hotline that provides information on copyright law and assistance in preparing copyright policies. For further information, contact AIME's Copyright Hotline (1/800/444-4203).

NOTE: It is our understanding that AIME will no longer handle questions from non-members of their organization.

COPYRIGHT VIOLATION CASES

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(phone: 319/245-1361 or 1/800/444-4203).*

The cases that follow have been dealt with by AIME and will help you realize that no school or government agency is so large or so small that it is immune to the copyright law.

Case 1: El Dorado Union School District, California. August 1988.

Situation: Programs were taped off-air illegally and promoted to other buildings in the district via catalog.

Results: The superintendent met with all librarians and principals to ensure that district policy and lawful procedures regarding the copyright of programs from TV are being followed, to institute corrective procedures to review all video material, and to eliminate any which were not clearly reproduced and retained according to lawful procedures.

The superintendent personally conferred with each librarian about the violation and sent letters of reprimand to those employees who were not in compliance with district policies, procedures, and the law related to this area.

Only those videotapes which were clearly reproduced and used in a legal way were retained by the district. All catalogs listing illegally reproduced materials were removed from circulation and destroyed.

Librarians sent memos to all staff to help them understand the law regarding the use of videotapes. The superintendent personally visited and inspected each library in the district to be sure that they were in possession of only those tapes which conformed to copyright laws.

The superintendent purchased from AIME the copyright law videotape, **Copyright Law: What Every School, College, and Public Library Should Know**, to assist the district's efforts to keep staff informed about the existing copyright laws, their importance, and the legitimacy of the private sector's concerns.

An annual in-service is presented for key district people, including reprographics personnel and librarians. Those who violate the policy will be subject to sanctions by the district.

Case 2: Glenbard North High School, Illinois. April 1989.

Situation: Video programs were illegally recorded off-air by teachers for use in their classes.

Results: Glenbard North High School was forced to spend \$4,265.00 to purchase the 83 illegally taped video programs. The school administration has since developed a policy and rules about the acquisition and use of videotapes.

Case 3: Dallas County Sheriff's Office, Texas. December 1989.

Situation: The Dallas County Sheriff's Office illegally duplicated videotapes for its own office as well as other county departments, including the Department of Health.

Results: Dallas County agreed to provide a complete accounting of illegally duplicated videotapes, ceased from further duplication unless written permission is first obtained, terminated services regarding copyright advice from a specific Dallas attorney, and substituted former guidelines with new ones prepared by AIME's counsel. They implemented the new guidelines beginning with a copyright workshop for county employees conducted by AIME. As part of these guidelines, employees who violate them in the future will face disciplinary action.

Case 4: Norco School District, California. April 1990.

Situation: One or more teachers at the Corona-Norco Unified School District violated the copyright laws that require teachers to tape only broadcast television, to show the program only once within 10 school days, and to erase the tape within 45 calendar days. Teachers also illegally copied educational videos for their classes.

Results: After about eight months of closed-door negotiations with AIME, the Corona-Norco School Board authorized their attorneys to try to settle the case out of court. The settlement required the school board to approve a policy on copyright law, to train district teachers on the copyright law, and to prepare a press release about the settlement.

Case 5: Parker Unified School District #27, Arizona. August 1991.

Situation: Administrative personnel in this small school district in northern Arizona authorized and condoned the systematic illegal copying of videotapes.

Results: All illegal copies were set aside and inventoried. Those employees who participated in the illegal copying were reprimanded and the disciplinary action was made public. The district prepared a copyright policy and an in-service training session was held for teachers and administrators to explain the copyright law. On behalf of its members, AIME received a \$10,000 damage settlement from the school district.

TECHNOLOGY

VIDEO

EFFECTIVE USE OF VIDEO

- ❖ Preview materials to determine the program's basic concepts, format, and suitability for your class.
- ❖ Consult the teacher's guide for information on the program's curriculum content and objectives, and suggestions for previewing and post-viewing activities.
- ❖ Relate programs to the total lesson plan, recent classroom instruction, and text. Develop specific objectives for using the program.
- ❖ Prepare the viewing environment: check equipment, lighting, and volume; be sure that all students have a good view of the screen.
- ❖ Discuss the program with the class in advance, relating it to prior learning. Provide students with viewing assignments, focus questions, or key concepts that can provide the structure for follow-up activities and discussion.
- ❖ Watch the program with your students. If using the program on videotape, consider stopping the tape or replaying important segments to reinforce comprehension.
- ❖ Structure follow-up discussions to check for understanding, to reinforce the program's core concepts, and to challenge students to think. Develop activities that integrate the program with the total curriculum plan.
- ❖ Evaluate the lesson. Assess students' reactions to the lesson and its motivational and cognitive benefits. Consider how the lesson might be improved next time.

TIPS FOR VIDEO PRODUCTION

Producing a Video

You will need the following equipment to produce a video: VCR, video camera, building distribution system, tripod on wheels, and computer and *VCR Companion* or other program to generate titles and credits (optional—signs on plain background can be used).

1. **Be sure to get parents' permission before videotaping students.**
2. To allow tape editing, do not begin recording right at the beginning of the tape. Likewise, do not record all the way to the end of the tape.
3. Use a simple, non-shiny background (a shower curtain works well).
4. Teach students to operate the equipment—one button at a time.
5. Make the following suggestions to the performers:
 - ❖ Smile!
 - ❖ Do not look around.
 - ❖ Keep eyes straight on the camera or on another person.
 - ❖ Provide a beginning, such as "Good morning"; a middle; and an ending, such as "Tune in tomorrow." Verbal transitions are necessary.
6. Make the following suggestions to teachers/directors:
 - ❖ Let students critique themselves immediately after taping.

- ❖ Let students design and evaluate questions for interviews.
- ❖ When selecting anchor people, pair a dependable student with an at-risk student. The dependable student will not let the at-risk student fail.
- ❖ Show what is already being done in the school.
- ❖ Use the interview format often.
- ❖ Model segments after successful television programs, such as **Reading Rainbow**.

Editing a Videotape

To edit a videotape, you will need a video camera with a **pause** button, a VCR, a blank tape and a recorded tape, a patch cord with RCA fittings, and a patch cord with F-connections. The following steps will help you successfully edit a videotape.

1. Put a blank tape in the camera and a recorded tape in the VCR.
2. Using RCA plugs, connect VCR **video out** and **audio out** to camera **video in** and **audio in**. (Watch the colors on the fittings so that video is connected to video and audio is connected to audio.)
3. Connect the VCR **VHF out** to the **VHF in** on the television.
4. Put the camera on **record**. Immediately press **pause**.
5. Push **play** on the VCR. Just before the segment you want to record, release **pause** on the camera. The camera is now recording that portion of your program. About 10 seconds after the end of that portion, press **pause** on the camera.
6. Search your recorded tape for the next segment you want to use and repeat the above procedure.

NOTE: U.S. copyright law prohibits the editing of purchased or rented tapes. These directions are intended to help you edit school-produced videos.

VIDEOTAPE LIBRARIES

Developing a Videotape Library

The ability to integrate instructional videotapes into the classroom is directly related to the teacher's access to a video library. Many schools and libraries are developing collections of instructional programs for use in the classroom. The following suggestions have been gathered from teachers and librarians who have developed successful instructional videotape libraries.

- ❖ Establish a central site (i.e., library, department office) to house videotapes. The location should be easily accessible for teachers who are using videotapes.
- ❖ Identify an individual (usually the media specialist) to oversee the collection. A successful videotape library is usually the result of an individual's efforts.
- ❖ Identify the series that best meet curriculum needs and the school's goals. Once the series have been selected by teachers, highlight the air date and time for each series.
- ❖ For ease in cataloging and use, tape only one series per tape. For example, a literature, a history, and a science series taped on one tape will be difficult for more than one teacher to use.
- ❖ For best quality, record programs at standard speed.
- ❖ Distance education learning centers can be valuable resources when it comes to taping programs.
- ❖ If indexing tapes with counter numbers, remember that different VCR models display different counter numbers.

Caring for Your Videotapes

1. Keep videocassettes in their original boxes or sleeves and store them in a cool, dry, dust-free area. Sunlight and heat can warp cassettes.
2. Avoid temperature extremes. Cold temperatures cause moisture to condense on tapes; extreme heat may cause tapes to deteriorate. Always bring tapes to room temperature before using.
3. Store videocassettes on end, just as you would a book.
4. Keep videocassettes away from electromagnetic fields such as electrical motors, television sets, or the library encoding/decoding system.
5. Always rewind videocassettes so there is no uneven tension on the tape.
6. Do not touch the videotape.
7. On any tape you want to keep, remove the recording tab at the back of the cassette. This will prevent anyone from accidentally recording other programs on the tape.
8. Using a VCR's **pause** mode for more than five minutes may cause permanent damage to the tape.
9. Use tape labels provided by the manufacturer. Label each tape with pertinent information, such as series title, program title(s), program number(s), program length, and copyright expiration date.
10. Buy only high-quality videotapes. Low-quality tapes can flake off and clog the video heads.
11. Do not leave a cassette in the VCR when not in use, unless you are making a timed recording.

VIDEOCASSETTE RECORDERS

VCR FEATURES

1. **Record**—For the best picture quality, use the normal recording speed on your VCR. When recording on **long play** or **extended play**, you sacrifice some picture quality, but the video is usually adequate for most uses. The “T” number of a videotape indicates the minutes of recording time at normal speed.

Cassette	SP (Standard Play)	LP (Long Play)	EP (Extended Play)
T-60	1 hour	2 hours	3 hours
T-120	2 hours	4 hours	6 hours
T-160	2 hours, 40 minutes	5 hours, 20 minutes	8 hours

2. **Pause (Freeze Frame)**—Great for interactive learning. The **pause/freeze frame** enables you to stop a program to study one frame, perhaps for a character's facial expression, a piece of apparatus in an experiment, or the details of a setting. **Frame advance/slow motion** allows students to view an action slowly, one frame at a time.

On a VCR with more than two heads, **pause/freeze frame** gives and holds a clear image on the screen for up to two minutes. (On a two-head machine, *some* interference may be present.)

3. **Memory**—The **memory** function enables you to rewind to the beginning of a segment so that you can repeat and reinforce instruction.

If the memory function is on, the tape will rewind until the counter is at 0000 and then stop. Follow these steps to use **memory**:

- a. Set **memory to on**.
- b. Start the program. Allow it to progress to the point at which you want to return to your teaching.
- c. At this point, reset the counter to 0000.

- d. To return to the beginning of the segment, push **stop**, then **rewind**. The rewinding will stop when the counter returns to 0000.
- e. Start again. Repeat as often as teaching requires.
- f. To rewind to the beginning of the tape, push the **memory** button again to turn the memory off.

This technique can be used any time you are teaching with video to get instant replays of important sections of a program.

4. **Fast Scan (Search)**—Used to return to some point or to skip over a segment you do not want to show. Press **play**, then **forward** or **rewind**. The VCR usually runs at three times normal speed, and you can talk while you scan because there is no sound.
5. **Remote Control**—Frees you up from fumbling at the front of the machine and allows you to stand back and view the program with your students. It's worth using.

VCR TIPS

Electrical Safety

- ❖ VCRs are usually fitted with a polarized plug or a three-wire grounded plug. If the plug does not fit your outlet, do not modify the plug itself. Use an adaptor or have your electrical outlet replaced.
- ❖ Turn the power off when the VCR is not in use. Leave the machine plugged in, however, if you want to keep the clock accurate or make a timed recording.
- ❖ Unplug and disconnect the VCR during electrical storms.
- ❖ Never operate the VCR if any liquid or foreign object has fallen into it.

Ventilation

- ❖ Do not cover or block the ventilation holes in the VCR cabinet. These may be found on both the bottom and the top of the VCR; therefore, do not place the VCR on a soft surface that could block the bottom ventilation holes.
- ❖ Avoid enclosed installations of a VCR unless ventilation is adequate.

Temperature

- ❖ Maintain a constant moderate temperature for VCR storage. Excessive humidity, sudden temperature changes, or extreme temperatures may cause dew to form inside the VCR or on cassettes.
- ❖ Do not expose the VCR to direct sunlight or heat; keep it in a cool, dry place.
- ❖ Condensation must dry before the VCR can be used.
- ❖ If the VCR is cold, turn on the power but allow at least one hour for warm-up before running a tape.

Long-term Storage

- ❖ Unplug the VCR and disconnect it from the antenna if it will not be used for an extended period of time.

Location for Use

- ❖ Separate the VCR from the television, other electrical appliances, and magnets by at least eight inches.
- ❖ Place the VCR on a stable surface that is free from vibrations. Take care not to drop or knock the VCR, which can cause the video heads to fall out of alignment.

Cleaning

- ❖ Cover the VCR with a dust cover to prevent dust from clogging the video heads.
- ❖ If picture quality begins to deteriorate, it may be time to have the heads cleaned. Head-cleaning kits often cause problems, so we discourage their use. Often these are abrasive and can cause serious damage to VCRs. Preventive care is necessary, but repairs should only be done by professionals. Plan to establish a maintenance budget so you can afford to have your VCR properly maintained by an authorized repair shop.
- ❖ If you clean the heads yourself, use **foam-tipped** swabs and head-cleaning solution. Do **not** use cotton swabs.
- ❖ Clean the VCR case with a damp cloth. Avoid cleaning fluids or aerosols that could cause damage, fire, or electrical shock.
- ❖ Unplug the VCR before cleaning.

TROUBLESHOOTING

Reception Problems

To determine the source of a reception problem, change the set cord on the nonworking television. If that does not solve the problem, proceed with the following steps to determine whether the television or the outlet is the problem.

1. Make sure that the set cord on the nonworking set is connected to the TV's VHF input.
2. Bring a working set with its set cord from another room where there are no video problems. If the working set will not work at the questionable outlet, then the outlet is the problem. Call Field Technical Services.
3. Move the nonworking set into another room. If it still does not work properly, the set needs adjustment or repair. Refer to your television owner's manual to adjust the tuning and the band selection.

Technical Problems

Should a technical problem arise, use the following procedures to check your system before calling ETV's trouble number.

Television

- ❖ Be sure that the TV set's electrical cord and antenna or wall outlet cables are plugged in and properly connected.
- ❖ Insure that the cable selector is tuned to the correct channel.
- ❖ Check set tuning—brightness, contrast, picture, fine tuning, color and hue, if applicable, and audio.
- ❖ Determine if the same trouble is on one channel or on all channels received.
- ❖ Check more than one TV set to determine if the difficulty is within the set or if the building distribution system is out.
- ❖ If the school has a building distribution system, inspect the head-in panel to insure that it is plugged into an AC electrical outlet.
- ❖ If all sets show trouble, or if a problem has not been resolved within 24 hours after it has been reported, call 1/800/922-4848 or go to the NTS Web site (URL: <http://www.scetv.org/nts/>) to report your problem or to check on its status electronically.

Radio (For Staff Development Only)

- ❖ Make sure that the radio is tuned to the proper FM frequency.
- ❖ If you have a tunable receiver, move the tuning selector to the right of the designated station frequency, and then to the left. Certain atmospheric conditions occasionally cause the FM signal to drift.
- ❖ Move the radio receiver to a different position.
- ❖ If your receiver has an antenna attached, check to be sure that it is connected properly.
- ❖ Check another radio receiver to verify that the problem is not due to a fault in the original receiver.
- ❖ If the reported problem has not been corrected within 24 hours, call 1/800/922-4848 or go to the NTS Web site (URL: <http://www.sctv.org/nts/>) to check on the status of your trouble report.

Video Equipment Problems

"Snow" Removal

Have you ever been faced with the problems of "hiss" and "snow" when using a VCR? This problem is characterized by a loud and intrusive sound blast that forces you to make a frantic dash to turn down the volume on the TV. If you're growing tense just reading about the situation, relax—there is a solution.

Use an RCA audio cable and plug it into the audio-in connection of the VCR. To get rid of the snow, use a second RCA cable and plug it into the video-in connection. This is particularly useful when using VCRs made in the late '70s and early '80s. These machines usually don't have a search mode and can only play tapes recorded in the standard play tape speed. While newer VCRs have a TV line camera switch that prevents this problem, older models require the RCA connections to trick the machine into using its line circuitry rather than RF circuitry when in the stop mode. What you're actually doing is supplying the VCR with a blank signal, preventing the snow and hiss, and providing a soundless black picture on the TV. This doesn't interfere with playing tapes since the play mode of the VCR will override this input signal.

If this sounds too complicated, don't worry! Properly connecting the RCA cable will solve the problem.

Television Problems

Problem	Solution
Rolling picture	Set vertical hold control.
Alternate black/white bands across picture tube	Set horizontal hold control.
Power, but no picture or sound	Try a new set cord. Try a different set on that outlet. If that set does not work, the outlet needs repair. Call Network Technical Services. If the TV does not work in another classroom, the TV needs repair.
Needed channel is not on TV	Add channel according to manual.
Unnecessary channels are on TV	Delete channels according to manual.
Reception is poor on a certain channel—picture is fuzzy, snowy, or not sharp; audio is distorted	Adjust the fine tuning until the picture is clear and the audio is undistorted.
Picture is dull or dark	Adjust the brightness control until the picture is easily seen.

If your building distribution system is set up so that your building distribution channel is 3 or 4, turn on your VCR as soon as you arrive each day and press the TV/VCR button so that "VCR" shows on the display. If you do not do this, the picture may be poor throughout your system.

VCR Problems

Problem	Solution
No power	Make sure the power cord is plugged in and adequately grounded. Check outlet, fuse, or circuit breaker. Press the timer on/off button to disengage timer.
VCR does not operate	Release the timer on/off button. Dew inside—let dry. Press the eject button several times. Unplug the VCR for about one minute.
VCR does not record	Is cassette erasure protection hole uncovered? If so, use a different cassette or cover the hole with tape. If recording off-air, be sure that the VCR is set on the correct channel, and that the mode selector knob is on tuner . Make certain that the start and stop times are correct (especially with regard to AM and PM settings). If recording without the timer, turn the timer off. The VCR will not operate when the timer is on.
Videocassette cannot be inserted into the machine	Be sure that the VCR is empty. If not, eject the videocassette. Hold the videocassette with the “door” facing into the machine.
Tape does not move	Make sure the VCR is not in the pause mode. Make sure the tape has not reached the end or beginning.
Picture is snowy, jumpy, or blurry during playback	Adjust tracking or try a different cassette.
Picture has excessive static during playback	Tape guides, rollers, or head drum may be dirty. Clean the VCR heads with cleaner.
Playback picture is not in color	Make sure that the color switch is in the color position. Using the knobs on the front of the set, make the proper color adjustments. (NOTE: If these knobs are not visible, check to see if they are behind a panel door.)
No picture during playback	Make sure the TV is set to the same channel as the VCR’s 3/4 output channel selector. Check all connecting cables.
Built-in tuner does not work	Set the tuner/aux selector to the tuner mode.
Cannot record certain channels	Tune VCR.
Tape stops in the rewind or fast forward mode	Is the memory button on ? Press the memory button to cancel the “M” on the display.

If you have problems setting up the VCR, call ETV’s Department of Network Technical Services at 1/800/922-4848.

LASER DISKS

Laser disk, or video/audio disk, technology uses laser technology to access large amounts of information stored on a laser disk. Since the pickup never comes into contact with the disk, the disk never wears out and data can be accessed at high speed rates.

- ❖ **CLV** (constant linear velocity) extended play disk has a storage capacity of approximately one hour of playing time per disk side.
- ❖ **CAV** (constant angular velocity) disk has a capacity of 30 minutes playing time per disk side. This is about 54,000 video frames—the individual frames that comprise a motion picture at the rate of 30 frames per second. The user can take advantage of features such as freeze-frame, step frame, and slow motion with the CAV.

CD-ROMS/DVD

CD-ROM technology provides quick, easy access to a small compact disk containing a large amount of data in text, sound, and graphic formats. The average CD-ROM disk contains data equivalent to the amount that could be stored in five, four-drawer filing cabinets filled to capacity with paper/folders. Many companies are taking advantage of this storage capacity and offer technical manuals used in industrial applications on CD-ROM, thereby providing quick access to vital information in a variety of applications to include technical specifications, blueprints, etc.

Since the inception of the CD-ROM technology, the price has decreased and the speed has increased. Thirty-two (32x) speed drives are rapidly becoming the standard for computers. The faster the speed, the faster the user's access rate.

Digital video disc (DVD) technology is also available for computers. The DVD disc can store up to nine hours of studio-quality video and multichannel surround-sound audio. To learn more about DVD, point your browser to the following URL: <http://www.compucon.com/dvdtech.htm>.

LCD PROJECTION PANEL/PROJECTOR

The video output from most computers can be projected onto a screen using an LCD projection panel or projector. Various models are available at a wide range of prices.

SCAN CONVERTER

A scan converter takes the computer's video output and converts it into signals that can be displayed on a TV monitor or recorded on a VHS VCR. Once again, availability varies and prices range from \$180 to \$2,500.

TECHNOLOGY IN SOUTH CAROLINA

THE PLAN

Connecting Learners

South Carolina's educational technology plan is now Web-based (<http://www.state.sc.us/sde/educator/techplan/index.html>). The plan contains "how-to" guides for districts to use in their school technology planning; features numerous Internet links that connect users to additional state, national, and international resources; and provides guidance to teachers about professional development resources that can help them use technology to enhance curriculum and classroom learning.

The new plan is designed to be used in several ways: as a guide for educators, schools, and districts in the development of personal and institutional technology plans that insure the effective use of information technology to support student learning; as a description of South Carolina's intent to raise all performance indicators in education; and as a constantly renewing resource for information technology applications in the state's public schools.

THE DECISION

As schools move ahead in their technology implementation plans, the question of computer specifications arises. Accordingly, the site listed may provide some guidance in this area.

- ❖ *Multimedia Personal Computer Information and Consumer Guide* is a very extensive online collection of computer information that includes recommendations for buying a multimedia PC, recommendations for reading about multimedia PCs, and technical articles about Windows95 and multimedia. By doing some research prior to purchase, one will be able to identify and select the PC that best meets the needs of the user. (URL: <http://ourworld.compuserve.com/homepages/rpmcgoey/MPC1.htm#MPC2>)

MULTIMEDIA GLOSSARY

For detailed information on technologies and technological terms, point your browser to the following Web sites.

- ❖ *Glossaries of Learning Technologies Terms*
URL: <http://olt-bta.hrdc-dthc.gc.ca/info/glosse.html>
- ❖ *Pitsco's Launch to Educational Resources*
URL: <http://www.pitsco.com/p/resframe.htm>
- ❖ *Technology Education*
URL: <http://mailer.fsu.edu/~jflake/TechEd.html>
- ❖ *The Technology Education Lab*
URL: <http://www.techedlab.com/>

TECHNOLOGY ASSISTANCE

The South Carolina Department of Education maintains 13 regional technology centers that are strategically located throughout the state. Each RTC has a PC training lab connected to the Internet via the state backbone. Staffed with a full-time technology specialist, each RTC provides a wide range of technology services. Technology recertification courses and workshops on a variety of topics—including computer basics, software applications, the Internet, and technology integration into the curriculum—can be scheduled through the centers. Technology planning, technology curriculum integration issues, and hardware and software consulting services are also available through the RTCs.

COMPUTER SOFTWARE

Copyright Amendments Relating to Computer Programs

The 1976 Copyright Act specified in Section 117 that Congress would extend protection to computer programs as a new kind of literary work. The Copyright Act, amended December 12, 1980, defines a computer program as follows.

A "computer program" is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

Of more crucial importance to educators is the amendment to Section 117 of Title 17 of the United States Code. This amendment states:

Notwithstanding the provision of Section 106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:

1. that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is in no other manner, or
2. that such a new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.

Any exact copies prepared in accordance with this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations prepared may be transferred only with the authorization of the copyright owner.

Any additional copying, other than that specified in the law, of the copyrighted software diskettes is strictly forbidden. Lease or purchase agreements negotiated by the district will stipulate how the program may be used and the conditions under which it may be copied. Sometimes, for a higher fee, contracts will allow copying for classroom use.

The printed documentation accompanying the diskette or tape is protected like all other copyrighted material. It may be photocopied for a teacher's personal use, but making copies for classroom distribution without permission or purchase is an infringement. As with the diskette or tape, copies of the printed documentation for archival purposes are permitted.

Robert Walton, author of *Microcomputers and the Library*, noted that frequently the district's investment in software over a period of years will far exceed the original purchase of hardware. Therefore, some recommendations for the management of microcomputer software to ensure strict adherence to copyright observance are set forth.

Strict policies should be established that explicitly define the use and restrictions concerning access to school-owned software. In addition to the obvious problems of careless damage, theft, or loss, the library staff and the faculty have an ethical responsibility to software developers to restrict, to the best of their ability, piracy of software. Piracy is currently the biggest threat to the continued development of applications software. School libraries should consider adopting all or part of the following procedures.

- ❖ Immediately upon receipt of software from the distributor or developer, the library should make a disk-to-disk, cassette-to-cassette copy of the program. The original should be permanently filed in a restricted off-site location (away from the microcomputer installation). The copy should then be labeled clearly with a warning against unauthorized copying—Notice: This material protected by copyright law (Title 17, U.S. Code)—and stored with the documentation in a reserve-type, non-student access area. Only the copy should be loaned to students and faculty for use with the system.
- ❖ Except in those cases where software is used in multiples to perform some specific task (CP/M + MBASIC + WORDSTAR), only one software package should be released to a student or teacher at a time.

Students should be prohibited from passing software diskettes from station to station or machine to machine, and also from bringing blank diskettes, copyrighted materials, or illegal copies into the computer area. All access to library-owned software should be controlled through the library staff software coordinator.

The need for software in the learning resources center (library) collection, to be accessed by teachers and students for use in possible combination with other media, poses questions concerning copyright.

Examples include:

- ❖ What is considered "fair use"?
- ❖ May teachers make copies of programs for classroom use?
- ❖ Is there any difference between teacher-owned programs and school district-owned programs?
- ❖ Is it legal to modify a program to fit a particular setting?

These and other questions are treated in the 1976 Copyright Act and its 1980 amendments that deal specifically with computer programs. Under the new law, computer programs are clearly within protection of copyright; therefore, the educational user will find it less difficult to answer questions concerning copying and "fair use." A strong policy statement supported by in-service presentations and appropriate learning resources center (library) procedures will provide answers and assurances to teachers and, to a large extent, avoid the possibility of legal action for infringement. Furthermore, a strong policy statement and appropriate procedures that guarantee the security of copyrighted materials will be advantageous in obtaining preview privileges for materials being considered for purchase from producers/developers.

Students and teachers should attend an orientation program prior to using the microcomputer area. Orientation topics should include:

- ❖ Inventory of all equipment intended for student/faculty use
- ❖ Inventory of all software intended for student/faculty use
- ❖ Identification of faculty and library staff available to assist students and teachers in the use of the microcomputer work areas
- ❖ Library policies and procedures
- ❖ Scheduling procedures for the facilities
- ❖ Copyright law and local policies protecting computer software and the ethics governing software piracy

SUGGESTED DISTRICT POLICY ON SOFTWARE COPYRIGHT

It is the intent of _____ to adhere to the provisions of copyright laws in the area of microcomputer programs. Though there continues to be controversy regarding interpretation of copyright laws, the following procedures represent a sincere effort to operate legally. We recognize that computer software piracy is a major problem for the industry, and that violations of the computer copyright laws contribute to higher costs and greater efforts to prevent copies and/or lessen incentives for the development of good educational software. All of these results are detrimental to the development of effective educational uses of microcomputers. Therefore, in an effort to discourage violation of copyright laws and to prevent such illegal activities:

1. The ethical and practical problems caused by software piracy will be taught in all schools in the district.
2. District employees will be expected to adhere to the provisions of Public Law 96-517, Section 7(b), which amends Section 117 of Title 17 of the United States Code to allow for the making of a backup copy of computer programs. This states that "...it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:
 - a. that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
 - b. that such a new copy and adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful."
3. When software is to be used on a disk-sharing system, efforts will be made to secure this software from copying.
4. Illegal copies of copyrighted programs may not be made or used on school equipment.
5. The legal or insurance protection of the district will not be extended to employees who violate copyright laws.

6. _____ of this school district is designated as the only individual who may sign license agreements for software for schools in the district. (Each school using the software should also have a signature on a copy of the software for local control.)
7. The principal of each school site is responsible for establishing practices which will enforce this policy at the school level.

TEACHING WITH TECHNOLOGY— TOUCHING THE FUTURE TODAY

As we enter the 21st century, changes will continue to be made to existing laws governing copyright in the digital areas of technology, information, and communication. As educators and media specialists, it is our responsibility to educate those around us in the appropriate uses of technology and its related components and applications. The following sites are provided for your reference.

- ❖ The Digital Future Coalition (<http://www.dfc.org/>) is an excellent resource on key legislation and terminology related to copyright issues.
- ❖ The Recording Industry Association of America (RIAA) site (<http://www.riaa.com>) is an excellent resource for copyright and licensing issues in the digital arena.

WEB SITES YOU WON'T WANT TO MISS

- ❖ Whatis?.com: An online technology dictionary
URL: <http://www.whatis.com/>
- ❖ SCETV's home page
URL: <http://www.scetv.org>
- ❖ PBS' home page
URL: <http://www.pbs.org>
- ❖ Office of Technology Regional Training Centers home page
URL: <http://www.state.sc.us/sde/pathways>
- ❖ South Carolina Information Highway (SCIWAY)
URL: <http://www.sciway.net>
- ❖ American Library Association
URL: <http://www.ala.org>
- ❖ South Carolina Association of School Librarians (SCASL)
URL: <http://www.LibSci.sc.edu/SCASL/scasl.htm>
- ❖ South Carolina Library Association (SCLA)
URL: <http://www.scla.org>
- ❖ Association for Educational Communications and Technology of South Carolina
URL: <http://Arachne.CofC.edu/AECT.html>
- ❖ South Carolina Association for Educational Technology (SCAET)
URL: <http://Arachne.CofC.edu/SCAET.html>
- ❖ The Knowledge Network: Educational Internet Resources
URL: <http://www.cpbj.org/edu/edu.html>
- ❖ Digital Librarian
URL: <http://www.servtech.com/~mvail/>
- ❖ Online Journals and Services on the Web
URL: <http://www.web-action.com/ejournal.html>
- ❖ South Carolina home page
URL: <http://www.state.sc.us>

NOTE: If you replace "sc" with any state's abbreviation, you can access that state's Web page (e.g., URL: <http://www.state.hi.us> will take you to Hawaii's home page).

- ❖ TUCOWS: The Ultimate Collection of Winsock Software
URL: <http://www.tucows.com>
- ❖ Winfiles.com: Another site for software downloads for Windows95
URL: <http://www.winfiles.com>
- ❖ Lightspan.com: Online learning for school and home
URL: <http://www.lightspan.com>

SATELLITE EDUCATIONAL RESOURCES CONSORTIUM

The Satellite Educational Resources Consortium (SERC) is a provider of distance-learning courses for middle- and high-school students. Course offerings include science, mathematics, foreign languages, and economics. For more information on available courses and registration, check the SCETV Web page (<http://www.scetv.org/k12/dist.html#serc>) or contact Bette Jamison, Office of Technology, South Carolina Department of Education, P.O. Box 11000, Columbia, SC 29211 (phone: 803/737-2116; fax: 803/737-3278; email: bjamison@scetv.org).

ETV'S DIVISION OF SCHOOL SERVICES

The Division of School Services was created in 1992 to work directly with South Carolina school districts to encourage the use of existing television technologies and to assist in the integration of new technologies as they emerge. This division also promotes the use of existing educational resources and assists in the development, production, and delivery of short distance learning (SDL) programming specifically designed to meet the local educational needs of regional distance education learning centers (DELCS). Another function of the division is to seek national and international distance learning offerings and to make these programs and related information available to all schools in South Carolina.

Through a variety of school-related advisory groups, established by the Division of School Services, the division is kept abreast of current needs and concerns of our state's public schools. This division provides a direct link between SCETV and the educational community throughout the state.

DISTANCE EDUCATION LEARNING CENTERS

The distance education learning centers (DELCS) are operated by the school district(s) to provide service to their schools. These centers offer customized television services designed to meet the specific needs of the schools served by them.

The DELCS broadcast ITV programs over the four-channel ITFS (point-to-multipoint microwave) systems for teachers and school personnel to use in order to enhance student learning. Also, DELCS record ITV/ ETV programs, other educational programs, electronic field trips, and teleconferences from ETV and other sources for delayed broadcast or to dub duplicate copies of these types of programs for schools and teachers. DELCS also produce and broadcast distance education classes for class instruction, advanced placement, college credit, teacher certification, staff development, and student enrichment—just to mention a few.

In most cases, the services provided by the DELCS are intended for secondary schools (middle, junior, and senior high), although several of the centers do provide services for the elementary schools in their areas. These services to the elementary schools are expected to be available in the near future.

For more information on the distance education learning centers and how they can assist you, contact the appropriate center for your area (as listed on the following pages).