How to Make Simple Super-8 Movies from Television Broadcast for Classroom Teaching.

This paper discusses the techniques used to make Super-8 movies from television broadcasts. The purposes of making such movies are twofold: (1) to allow teachers to use special television programs of educational nature for classroom instruction, and (2) to store information from television programs for future viewing. Step-by-step directions for making these movies and a list of needed equipment are included. (Author/HE)
Television has now become a sophisticated technological tool for classroom instruction. The distinguished American architect and designer, Buckminster Fuller, calls television "the third parent." By the time a youth graduates from high school today, he has viewed approximately 15,000 hours of television, but during the same years, he has spent just 11,000 hours in the classroom. However, the use of television programs (both commercial and educational television broadcasting) is still limited and not accessible to many school systems, and particularly for classroom teaching. Today's teachers can dramatically capitalize on the television programs from regular commercial and educational TV channels for classroom instruction to provide enriched educational experiences for the students. But, schools or school systems still are not capable of using television programs for the following major reasons:

1) Most schools do not have their own resources to set up a closed-circuit television system that will allow recording and playback of out-of-school TV programs according to classroom schedule.

2) Important television programs are not always available during the school-hour, so the teachers cannot use educational programs according to their class schedule even if the school provides a regular TV
One of the major advantages of television is its versatility to store and retrieve information at other times after the original presentation at a low cost as opposed to other media. However, lack of video-tape equipment and appropriate recording system prohibits classroom teachers from using important telecasts of educational programs, events, lectures, debates, and the like to supplement their teaching. This problem can be solved by making simple Super-8 movies directly from the TV screen which can be used at a later time for classroom instruction.

Today, classroom teachers can easily use many important television programs or segments of them suitable to their classroom needs. As a media specialist, I have made many Super-8 movies directly from TV and used them in my classes. In this paper, I will discuss the simple techniques to make such movies which do not require any special competency in photography or film making. Even teachers and students who have no knowledge of the media field will be able to make such movies at a low cost.

The purposes of making such movies are twofold: 1) To allow teachers to use special television programs of educational nature for classroom instruction, and 2) Teachers will be able to store information from TV programs for future viewing.

The techniques of making Super-8 movies including sound directly from a TV receiver, and photographic equipment, film, and other materials needed will be discussed here. The following equipment is required:

*One Super-8 movie camera with the usual features such as zoom lens, built-in automatic light meter for automatic exposure and manual over-ride, single-lens-reflex viewfinder, focusing device through the lens. (Most automatic Super-8 movie cameras have these features.)
Techniques of Shooting

It is assumed that each school has a television set which can receive regular commercial and educational programs. However, the teacher can use his own home TV for shooting. The exact shooting sequence is given below step by step:

Step #1 Set the movie camera on the tripod firmly and securely. Place the camera in front of the TV screen at a distance of 3 to 4 feet away from the screen. The camera and television screen will be facing each other.

Step #2 Look through the viewfinder of the camera and focus the TV screen covering the entire area of the viewfinder by moving the zoom lens back and forth. The area of the viewfinder should entirely cover the TV screen so that no part or edge of the television receiver except the screen will be visible through the camera. Now run the television, and when the image appears on the screen, focus the camera perfectly. While focusing, do not point the lens of the camera to the center of the TV screen as this may cause some reflection between camera lens and the glass surface of the screen. To avoid any such reflection, you may tilt the camera slightly upward or downward (approximately \( \frac{1}{2} \) inch). However, this may not be necessary if you place the camera so that no reflection occurs from the
TV screen. When the television is "on," you will easily see any reflection through the camera.

Step #3 Connect the tape recorder with the TV receiver using the auxiliary "input" of the recorder and the "earphone" output of the television receiver or other "output" of the receiver. You should use a recorder with a tape-counter so that an accurate measure of the recording can be maintained.

Step #4 The room must be completely dark while shooting. Load the camera with the film and set the camera in "auto" position. Check the light meter reading in the camera. If it gives a correct reading of light in "auto" position, then it is ready for shooting. If there is insufficient light, then brighten the TV picture by using the "bright" knob of the television. This will increase the light and the needle of the light meter in the camera will indicate the right reading for shooting.

Step #5 All of the above adjustments should be completed before the actual shooting of the program. Before shooting, be sure that the room is dark, and if you do the shooting in the daytime, then put the blinds or shades down on the windows so that no light from outside falls on the camera lens. You may use a black and white or color television for shooting. Now, you are ready for shooting. Keep several movie films handy (depending on the length of the program to be filmed) for continuous filming. Set the tape counter at "zero" setting and start recording, and simultaneously start shooting. In this way, you can make a movie of all or part of a program.

When the filming is complete, send the films for processing. You can make a movie of any length or time depending on the type of the program.
Generally, the length of each film cartridge is 50 feet and it runs for approximately 3½ minutes if you shoot 18 frames per second. Movies are made in lengths of 200, 400, or 800 feet. A 200 foot film runs for about 14 minutes. After processing, splice the films together following the film sequence. You can use the film accompanied with the tape recorder for presenting a sound movie. This simple sound movie will give you the same benefit as regards teaching or learning for using television programs at a very low cost. However, if funds permit, you can send the original spliced and edited film to the laboratory or film store to put the "sound strip" on the edge of the film. When this has been done, sound can be added on the film from the recorded tape through the projector. In this case, a Super-8 projector with sound recording and playback system will be required. Recording in the projector will produce accurate synchronization and make a high quality sound movie.

This method of making Super-8 movies from a television screen will allow teachers to tap, store and retrieve information in the classroom at a low cost. At the same time, teachers and students together will enjoy a "creative" activity for making instructional movies which will allow the use of the vast resources of television programs.

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