

Tape, Teachers and Travel By Chuck Dolbear

During my summer travels, I visited several states teaching in-services. Based on questions from the teachers, I would like to discuss a few reasons why videotapes, cameras, and VCRs jam. In fact, 80% of VCRs jam!

There are three main reasons why a tape will jam in your unit: **temperature, dust and position**. The **temperature** of your videotape can cause it to get stuck in the VCR if the tape is inserted right after transferring it from air-conditioning to outdoor heat. Just like your glasses, videotape fogs up when changing temperature. In fact, you might as well pour water on your tape while it is playing in the VCR. After moving the tape, allow it 10 to 20 minutes to adjust to the temperature change. Actually, some of the new camcorders have moisture detectors built into the system and may shut down if it detects moisture, allowing it to function only when the moisture is completely gone.

Secondly, the position of the videotape is particularly important during the summer. Keep your videotape in a vertical **position**. This keeps the shiny black tape flat instead of twisting or curling when the humidity changes. The small head in the VCR tends to clog when the tape is not smooth and flat.

Finally, the third major problem is **dust**. Recently we had a vacuum cleaner salesman demonstrate his product right in our living room, you know, one of those swirling water kinds that

keep the air in your house fresh? I could hardly believe how much dust, lint and dog hair it picked up. And then there's the stuff you don't see, like cigarette smoke. Videotape is like a magnet; it attracts and sucks up all that junk in the air. So, put your tape in a protective sleeve while in the upright position to significantly reduce the amount of dust. You may want to make a mental note that the new DV tapes are more sensitive to temperature, dust, and position than the old VHS tapes.

"OK, Chuck, what happens when the VCR or camera clogs, and you can hear it, but can't see anything but snow on the screen?" Your Playback or Record head could be clogged. Do not use head cleaners! That's like using sandpaper. Purchase an expensive new movie, put it in the VCR, press the Play button, and then start fast-forwarding (while in play mode) for about five minutes. If you still can't see a picture, press the Rewind button (while still in play mode) and rewind to the beginning. By now, the snow should fade, and you should be able to see a picture clearly. The new tapes on which movies are recorded are anti static, anti moisture, anti dust, anti-mother-in-law, well, maybe not that, but the label will tell you how many "anti's" are built into the tapes. These new tapes will clean the tape path, but be patient and give it five to ten minutes in each direction.

Also during my in-services, I found some exciting and innovative ideas that schools in Tennessee, South Dakota, and California are implementing. In Tennessee, one school has formed a mutually beneficial friendship with local businesses. Teachers from the school made some phone calls to see if their students could produce a sales or training tape for the businesses. Through the project, students get invaluable production experience, donations, and production materials from the businesses. In return, the students produce news stories about the local businesses. You could do the same thing in your community.

Other schools in South Dakota and Kansas, (populations under 3,000) are having their students broadcast school news to the community. The town is excited and supportive of this new venture. Any small town school, with cable access, interested in such a project, contact me for details.

Lastly, in California, schools hold video classes for one hour a day for 180 days. This allows the students to prepare for video jobs in the corporate community (which holds 90% of the job market!). Meanwhile, TV broadcasting is only about 10% of the job market.

Teachers, please send us the unique projects you are working on at your school. You can email us at videochuck@videochuck.com. We plan to include some of these articles and ideas in future columns!

Prof. Chuck Dolbear develops video curriculum/packages for schools and teaches national video workshops at Pittsburg State University and Cal State University, Los Angeles, California.

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The Exploratorium

The Exploratorium Science Snacks are not to eat, but to have fun with and learn from. Science Snacks are miniature versions of some of the most popular exhibits at the Exploratorium, (San Francisco, CA). Each "snack" begins with a photograph of itself, a short introduction, and a list of the materials needed. Other sections give assembly instructions, describe how to use the completed exhibits, and explain the science behind them. More than 100 Science Snacks cover topics such as a magnetic pendulum, hand-held heat engine, fog chamber, water spinner, and squirming palm. "Snacks" are added on a regular basis so be sure to check this website often at: www.exploratorium.edu/snacks/snackintro.html

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NASA Space Link

Let's Talk Robotics video resource guide examines some of NASA's robotic research and how robots are used in space exploration. Students can design a microrover or build a robot arm from wooden craft sticks. The videotape to accompany this shows astronauts demonstrating robotic arms and free-flying cameras on the Space Shuttle and views of NASA's robotics laboratories. Also, the Mars Sojourner robot is featured, along with middle and high school students using robots. Both these products may be ordered from NASA CORE from the web site: <http://spacelink.nasa.gov/Instructional.Materials/NASA.Educational.Products/Let'sTalkRobotics/>

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National Council of Teachers of Mathematics

Student Math Notes (SMN) is a popular resource that presents ready-to-use classroom activities geared to grades 5-10. Published exclusively online, you can access new additions to the SMN online library every: Sept., Nov., Jan., March, and May. For more information, visit the NCTM web site at: nctm.org/publications/smn.

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