

Video Production Handbook

For Short Educational Videos

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Extension

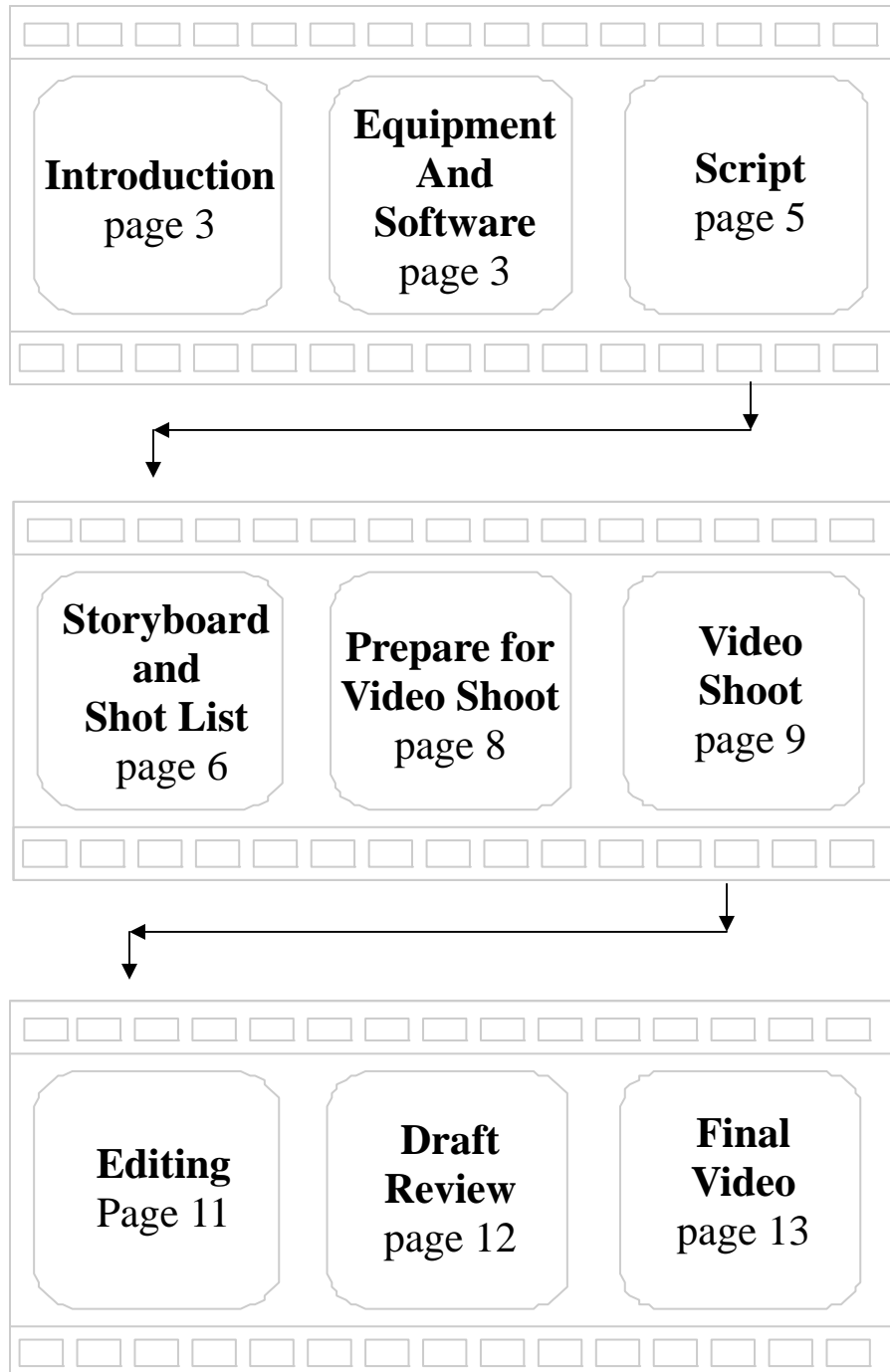


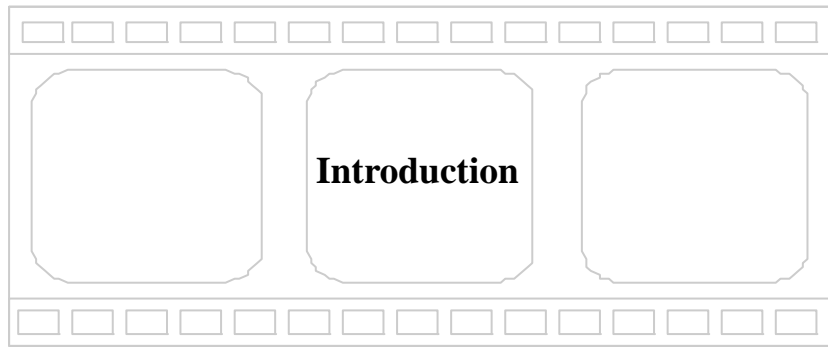
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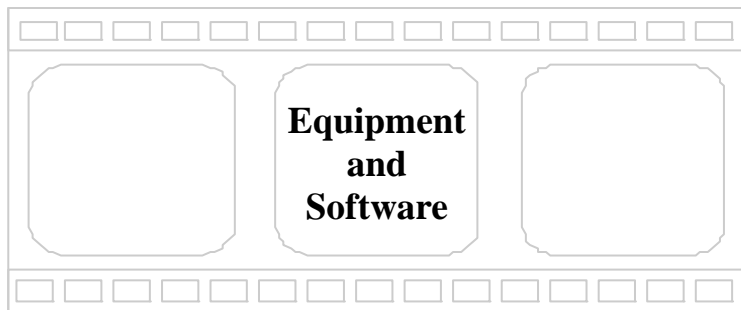
Video Production Process





Short educational videos are an alternative educational tool which can be viewed online or at workshops and trainings to reach diverse audiences. The purpose of this handbook is to guide you through the video production process and provide you with specific examples to help you succeed in producing your own short educational video.

This handbook has been developed as a companion guide to the Small Acreage Video Pilot Project, funded by a CSU Extension Innovation Grant, geared towards educating small acreage landowners. The pilot project was designed to streamline the video production process and make it more accessible and doable for others.



The Basics

The basic equipment needed for any video production is a camera, microphone, tripod, and editing software. Additional equipment include microphones, or some other audio recording device. You should also consider auxiliary hard drives or additional computer memory because movie files can take up a lot of space. Your budget and video idea will determine what type of camera and equipment you'll need.

Do some research and visit stores where you can play with equipment. Check out the article on Desktop Video at about.com, "Things to Consider before you buy a camcorder"

<http://desktopvideo.about.com/od/desktopeditinghardware/bb/buycamcorder.htm>

For the pilot project, we used Flip Mino HD cameras for the footage without sound. Flip cameras are inexpensive, easy to use, and produce high quality (HD) videos. They record audio and video but the built-in microphone picks up surrounding noises and is not appropriate for interviews unless they are done in a sound proof room. If using a Flip camera, an Edirol or other mp3 audio/voice recorder can be used to record the audio which can be added to the video in the editing process. You may need a more expensive camera and microphones depending on what you want to be able to do. If you need to use other cameras and wireless lapel microphones for interviews, contact Joanne Littlefield (Assistant Director, Community Relations, CSU Extension) for assistance.

Table 1 on page 4 analyzes the positives and negatives of Flip cameras. Table 2 offers equipment examples and prices.

Equipment and Software Continued

Editing Software

Editing software is necessary to create a final video. The editing software you choose may depend on your video idea and your computer capabilities. Listed below are a few of the top software options. Remember to consider the minimum system requirements needed for each program to run properly. As we wanted to create actual videos with sound, Adobe Premiere Elements 7 is the editing software we chose for the video pilot project. As with most programs, there is a learning curve, but it is very learnable and user friendly. You can edit video and audio, add text and titles, insert pictures or images, and create a final rendered file or burn it to a DVD. To learn the software, Jennifer used the Class On Demand tutorial DVD, Fundamentals of Adobe Premiere Elements 7, which is available at www.classondemand.net.

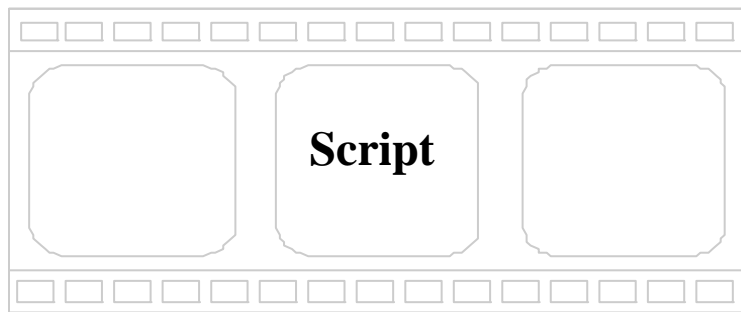
Table 1. Flip HD Cameras

Positive	Negative
Cheap (\$200-\$230)	No auxiliary microphone plug-in
Easy Mino HD recharges via computer Ultra HD has rechargeable AA battery pack	Minimal functionality (color balance, exposure, microzoom, etc)
Portable and small	Tripod/camera ratio (unit is small)
Records 60 (4GB) or 120 minutes of video (8GB)	

Equipment Costs

Table 2. Prices will vary but these examples will give you a good idea

	Examples <i>(I encourage you to research to find the equipment that suits your needs)</i>	Where to Purchase <i>(Also check your local electronic stores for price comparisons)</i>
Cameras	Flip Mino HD \$200 JVC Everio S \$300 JVC Everio HD \$600	www.theflip.com www.bhphotovideo.com
Tripods	Zumell Heavy Duty Tripod \$110	www.hayneedle.com
Editing Software	Adobe Premiere Elements 7 \$75 CyberLink Power Director 8 \$70 Corel Video Studio \$30 Soundslides \$70	www.adobe.com www.cyberlink.com www.corel.com www.soundslides.com
Microphones	Audio-Technica VHF Wireless system (lavalier microphone, transmitter, and receiver) \$200	www.pcnation.com
Voice Recorders	Edirol \$350	www.americanmusical.com
Auxiliary Memory	SanDisk USB 16 GB Flash Drive \$60	Staples
File Converter Software (more on page 11)	Prism Video Format Converter \$40	www.nchsoftware.com/prism/index.html



Part of developing the script is deciding what type of video you want to create. Will it be video and pictures with voice-over, an interview, someone speaking to an audience, or a combination? Be creative and consider what your resources are for the talent, expertise, and subject matter.

Videos streamed online should be no longer than two to three minutes. This short length will force you to focus your idea. It may be helpful to discuss ideas with others to fine tune an idea and decide what points you'd like to make in the video. For example, Jennifer first came up with the idea of pasture management, which is very broad. Next, she talked with others and developed a script which introduces five strategies of pasture management.

As a guideline, a three-minute script written in 12 point font will be less than one page long. Read the script out-loud to time the length. Remember to pause between thoughts, and leave five seconds at the beginning for a title, and 10 seconds at the end for the credits. Also leave time to include a short narrative or text at the end which directs viewers to additional sources of information.

Working with a Reviewer

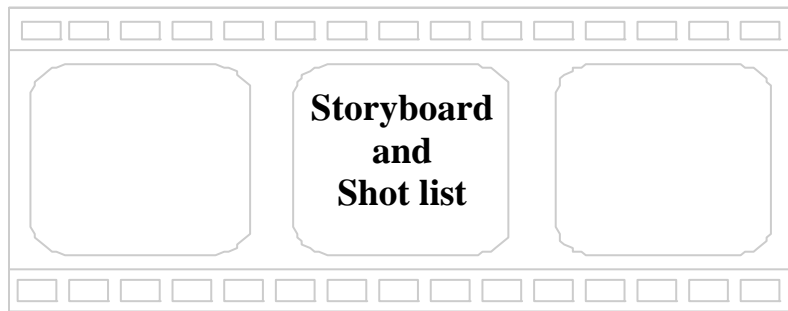
Develop the script with a reviewer. Contact someone who has credible and expert knowledge, preferably with a PhD, to review your script. The preliminary review will ensure that you are presenting accurate information to the public. Contact your reviewer in the beginning stages of your video so changes can easily be made. The reviewer's name will be listed in the credits.

Interviews

You may decide that you want to conduct an interview. For interviews, develop a list of questions you plan to ask an interviewee. Be sure to provide the questions to the interviewee in advance so they can prepare their answers. Avoid questions that could be answered 'yes' or 'no'.

Final Script

Be sure to give the final script to your talent as soon as possible so they have time to become familiar with it before the video shoot. The day of shooting will be much easier and less time consuming if the talent is able to recite the script with ease.



Once you have the script finalized, the next step is to begin to visualize it. A **storyboard** is a series of rough sketches outlining the scene sequence or actions to be shot on video. The storyboard is imperative to help you visualize your script. A blank storyboard sheet is provided on page 7.

Imagining what will visually portray your script will help you come up with a list of shots. A **shot list** is simply a list of shots you want to remember to take when you are filming. The storyboard and shot list will direct you and your team during the video shoot. They will help you consider shot angles, types of shots, and how you will begin and end the video (i.e. walk in, walk out).

B-roll is the secondary footage that adds meaning to a sequence and disguises the elimination of unwanted content. In the example storyboard below, the B-roll shots are the ingredients, the hands making the sandwich, and the mouth taking a bite.

Make a list of B-roll shots and *plan on taking more shots than you think you will need*. The more shots you have to choose from, the easier it will be during editing.

Figure 1 Example story board with shots listed



Types of shots

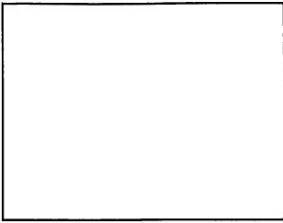
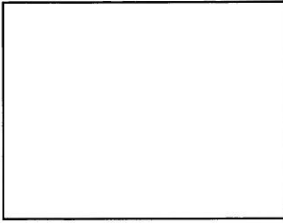
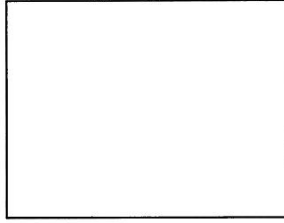
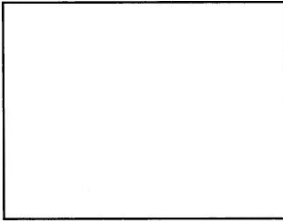
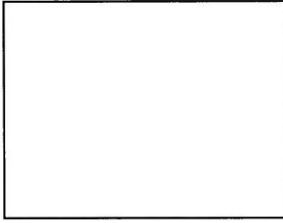
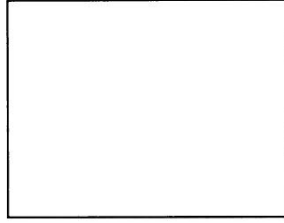
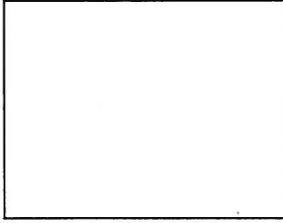
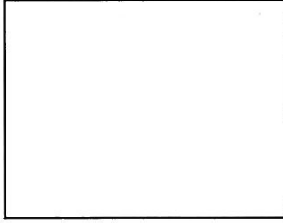
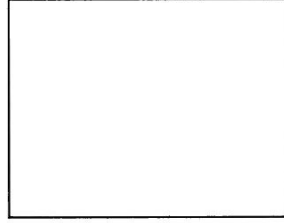
CU=Close Up

MS=Mid shot

LS=Long Shot

Figure 2. Blank Storyboard

Video Title:

		
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Shoot Location

As you begin to develop a storyboard, you will also need to determine the location(s) where you will shoot the video. If the location is privately owned, get permission from the landowner. A Property Release form is available at www.ext.colostate.edu/staffres/photorel.pdf. A Spanish translation is available At www.ext.colostate.edu/staffres/photorel-sp.pdf.

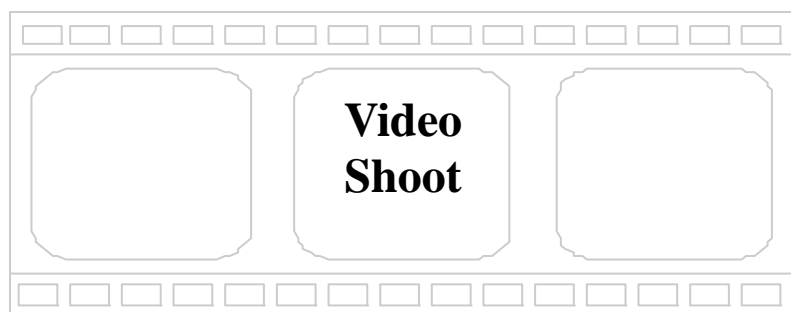
Scout out the location before the day of the shoot so you know specifically where you'd like to shoot. B-roll can be shot at various locations and times. The Flip camera is small enough to keep with you in case you see something worth shooting while you are out doing other things. But consider visual consistency, including light, shadow and clouds, when shooting in short segments. Keep in mind that in the final video, each segment should match the one before it in order to not confuse the audience.

Props and Equipment

Remember, you are the director and must facilitate the entire production. Getting things ready before the video shoot will prevent wasting everyone's time during the shoot. You'll need to determine what equipment and props will be needed for the video shoot and confirm the shoot location and date with your team to make sure everyone is there when expected. Make a list of equipment needed so that you can check off items before you leave.

Use a dry erase board or poster as cue cards to help your talent remember talking points.

Arrange to have tripod(s), camera(s), microphone(s), etc. ready for the shoot. Don't forget to charge batteries and/or bring extras.



Lighting

Plan the video shoot according to the weather and sun angle. You want low light. Overcast conditions create good light for shooting as well. In the summertime, shoot before 10 a.m. and around 6 p.m. for best subject angles.

Time

Two minutes of video could take 2-3 hours to shoot, so plan on leaving plenty of time.

Recording

Consider the composition within the camera frame and try to find well-composed shots. If your not sure, just take shots at different angles and different directions. You can use a small digital camera to take a picture of various angles, etc. This will help you frame your actual shots before you shoot video. Check the background for distractions or scenes that aren't consistent with the message.

Always use a tripod to avoid shaking. Minimize camera movements (panning, zooming). This is especially important for online viewing. Let the subject move toward or away from camera instead. If you do need to pan or zoom, do it so slowly that you barely think you are moving. Establish a shot for a few seconds before beginning the pan or zoom.

B-roll

When shooting B-roll, record each shot for at least 15-20 seconds (it can be edited later). Always use a tripod, even for B-roll. Refer to your shot list to make sure you take all the shots you had planned.

People

Bring water for your interviewee (and yourself, and crew) when filming. The goal is to keep the interviewee composed throughout the shoot. When filming people, avoid cutting off subject's waist, knees or feet at the bottom of the screen. The photography 'rule of thirds' applies, which means you should have the subject to the left or right of the shot, with an appropriate and interesting background. Also consider the angle of the camera. Set-up the tripod so the camera rests at shoulder or eye level. This gives the most comfortable point of view for the audience. In general, looking up at the subject makes the viewer feel inferior, and looking down on the subject makes the viewer feel superior.

Subjects in your video who are not Colorado State University Extension employees must sign a release form available online at www.ext.colostate.edu/staffres/photorel.pdf

Sounds

If you are recording audio (i.e. an interview) be aware of the other sounds around you (planes, cars, talking, etc). You may have to stop recording to wait for a plane to pass overhead. Although background sounds seem insignificant while you are shooting, they will be very noticeable in the final video so it's best to minimize background noises. Always review your sound with headphones on before you leave the scene. Something may have happened you didn't notice.



If using Adobe Premiere Elements 7, refer to the online user manual and the Class On Demand tutorial DVD, Fundamentals of Adobe Premiere Elements 7 to learn the editing software. For editing assistance, contact Jennifer Cook, Small Acreage Management Coordinator with CSU Extension and NRCS.

Converting Files

Flip video footage is uploaded to your computer as **.mp4** files. You must convert the .mp4 files to **.avi** files in order to edit them in Adobe Premier Elements 7. Use Prism Video Converter software to convert your files. Prism Video Converter can be downloaded for the free three-month trial or purchased at <http://www.nchsoftware.com/prism/index.html>

Music

Because research has shown that adding music to an informational/educational video impedes learning, it is the policy of CSU Extension that no music be used, natural sounds, however, recorded at the location, can add interest and should be added as appropriate to the subject.

Font

Font for any text must be CSU approved (www.ext.colostate.edu/logos/guidelines.pdf). The approved fonts are: Swiss 721, Garamond, Arial, and Helvetica. Any shadowing on fonts should be minimal and from above not below. Reference any graphic elements (such as charts or maps), including source, on the graphic itself.

Logo and Titles

The Extension logo must appear on the opening shot and at the end of the video. Use a transparent logo if appropriate. Contact Joanne Littlefield or Jennifer Cook for the logo files or visit www.ext.colostate.edu/logos/.

The title of the video should be included at the beginning of the video. Conclude the video with a list of resources for more information, and credits. The credits should include participants, director, editors, reviewers, special thanks, Extension logo. Add the copyright symbol, year, and the words “All Rights

Sample Credits

Figure 4.

Produced by
Small Acreage Management Team
Jennifer Cook
Jennifer Tucker
With Assistance from
CSU Extension Communications
Joanne Littlefield
Amber Walters
Marie Allen
Reviewed by
Joe Brühmer
Special Thanks To
Ellis Farm



Edited videos should be reviewed by your reviewer and other colleagues to check for errors and other details. To create a video which can be viewed with Windows Media Player (or other common players), render a draft video in **.avi** format. The file will be too large to email. There are a few options for making the file available for review. You can burn the video onto a DVD, save the video to a thumbdrive or auxiliary drive, or upload the video to YouTube, Dropio.com, or Google docs.

Ask your reviewer(s) for specific comments and give them a deadline. Use the sample letter below to describe the purpose of the review process and what you expect from of your reviewers. Below is a sample review letter.

Dear Syndi,

Enclosed is a DVD containing the video, "Home-Scale Solar Electricity." Please review the video by December 1, 2009. The purpose of the review process is to fact check, to confirm that details are presented accurately, and to make sure there is no misleading information.

The Small Acreage Video Pilot project is funded through an Extension Innovation Grant. The videos will be available for viewing via the Extension Small Acreage Management website, www.ext.colostate.edu/sam and will also be distributed to NRCS and Extension field offices to be used at workshops, or handed out to landowners.

The videos contain very basic information and are to act as a "commercial" or "preview" to draw interest and direct viewers to NRCS and Extension for more detailed information.

Thanks for your help in reviewing the video. Please contact me after you've watched it, 303-659-7004 x.3 or Jennifer.cook@colostate.edu

Yours In Conservation,

Figure 5.

Sample Review Letter



Once all the review comments have been received and edits/changes have been made, render a final video in .avi format. Send the .avi file to Ruth Willson, Assistance Director of Technology at CSU Extension. Ruth will convert it to an .swf file and post it on the Extension website for public viewing. If you are posting to your local website, work with your local webmaster.

Don't forget to delete old files once the final video is produced.

Send the video link to interested and appropriate people for a wider distribution. Consider also posting your final project to YouTube. Direct any questions about posting online to Ruth Willson.

Helpful Resources

Flip video cameras

www.theflip.com/en-us/Products/mino.aspx

Prism Video Converter Software

www.nchsoftware.com/prism/

CSU Extension: Jeff Wood's Technology Toolbox:

<http://technotoolbox.blogspot.com/search/label/video>

Web Video: Making It Great, Getting It Noticed by Jennie Bourne and Dave Burstein

Desktop Video at About.com: Info on buying equipment and video production tips

<http://desktopvideo.about.com/od/desktopeditinghardware/u/GettingStarted.htm>