DETERMING POST PRODUCTION WORKFLOW

Establishing a production workflow is crucial to a smooth production. The workflow should be developed AT THE START of preproduction, since it will determine budget items, equipment needs, delivery formats and many other things.

The most important reason to develop a workflow is that you do not have technical problems due to technical errors that can create sleepless nights and endless frustration.

A workflow ensures your team will avoid issues that impact the quality of your show.

A. PREPRODUCTION MEETING:

The Director, Producer, DP, and Field Sound crew meet to discuss the technical workflow, working backward from your final delivery format, determine your delivery needs.

What are the intended venues for delivery?
Will you be screening in theaters or to streaming platforms?
Will your show possibly be broadcast and need to have dropframe frame rate (23.98/24 or 29.97/30?)
Will you shoot at 4k? If so, what are the advantages and disadvantages?
Will you be doing motion manipulation or compositing?
Will you be shooting Raw or Log and, if so, how will that impact post?
Will your shoot double cam? If so, what is your rationale?

B. FILL OUT THE WORKFLOW WORKSHEET AS FOLLOWS

Section 1: ASSESS and SPEED UP EDITORIAL COMPUTER for Premiere Pro:

Will you be primarily editing at home or at school?
If home, does your computer meet the system requirements to properly run PP?
How much RAM do you have? You'll need 8 GB min. to run PP (16 preferred and more if 4K)
How fast processor speed? 2 GHZ and Intel i5 for 2k, more for 4K.
Number of processors? Intel i5 (at least 4 core) for 2k. More for 4K.
HD (disk space on editing computer): 4 GB+ free space.

***TO find out your computer specs on a Mac**
Go to APPLE > About this mac



You may have to do extra research to find out how many cores you processor has.

***To find the amount of space you have on your computer:**



TIPS TO HELP YOU Speed up your computer:

Here are several sites that offer instructions on things you can do to

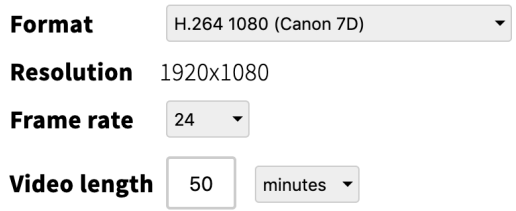
https://www.digitaltrends.com/computing/how-to-speed-up-your-mac/
https://www.youtube.com/watch?v=83TerRCGADQ
https://www.macworld.co.uk/how-to/mac/speed-up-slow-mac-3636548/

Section 2. DISCUSS ONLINE/OFFLINE CONSIDERATIONS

a. Estimate shooting ratio: Shooting ratio is the ratio between all the footage shot and the edited run time of finished project . Students narratives are often 8 :1 or higher. Documentaries are much more (15:1). To be safe side: calculate your final run time and multiply by 10. (ie: 5 minute piece would require 50 minutes of video).

b. Find Storage size needs: Use a video calculator to determine space needs for your format: https://www.digitalrebellion.com/webapps/videocalc

Here's a calculation for a 50 minutes of dailies for a Canon 7D 1080p24 with an h264 codec.



c. Estimate several more gigs for duplicating files, audio, project files, stills and graphic files to arrive at a final storage file size**. Determine whether your team will need to buy a drive for the show** or whether you can use an individual's drive. Put any drive money in the budget.

Make an on paper agreement to how long the editor will keep the drive and provide copies.

d. If you are shooting 4K you'll need to transcode to proxies (smaller clones of the original footage) in order to edit without stuttering, dropping frames in PP. Do a test to find out how long one minute of transcode will take on the computer you are using and then caluculate total time for the entire estimated shooting ratio.

Section 3. Drive Storage size, speed, transfer speed and number of ports
The team should discuss drive needs and whether they will spend money to purchase a designated drive and, if so, how long they will keep it and provide access to footage. If a team purchases a drive, it is designated for that project alone and is not for personal use.

Note the make and model of the drive
Note the speed of the drive: it's best to have a Solid State drive or 7200 rpm
Note the storage space available for the drive
Note who is owns the drive OR is responsible to hold the team drive and for how long they will keep the footage.

Section 4. CAMERA FORMAT and BIT RATE
Use the Workflow Worksheet as you answer specific questions below.

Based on the discussion from Step A, what cameras will you use? The DP is responsible to know/find out the specs for each cameras. This may require research and the DP should know how to set all specs for each camera.

Remember: If you plan to use a multicam set up, you will want camera specs to match: resolution and frame rate, but also codec can effect whether shots cut together.

Note the make and model for each camera will you use.
Note the resolution (horizontal and vertical pixel count: 1080p? 1440p? 4k?
Note the Frame Rate you will use? 24 FPS is recommended for narrative projects
Note the codec will you use (if your camera offers a choice). Choose least compressed.
Note file type will you use (if your camera offers a choice).

Section 5. FIELD AUDIO AND SYNC
The Field Audio and Mixer should be discuss and agree to the specs.

Note the file type: wav? aiff? mp3?
Note the sample rate. Usually 48Hz, 16 Bit for professional audio recorders.
Note the syncing strategy for editors: Sync in Premiere or before import in programs like Plural Eyes?

Section 6. STILLS/GRAPHICS/ARCHIVAL VIDEO
Remember that if you plan to zoom in on any photographs or graphics that you will need original stills and images have larger resolution than your show resolution or you can't zoom in without pixilation.

Also, if you are getting archival video at a lower resolution (720 X 480 SD) for a 2k show, you won't be able to set to frame without pixilation.

Note the Resolution
Note the Frame rate for video (will it need to be transcoded to your FPS?)
Note the file type: jpeg, png, psd?

7. COLOR CORRECTION

If you are hiring a colorist remember to put their fee in the budget.

Note which application will you color in—Premiere, Davince, Color?
Note whether the colorist be the editor or a hired professional?
Note what files will a hired colorist require? EDL, XML, original media, reference movie?

8. AUDIO MIX

Note which application will you color in—Premiere, Protools, Audition?
Note which files will a hired colorist require? AAF, OMF, reference movie?

9. MASTERING and DISTRIBUTION

Reconform the mixed audio with the color graded video for output and then export a master file using "Match Sequence Settings". Transcode to other delivery specs from the master so you don't need to have PP render for each output.

Note deliver specs for the following:

Theatrical screening: This is your highest resolution with codec with codec and file type prescribed by festival/event.
Lightwieght file (h264) posted to internet for cast and crew download.
Delivery specs from professor for project grading.

C. BUDGET and MOVING TOWARD GREENLIGHT

Add postproduction costs to the budget.