Video Tech

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If you followed Andrea Keiz's Manual for Video Documentation the following can give you further guidance: offering steps to take after you recorded material and suggesting how to edit and publish video for different purposes. Here are three user cases, using different types of recording devices in different situations, aiming to provide insight and relation to your situation or similar to yours.

SOPHIE

is a student in a dance teacher education program. For her own review and reflection she wants to record her class that she is teaching to other students in the program. She has an iPhone and a Mac laptop that she wants to use for this.

— Sophie's tools

JOHN

is a teacher at an institute. He wants to document his students progress over a year (of rehearsals for a piece they are developing together). He has access to the equipment from the institution that includes two cameras: one camcorder that records to MiniDV tapes and one that records to an internal storage and SD cards.

— John’s tools

PETRA

is a student, she wants to create a short trailer for the website of a place where she is performing a piece together with others. For that she asked a friend’s help for recording, editing and publishing. Her friend has a digital still camera with different lenses.

— Petra’s friend’s tools

Postproduction

In postproduction we will look at the material, which is an important factor to consider. How much material have we recorded? Do we have the time to look at it and make decisions on what to edit? Of course, if you just want to get a feeling of how a class went, you don't need to do any editing as you can throw away the material afterwards. In this case it might not even be necessary to transfer the recorded material to a computer, but instead you hook up the camera to a TV or Monitor in order to watch and reflect on it. If you used a smartphone for the recording, then you can watch it directly. This can save you a lot of work.

If you want to store the recorded material for later use, it is advisable to create a title and credits with information of when and where it was recorded, by whom and any additional necessary information. Here often less is more: keep a simple font (something like Arial. Try to avoid playful fonts, and the use of colour and effects as this will look unprofessional right away), using white for the text on black background.

EDITING

Editing is the process of cutting things from your video that are not needed; putting different videos from different cameras or different recordings together in a single video stream; adding titles, subtitles, credits, music, sound, changing volume of the sound in certain places etc. For this phase you need to plan time to look at the material. If you recorded 1 hour, you need 1 hour to watch it unless you fast forward. Often, in a first round, you just watch it to see what you actually recorded and have an idea as base to work with. For this step you need to consider how much storage you will need, this heavily depends on what device you were using to record. If we take John with the MiniDV tapes, there 1 hour is equal to roughly 13 GB on your hard drive. In this case material is transmitted in real time, so 1 hour takes 1 hour to transfer. For Sophie and her iPhone, this is roughly 8 GB per hour. However with newer cameras and devices there are many different settings that have great influence on this, and also the available storage on computers can vary a lot. Therefore you need to test this for your specific setup.[1]

For editing you will need an application that allows you to playback, cut, move your recordings and add titles and transitions between your video clips. For Sophie, smaller things she just does on her iPhone with iMovie, but for larger projects longer than a few minutes she works with iMovie on her Mac laptop. John uses Adobe Premiere while Petra and her friend go crazy with DaVinci Resolve. These editing tools are only some suggestions from the ones available that range from free to costly, from easy and sometimes limited to difficult and feature packed. There is not a straightforward answer to what will work for you best, but **the takeaway message is that you can most likely do anything you need with the tools that cost you nothing or only a little**. An editing tool does, generally, not change your original video files and when you save you only save the information how the videos are in relation to each other and where you made cuts, titles etc. In order to have a video that you can share with others, you need to export a video file that contains everything you did during the edit.

PUBLISHING

Once you are ready with your edit and you want to export, you need to ask yourself where and how you want to use it. This will influence the settings you should choose during the export, which can be quite a technical process. To make things easy, many editing applications include presets such as YouTube720p HD or Vimeo 1080p HD.[2] These are good starting points. For all three: Sophie, Petra, and John the recording format is Full HD that is often referred to 1080p.

When publishing things for others there are a couple of options and you should always do this in relation to who your audience is. Three examples are IDOCDE,[3] YouTube, and Vimeo, which are video hosting websites. These platforms have guidelines and tutorials on how to best prepare material for uploading and, to some extend, offer tools for creating captions and sharing options with others, such as private links or password protection. If you want to use these platforms you need to create an account and, not sure if there is a need to say, anything you publish in the internet might be accessible even if it says private link or password protection. So, if you are concerned be aware. To mention another media form: the production of DVD is not readily available from major editing applications, as they do not support the production of physical media anymore. Only in older versions of their applications this option may exist.

More Cases on Usage

Say you want to do an audio recording of a dance class. The teacher is moving a lot on the floor so a wireless microphone (lavalier) is already a bit problematic to use, as it comes in the way when moving and can be hurtful. One can ask the teacher to take the wireless mic on and off in these situations. While this is not ideal, it might be the only option to allow for a good quality audio recording and the least influence on the teacher.

Another problem comes when suddenly there is a gathering on the floor to exchange feedback about an exercise or the class and you want to also record what the students are saying. An additional (handheld) wireless microphone could be a solution but generally people are not used to use a handheld wireless microphone: they either hold it too far away or point it somewhere else than their mouth, so recording them well is rather difficult. Apart from that, handing the microphone to others who want to contribute something takes time, and is distracting the flow of the sharing. A possible option, in this case, is to take an external audio recorder with built in microphones (such as a Zoom H4) and place that in the group of people. While this will record lots of the room acoustic and noises (people moving, feet, changing seating etc. as it is sensitive to everything in the room and does not adapt to sound as a human does), it is still better to have it than not to have a recording at all. Advice is to really test it before an important situation, so you know the settings and the material you will be getting from the device.

Backup of Video Material

Digital data is fragile. That means: it is easy to be deleted and be lost forever, so have a backup of your material. Have at least one copy of your video files on a separate hard disk. At the time of this writing an external hard disk of 2 TB costs around 60 Euros, which should be enough to hold your data that you otherwise could easily loose or destroy by dropping (or doing anything else to) your laptop or the hard drive you have your material on to work with. A 2,5" drive with USB3 connection is a good starting point, as it is small and does not need an additional power adapter. HDDs (hard disk drive) have spinning physical parts, which make them a bit prone to problems when you do not handle them carefully. Dropping them when they are attached to your computer and when its running easily results in damage that is too expensive to repair and you loose may your data. Today they are often replaced by SSDs (solid state drive) that have no spinning parts and are faster accessing your data. These SSDs are still more expensive than HDDs and their advantages are not necessary for keeping a backup. As another option you can use cloud storage, however this is a whole other issue which are then related to costs in regards to space, your internet connection speed, privacy concerns and many more issues that make it not the first choice for backing up large video files.

Spending a bit of time, before documenting, on having your technical setup worked out, you can focus a lot more on the content and don't have to worry about your technical setup.

NOTES

1. 1024 MB are equal to 1 GB and computer hard disks are nowadays generally measured in hundreds of GB. If you are looking for more details start here en.wikipedia.org/wiki/File_size
2. These refer to the size of the image, frame rate and codec. For example 720p refers to 1280 pixel wide and 720 pixel tall image while 1080p is 1920 pixel wide and 1080 pixel tall. The p stands for progressive, which means that every single frame is a full image.
3. IDOCDE — International Documentation of Contemporary Dance Education. www.idocde.net is a platform for contemporary dance teachers.