Guide to Creating Educational Videos

Pre-Production

Planning is key in video production. Thorough planning will reduce time not only in the production phase but also in the post-production phase. So what is there to prepare and plan?

- **Identify the concept or narrative you want to get across**
  - Break down this information into key messages
  - Sequence the information – in a logical progressive order

- **Write the ‘script’ – what will be said and by whom in the video**
  - A script has a number of advantages:
    - The speaker will know what they are going to say & be able to practice (helps with confidence)
    - Allowing access to the script with the video is good practice as it enables:
      - access to the content for students with special needs
      - students for whom English is an additional language an opportunity to read and review their understanding of the video
      - students in general the option of scanning for information
    - Helps with Storyboarding your video

- **Research the locations you are going to use**
  - Identify where are you going to shoot the video or locate the images you want to use as background

- **Storyboard the video**
  - Identify the ‘shots’ to be used at key points in the video
  - Identify appropriate backgrounds or actions taking place in the video – what will assist in the telling of the story and increase understanding eg diagrams, context images, demonstrations, text
  - For each ‘shot’ identify the image/text etc. that will accompany the scripted dialogue

- **‘Prep’ those to be involved in-front of the camera or recording the voiceover**
  - Get them to practice what they are to say aloud and time its duration
  - Practice with the **Teleprompt + 3 App** and identify the most appropriate ‘pace’ (this App will connect through Bluetooth to the iPad in the recording studio & pick up your script)

- **Identify the approximate time (in length) that the video is going to be**
  - Keep the video as short as possible - generally no longer than 5-7 minutes. It is more beneficial to scaffold the content and break a bigger topic into shorter key concepts in separate videos.
  - Identify titles that will assist learners to identify key points as well as enable them to go to particular parts in the video when reviewing the video for assignments or exams

- **What learning activities are going to accompany the video? Consider how you are going to use the video as part of a learning sequence to actively engage learners. For example:**
  - Quizzes (to check for understanding)
  - Problem solving scenarios - using information from the video (to promote deeper understanding)
  - Group activity (to promote active collaborative learning)
  - Key questions for group discussions (to promote active learning and student engagement)
  - Used for preparation for your flipped classroom
Tip: Plan for it or it is likely that it won’t be there in the final video.

Production
The production phase refers to the actual shooting of the video footage to be used in the video. It is highly recommended that you use a recording device on a tripod for all recordings.

Recording Studio:

- The recording studio in Napier Building: Napier 112 can be booked and has been set up as a plug and play facility. Take a USB v.3 (16-32 Gig) to record onto. The recording studio has been set up so that you could do the recording on your own:
  - At the time of booking you can identify whether you want to record with white, black or green screen (a green screen allows the insertion a photo background or PowerPoint in the Post-Production phase).
  - The following alternatives have been configured (see https://www.adelaide.edu.au/technology/yourservices/learning-teaching/teaching-rooms/ scroll down to ‘Recording Suite’ – Examples & image gallery for more information):
    - Full Screen camera – good for one or two people
    - Full Screen Presentation – PowerPoint or other projected images
    - PIP (Picture in Picture) eg PowerPoint with insert of presenter
  - Dave Johnston (works with AdelaideX on editing video for MOOCs) is the person who does the booking and if you haven’t used the recording studio before he will step you through how to use it.
  - There is a Teleprompter in the recording studio which enables the speaker to look at the camera and read the script – the iPad in the studio has Teleprompt + 3 App App installed. Practice reading the script with the App and this will also give you a good idea of how long the video is going to be and the right pace to set the App at for filming. It is a good idea to also keep a rough idea of timing – at which points you want to add text or image to the video in post-production.
- There is currently another recording studio being set up on level 2 of the Central Hub. This will also be a ‘plug and play’ recording studio and offer additional options for recording such as the ability to record discussion panels.

Location Shooting:

When recording at locations either indoors or outdoors there are many things to consider:

- **Lighting:**
  - LED light
    - When shooting at a location the idea is to emulate lighting from the sun (natural lighting). Studios usually use a Three spot lighting set-up
    - With advances in technology used for video capture, all you need is one LED light( eg Ledgo 600 with tripod and portable battery) used as the key light (above and at an angle of 45° to the ‘subject’).
Natural lighting

- If shooting in the open air consider where the light (sun) is coming from. Look for a shady spot or cloud cover as shooting with the speaker looking into the sun can produce squinting and heavy shadows on the face.
- If shooting indoors using artificial lighting you may need to adjust the colour on the video camera or alternatively make colour adjustments during the editing phase.
- The correct lighting helps to direct the viewers’ attention

The most common ‘Shots’ used in video production can be described as:

- **Establishing** shot or **Wide** shot – whole of person within a context ... or the context
- **Close-up** – head and shoulders
- **Mid-shot** – head to waist
- **Closing shot**
- **Zooms** and **Pans** – avoid if at all possible. If you must use one, make it very slow.

Framing: What you see through the view finder is what you get ... not what is in your head! Shooting video is similar to shooting a photograph only the subject and video move. The rule of thirds and the Golden Mean apply to both:

- **Rule of thirds and the Golden Ratio/ Mean**: composing a picture that is aesthetically pleasing ie one that is ‘easy on the eye’: [http://www.ultimate-photo-tips.com/photography-rule-of-thirds.html](http://www.ultimate-photo-tips.com/photography-rule-of-thirds.html)
  - Divide the ‘frame’ into thirds: the areas are key, as are the intersections of the sections. Eg place the horizon on either the line of top third or the bottom third. Please see the preceding link for more information.
- **Point of view**:
  - **Level**: when the camera is placed at eye level of the speaker/subject the speaker is seen as equal to the viewer. An equal partnership between the viewer and speaker is created.
  - **Above**: when the camera looks down on the subject the subject is seen by the viewer as vulnerable or weak ie The viewer is more powerful. An uneven relationship between viewer and the speaker/subject being videoed is presented.
  - **Below**: when the camera is set lower to video looking up the speaker/subject. ie. The viewer is less powerful. An uneven relationship between viewer and speaker/subject is presented.
- **Videoing people talking or moving objects**: **Lead space**. When framing shots of people -
  - Leave ‘space’ for the person to talk into. This means that you would place the person slightly to one side of the ‘frame’ using the ‘Rule of thirds’ (what you can see in the viewer ie. what is recorded) so that there is physical space to one side (the side they are ‘speaking’ to).
  - If a subject is moving then the ‘space’ is left in front of them (the direction they are moving in).
  - When framing shots of people avoid placing the edge of your frame at one of the body’s natural cut-off lines i.e. avoid cutting at the neck, elbows, waist, knees and ankles.
- **Room at the top**: This refers to ‘headroom’ i.e. the amount of space between the top of a person’s head and the top of your frame.
  - Too much headroom makes the person appear to be sinking.
  - Too little headroom places visual emphasis on the person’s chin and neck.
  - Pay attention to where the eyes appear. Follow the **rule of thirds** and place the subject’s eyes on the upper third line.
- **Distracting background**: consider what is in the background and avoid distracting content that takes the attention away from the subject. (eg a pole in the background that looks like it is
coming out of the top of the head of the speaker). Depending on your video equipment, you may be able to decrease the **depth of field** i.e. how much is in focus

- **Filming on mobile devices**: such, smart phones or tablets, is becoming increasingly popular and possible to produce high quality video. Remember **only shoot horizontally** (i.e. landscape mode).

- **Audio recording**: sound is 50% or more of your video.
  - Use a quality **separate** microphone for recording the audio – if the audio is scratchy it is **ALMOST IMPOSSIBLE** to fix it post production. E.g. a lapel microphone or directional microphone on top your video camera will provide good quality audio.
  - You can choose to record voiceovers separately to the video recording and insert them during the post-production phase.
  - Adding sound effects or music: [http://audionautix.com/](http://audionautix.com/) This site has a huge library of categorised sounds that have been released under Creative Commons License 3.0 (free to use the music as long as you provide a link to the website or credit with “music by audioautix.com”)

- **Recommendation**: shoot in 16:9 with 1920 x 1080p (full high definition) and 30fps (frame rate) for optimal quality.

**Tip**: Your video will only be as good as what you shoot and quality sound is critical.

**Post-production**

This is the last phase of video production where all the ‘bits’ come together in the video editing suite: voiceovers, images, video recordings and any text/titles that you want added to key points in the completed video.

**File Management**

- Make a new folder for each video you are making
  - Transfer and organise your footage – select the best ‘takes’
  - Add all the files that relate to the video e.g. images, PowerPoints, script, music files etc

**Editing**

- If you have done your planning you will know where all the ‘bits’ fit together. (The ‘storyboard’ will help you here)
- The University recently set up a **Video Editing Suite** in the **Learning Innovations Studio** (LIS). It is located on level 3 of Barr Smith South, opposite the Ira Raymond Room. There are two iMac computers with Camtasia and Adobe Elements
  - [Camtasia online tutorials](https://www.techsmith.com/tutorial-camtasia-8.html)
  - [Adobe Premiere Elements online tutorials](https://helpx.adobe.com/premiere-elements/tutorials.html)
- **You can also use iMovie or Windows Movie Maker** and edit on your own PC or Mac – contact Tech Services to request the software on your computer: servicedesk@adelaide.edu.au
- After you have selected the best video ‘takes’:
  - Add them to the timeline in sequential order
  - Trim the start and finish of each clip
  - Choose your background (if using Green Screen)
Add transitions & Top & Tail if appropriate
Add images and titles (including ‘lower third’ if appropriate) to the timeline as required
Export a proof and share with a friend or co-worker to get their feedback
Adjust as required

If you are using your iPhone or iPad there are a number of Apps for video editing (similar apps are available for Android devices):
Adobe Clip
FiLMiC Pro (can be used to shoot the videos as well)
VideoGrade: for adding effects
iMovie

Publishing
When adding your video to MyUni it is recommended that you add the video to your MyMedia list and then deploy it to your course from there - rather than embedding the video into MyUni directly. This is because in MyMedia your video will be streamed, while embedded video will have to download and take much longer to play (which is frustrating for the viewer).

Logon to MyMedia:
Adding a video to MyMedia:
https://www.adelaide.edu.au/myuni/staff/resources/tutorials/content/MyMedia-Upload-And-Publish-Existing-Video-In-A-Course.html
Publish a video to your MyUni course:
http://www.adelaide.edu.au/myuni/staff/resources/tutorials/content/MyMedia-Publish-An-Individual-Recording.html
Adding and Editing video Guide:

Other Resources
Video for Teaching and Learning from the University of Queensland: http://www.uq.edu.au/teach/video-teach-learn/index.html

Short videos on Production Basics from Stanford University:
https://acomp.stanford.edu/tutorials/video_production_basics