

JOURNAL ENTRY 1 - VIDEO IN LOW LIGHT ENVIRONMENTS

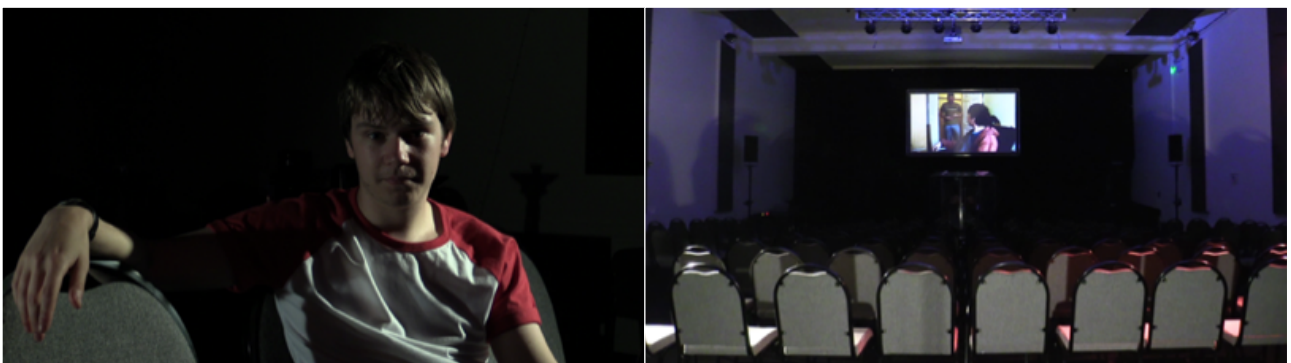
I have been asked by church to collect some stock footage of the building and the Sunday services for use in some upcoming promotional material. Some shots will be easy as they are in brightly lit halls, foyers or other rooms; for example the picture to the right. However, the main auditorium and the community room are both blacked out. As the Production team leader, I have the access to the room and the equipment to experiment and play around with the lighting in the room. With such a dynamic space, lost of lighting styles are possible. In this journal entry, I will show the impact of different lighting conditions on the video.



*This is a long exposure photograph of the auditorium.
The only light is a green LED from the emergency lighting.*

1. SINGLE LIGHT SOURCE

As you can see from these stills one of my videos last year, the auditorium is very dark. With a single light source exposing the subject, the background falls into complete darkness. It is difficult to expose at this level without using lots of gain and as a result, having grainy footage. However, having a darkened room gives you the control to model the light to your own pleasing.



2. WALL LIGHTS

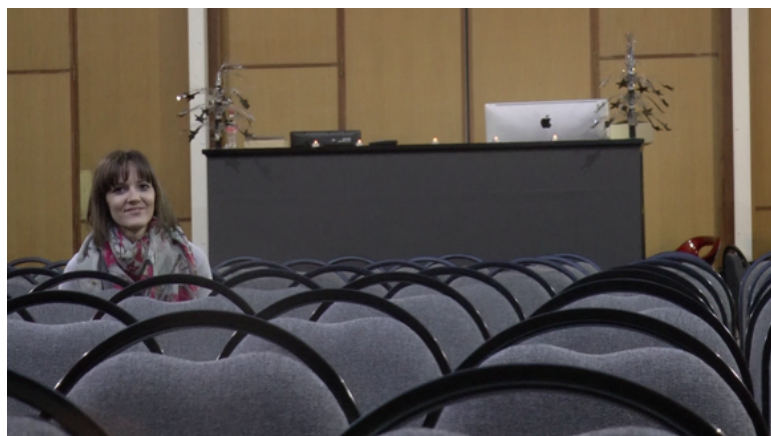
There are bright LED work lights intended for when the auditorium is being cleaned or rearranged. There are four sets of them. The two sets of three LED's are normal LED white. The other two sets consist of only two LED's, however, they have been warmed with gels. This dramatically changes the feel of the room. As you can see from the very left screenshot below, the room still be quite dark with only some of the lights on, however if you configure the lights to your advantage, you can produce a nicely exposed image. The only downside to these is that they are very harsh and they cast multiple, harsh shadows.



The configuration of the wall lights, going clockwise from the top left:

1. No wall lights
2. Only the cool wall lights
3. The normal wall light fixture
4. The configuration of the cool wall lights
5. The configuration of the warm wall lights
6. The wall light with gel fitted
7. The room with ALL wall lights on
8. The room with only the warm wall lights.

Below is a screenshot of some raw footage for our video news at Christmas last year. This was lit using all of the wall lights. As you can see, I shot from a low angle using the chairs to hide the shadows that the chairs caused. I remember trying to shoot across the chairs, however I got harsh lens flares.



3. COLOUR WASH

Our lighting system currently consists of 12 tri-colour LED par cans. As you can see from the screenshots below, a soft colour wash does light the image up enough to be able to distinguish features. However, depending on the colour, the exposure and gain must be compensated for, this introduces grain into the images.



4. COLOUR WASH & WHITE LIGHT

My next step was to add white light into the scene on top of the colour wash. As you can see from the images below, the extra white light is a massive improvement over the colour wash. As it is an LED white, it creates quite a pinky skin tone, however this is only really noticeable on video as our eye auto corrects this.



CONCLUSION

I set out to investigate how different lighting approaches affected video. This helps me with learning outcome 4 and also partly, learning outcome 2. Sometimes we will have to shoot video in places that have harsh work lights, investigating different lighting conditions has shown me how I can supplement the lighting with fixtures. This would encourage me to bring portable LED lights on shoots in the future.