
Kings Church Blackpool Blend

Brief

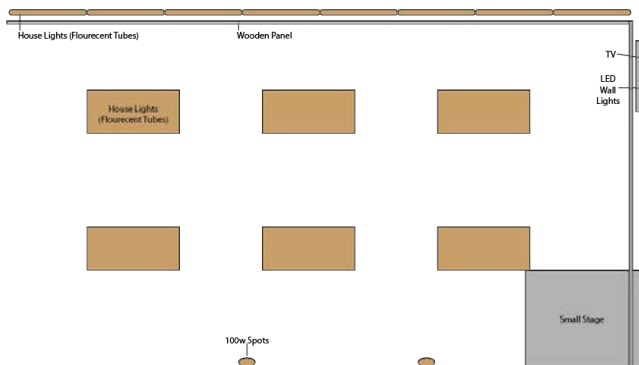
Contact

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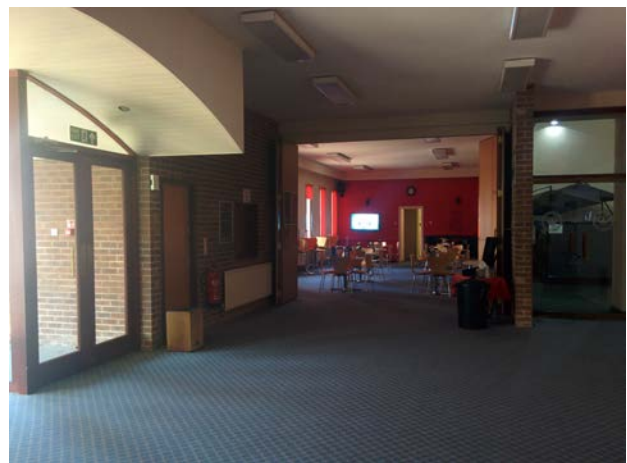
Location

Kings Church Blackpool, 10a Beaufort Avenue, Bispham, Blackpool, FY2 9HQ

Room Plan



Reference Image



Project

This will be an educational project, aimed at equipping Young People with a technical skill. 1 hour of Encounter Youth has been set aside for Luke to educate a group of 11-16 year old about lighting in a fun and engaging way. They must enjoy themselves.

Budget

There is no budget available to fulfil this brief, however any existing equipment can be repurposed. Electricity will be provided by Kings however they require and audit of how much will be used. Petty cash is available for consumables.

Deadline

The project will take place on Friday 22nd of April during Encounter Youth. The paperwork deadline is **Friday 29th April 2016**.

Kings Church Blackpool Blend

Treatment

Preparation

I will prepare the lighting setup on Thursday 21st April during W&P night. This will give me time to make sure the rigging is safe and working.

Friday Agenda

7:45 pm	Handover to Luke - Introduction to Lighting
7:55	Game - DMX whispers
8:10	Explanation of DMX
8:15	Challenge
8:30	Songs
8:45	Wrap up and handover back to James

Details

Introduction to lighting

I will give a brief introduction to rest of the evening. I will talk about the types of places that use lighting, show some pictures and videos of lighting and talk about the two main parts, the fixtures and the control surface. I will also introduce the fixtures and show what they can do. I will also introduce the lighting software, the virtual desk and the pre-programmed scenes. I will then introduce the game.

DMX Whispers (Signals)

This game is like Chinese whispers with one difference. Rather than choosing a word or phrase, the first person gets to pick a colour from a chart and must then convert it to DMX values. The DMX values then get passed along and the last person must input the DMX values and see what colour the light changes to. Hopefully, it is the same colour that the person at the start chose.

Explanation of DMX

I will give a brief explanation of the DMX protocol. I will first show a DMX cable, I will then talk about how DMX is a daisy chain and the whole message is given to each fixture but the fixture only listens for the part that it needs. I will then show a simplified version of the light's DMX charts showing what each channel does then issue a challenge.

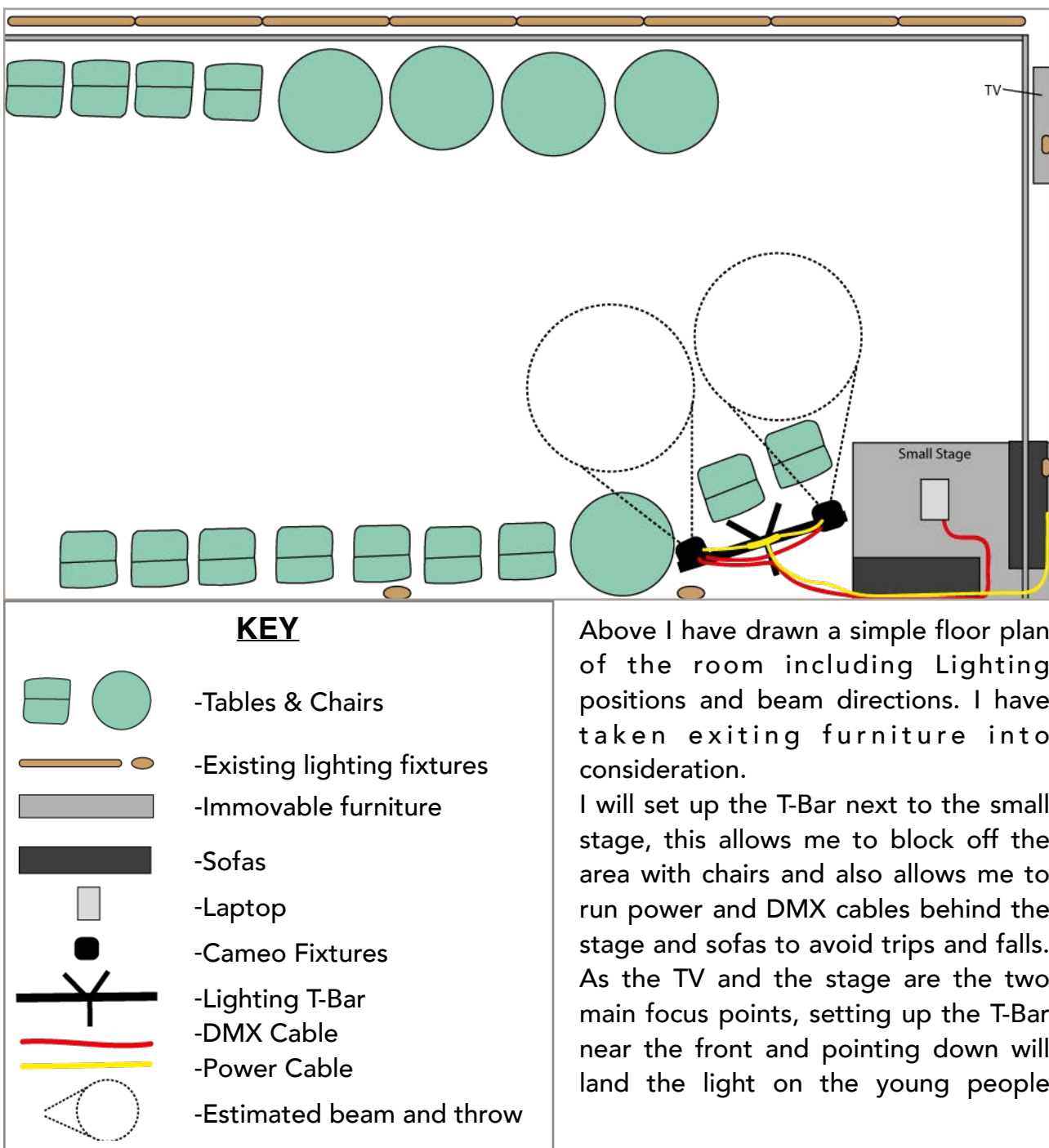
Challenge

I will give each you person a card with a desired lighting scene on. They must then use the lighting desk and a cheat-sheet of the channels to make that scene happen. The young people take turns and each person who does it wins a donut.

Songs

We will then sing a couple of songs. Young People will have an opportunity to play with the lights during the songs. This will teach them how to respond to the lyrics, rhythm and dynamics of music.

Floor Plan



when they are sat and of the floor when they are participating in activities. The laptop will be accessible by sitting on the edge of the stage and looking back into the room.

Kings Church Blackpool Blend

Risk Assessment

RISK DESCRIPTION	LIKLIHOOD	IMPACT	MITIGATION PLAN
Electrically unsafe equipment	Low	Medium	<ul style="list-style-type: none">All equipment in rig to be PA tested.
Suspended fixtures falling	Low	Medium	<ul style="list-style-type: none">Safety cables to be used in addition to normal nut & bolt.
T-Bar collapsing/being knocked over	Low	Medium	<ul style="list-style-type: none">T-Bar to be set up safely with large footprint.T-Bar to be set up in corner behind chairs where it cannot be knocked unintentionally.
Trips & Falls - Cables	Low	Low	<ul style="list-style-type: none">T-Bar to be set up in corner and cables to run round behind sofas so that they cannot be tripped over.
Trips & Falls - T-Bar legs	Low	Low	<ul style="list-style-type: none">T-Bar to be set up in corner with chairs around it so that the legs are inaccessible.
Fire	Low	High	<ul style="list-style-type: none">Working smoke detector and alarm system on site.Fire exits clearly marked and kept clear as much as possible.
Eye strain due to use of laptop in dark	Low	Low	<ul style="list-style-type: none">Youth to be warned to stop using the laptop if they feel unwell/sore eyes.
Epilepsy/other illness brought on by strobing effects	Low	Medium	<ul style="list-style-type: none">No such illnesses reported on medical forms.Youth to be warned to alert a leader if they feel unwell.

Kings Church Blackpool Blend

Equipment List/ Energy Audit

Due to the lack of budget, I had to use the equipment which was available at the time. Equipment must be in a safe working condition and not already in use in another room's installation.

Name	Type	Energy Usage
T-Bar	Lighting Stand	N/A
Cameo FlatPar Tri Colour 7	Fixture	25W
Cameo FlatPar Tri Colour 8	Fixture	25W
Enttec USB to DMX Adapter	Lighting Hardware	N/A
Asus Laptop	Lighting Hardware	Pre-Charged Battery
QLC+	Software	N/A
1m DMX Cable	Data Cable	N/A
10m DMX Cable	Data Cable	N/A
1m IEC Cable	Power Cable	N/A
1m IEC Cable	Power Cable	N/A
10m 4-way power bar	Power Cable	N/A
Electrical Tape	Consumable	N/A

Using the formula $E(\text{kWh}) = P(\text{kW}) \times t(\text{hr})$ I have calculated that using the two 25W¹ fixtures for a period of 3 hours (6pm-9pm) will use 0.15 kWh of energy.

¹ GmbH, A.H. (2013) FLAT PAR CAN TRI 3W IR. Available at: <http://www.cameolight.com/en/products/led-flat-par-cans/flat-par-can-tri-3w-ir-7-x-3-w-high-power-tri-colour-flat-led-rgb-par-light-in-black-housing/> (Accessed: 2 May 2016).

CHALLENGE!

Left light red

Right light green

CHALLENGE!

Left light red

Right light white

CHALLENGE!

Left light flashing red

Right light blue

CHALLENGE!

Left light white

Right light flashing blue

CHALLENGE!

Left light off

Right light green

CHALLENGE!

Left light dim red

Right light white

CHALLENGE!

Left light red

Right light green

CHALLENGE!

Left light magenta

Right light off

CHALLENGE!

Left light magenta

Right light cyan

CHALLENGE!

Left light flashing magenta

Right light any colour

CHALLENGE!

Left light flashing white

Right light flashing red

CHALLENGE!

Left light dim flashing yellow

Right light green

CHALLENGE!











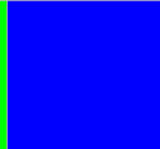

Left light flashing blue




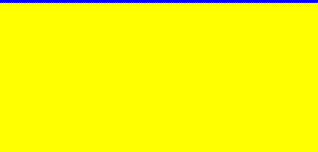




Right light flashing red

CHALLENGE!

Left light flashing magenta

Right light flashing yellow

Light 1 (Left)						Light 2 (Right)					
1	2	3	4	5	6	7	8	9	10	11	12
											
Dimmer	Strobe	Red	Green	Blue	Programs	Dimmer	Strobe	Red	Green	Blue	Programs

Colour	RED	GREEN	BLUE
	255	0	0
	0	255	0
	0	0	255
	255	255	0
	0	255	255
	255	0	255
	255	255	255
	255	100	50
	50	80	80
	177	200	222

Kings Church Blackpool Blend

Evaluation

In this document, I will evaluate the effectiveness of the project and also show how I have learned from the experience.

Preparation & Planning

I don't have much experience with teaching myself, fortunately I do know many teachers. From speaking to them I learned that a crucial part of teaching is keeping young people's attention. They suggested achieving this through having lots of smaller activities rather than one long session. That was what prompted me to split up the actual learning sections with games and activities. It was interesting adapting games and trying to pitch it to their level whilst still keeping the session educational. This seemed to work, as all young people engaged in the activities and took part. From speaking to some of them and throughout the challenge, it was clear that they had grasped some of the fundamental concepts of lighting.

A thorough risk assessment and floor plan allowed for a quick setup. Planning the rig allowed me to build it in advance and simply move it into the correct place before Encounter Youth.

Not having a budget to work with was a frustration at first, however it helped me keep it simple. The LED lights that were available turned out to be simple and intuitive enough for the young people to grasp. Planning and creating assisting materials in advance allowed me to focus more on running the event.

The Session

I consider the session was a success; the objectives were to '[equip] Young People with a technical skill ... in a fun and engaging way' and I believe that was achieved. All young people engaged in the activities and appeared to be enjoying themselves. When participating in the challenge, it was clear that they had grasped most of the information.

In a higher budget environment the ideal plan would be fixed lighting, however with the resources I had available, temporary lighting was the only solution and I had to plan around this. A thorough risk assessment allowed safety to be maintained in an environment where the young adults were moving around and equipment could have been knocked over. Strategic placement of barriers and hiding cables were a successful aspect of keeping the equipment and young adults safe. Using safety cables to secure the lights to the bar was an additional layer of safety which proved successful. Alongside the educational aspect of the lighting, a secondary aspect was to engage the young adults and alter the atmosphere of the event. The young adults responded positively to the altered lighting as planned. Static colours were used to set the tone of

the room. For the more active times of the event chaser patterns were used, which young adults responded very excitedly to; the leaders were overjoyed with the result. Towards the end of the event, sound activated chaser patterns were used, the young adults loved these and had a lot of fun interacting with the lighting. This dramatically changed the engagement of the young adults. In the future I would use the sound activation option more often during the event and would plan it into more sections.

I have learned that clear communication with the client, understanding what they want to achieve, especially in regards to managing the behaviour and safety of young adults is crucial.

Feedback from leaders

I had a lot of positive feedback from leaders and parents after the event. One young adult had previously expressed an interest in lighting and his mother thanked me for inspiring him to continue pursuing it. A senior leader in the church expressed a re-kindled interest in lighting in the Blend area, she asked for the lighting bar to remain in Blend on static colours to add to the atmosphere in the room. The usual Encounter Youth leaders also thanked me for taking the time to plan and run the session, stating that "the kids really seemed to enjoy it".