



Performing Arts Virtual Learning

**7 & 8 Stagecraft
Lighting Design**

May 12, 2020



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Lesson: May 12, 2020

Objective/Learning Target:

Understanding basic terminology and equipment used
in lighting design

What do you think?

As you have learned, theatre has its own language. Today we will explore the language of theatre lighting.

Think about your understanding of these words:

1. **Throw**...you most likely thought of throwing a ball.



2. **Gelatin**...what flavor of jello came to mind?



3. **Color frame**...



4. **Dimmer**...not as bright?

These lighting terms and more ahead.



Terminology

- 1. Throw**—The distance from a lighting instrument to the area to be lit. The distance the beam of light will effectively travel.
- 2. Gelation (gel)**—Transparent color media placed on lighting instruments to produce different colors.
- 3. Color Frames**—metal holders which fit into a lighting instrument to keep a color gel in place.
- 4. Circuit**—the complete path of an electrical current. (Each outlet has its own circuit number to designate where each instrument is plugged.)



Terminology Part 2

5. **Dimmer**—An electrical device that controls the amount of current flowing into a lighting instrument, thus increasing or decreasing the intensity of the light.

6. **Key light**—Accent of highlight on an actor's face, usually in the direction of the motivating light.

7. **Fill light**—Wash or soft light that fills in the light on the actor's face from the direction opposite of the key light.

8. **Dimension lighting**—Lighting an actor from behind and/or the side, so actors do not look flat.



Instrumentation

- The specific instrument used in a lighting design depends upon what kind of light the instrument creates and the desired effect the designer wishes to create on stage.
- Each instrument has a different **throw**, beam spread, intensity, and light quality.
- Some instruments require a **gel** to color the light
- LED instruments that have their color selected in the control board and it is created electronically.

Additional Terminology

On the last slide I used the terms “**Beam Spread**” and “**Light Quality**”, allow me to explain.

The image to the right shows a light beam from a single light source. Take note of how the beam gets wider the further the distance that it travels, that is **BEAM SPREAD**.



The 2 images to the left demonstrate a simple explanation of **LIGHT QUALITY**. One beam is sharp edged and one is soft. This is a simple explanation that will be enough for now.

Types of lighting instruments

Ellipsoidal



Different brands look different and they come in different sizes. The one on the left is what we have at Nowlin.



- Frequently called a Leko.
- A longer instrument with a strong beam of light that can be shaped with internal shutters.
- The throw of this light is long.
- It should be hung from the catwalks or rails.
- A gobo (metal template with a shape) can be used in this type of instrument. More about gobos to come in future assignments.
- Uses gel for color.
- Excellent for key and fill lighting, as well as special effects

Types of lighting instruments

Fresnel pronounced feh-nell with the emphasis on the last syllable, the “s” is silent.

- Small instrument that gives a soft edged pool of light, which makes blending easy.
- The throw is medium.
- Can be focused in spot or flood position.
- Usually hung from the electrics over the stage.
- Uses gel for color.
- Provides excellent key and fill light or dimension lighting.
- Uses barndoors to block unwanted light.



Again, these look different depending on the manufacturer and size. This is a picture of the ones we have at Nowlin, the one on the right has barndoors attached.





Self Assessment

- 1. True or False: The beam of light spreads out as it travels from a lighting instrument.**
- 2. What is the name of the item that will change the color of a light?**
- 3. A light is plugged into a _____ and the intensity of it is controlled by a _____.**
- 4. True or False: Dimension lighting keeps an actor from looking flat.**



Self Assessment Answers

1. **True** or False: The beam of light spreads out as it travels from a lighting instrument?
2. What is the name of the item that will change the color of a light? **Gel**
3. A light is plugged into a _____ **circuit** _____ and the intensity of it is controlled by a **dimmer** _____.
4. **True** or False: Dimension lighting keeps an actor from looking flat.