**Integrated Art | Lesson Plan**

**Science + Photography | 2 day**

**Learning Goals/Skills:** This workshop will focus on the scientific and mathematic components of photography. Students will play with short and long exposures observing how light and movement change in relationship to time. Students will paint with light by moving single source lights in front of a camera (ex. cell phone, flashlight, laser pointer etc).

**Day 1: Light Lab**

**Introduction [15 mins]**

**Discussion**: Your Eye and Your Camera **[5 mins]**

**Exposure = Aperture + Shutter Speed**

*In small groups look at the different components of the camera - observe functions and talk safety.*

**Presentation**: Power Point or Packet **[5 mins]**

*What is Shutter Speed? How does it relate to light?*

**Interactive Activity:** Name that Shutter Speed **[5 mins]**

*Split the group into two teams for shutter speed identification game.*

**Light Lab** **[35 mins]**

**Light Lab:** 10 minutes each **[20 mins]**

*Use unbiased pairing methods to create teams of 2*

**Reflection:** Upload Photos + Identify favorite **[10 mins]**

**Check for Understanding**: Rotate one computer + identify the shutter speed on a sticky. **[5 mins]**

**Day 2: Photo Challenge Day**

**Introduction:** Examples of a self-portrait **[5 mins]**

**Project Challenge:** Make a Long Exposure portrait that represents you.

**Working Time:** Give it a go!  **[10 mins]**

**Pair Share:** Problem Solving **[5 mins]**

*What’s working? Where are you stuck? What Problem solving*

**Work Time**: Use feedback to finish your portrait **[10 mins]**

**Upload and select favorite** **[10 mins]**

**Reflection**: Gallery Walk **[10 mins]**