

## How to Create Voltage – Micro-Teach by Sonia Pasqual

Applying the following workshops:

Case-based Teaching LCTS2222 and Write to Learn LCTS3184 workshops

Course, Lesson Topic: Introduction to Stage Lighting TPA2220C (C means class is a lab format)

Contextualize your activity: This occurs week 3 - 4 of the semester. The student has learned about lighting how it is distributed and color in week 1, lighting fixture types and stage lighting week 2 and continuing stage lighting and electricity in week 3.

Learning Outcome: On completion of the class, students should understand stage lighting techniques, practices and equipment. Including electrical theory, use of dimming systems and implementation of lighting designs. This course includes a learning activities designed to ensure competence in oral communication.

Active Learning Technique Implemented: Creating group participation, allowing each group to play a role of a certain portion of the atom of copper. Copper is discussed previously and afterwards as the best conductor/metal for creating electrical flow of current or energy. Creating the atom of copper, plus a magnetic field and introducing music for the copper electrons to dance around the magnetic field, a force of intensity or movement is formed. This intensity creates voltage, when more electrons are introduced and moves a higher voltage is formed within the generator or circuit output.

Activity Outline:      Atom of Copper – The Best Conductor for Electricity

- 1) Short explanation of copper metal and its atom, what occurs when it's in a magnetic field moving around **2-3 minutes**
- 2) Short explanation of the 3 groups, colors and roles. **1 minute**
- 3) Allow participates to get in place. **50-60 sec.**
- 4) Play music and have electrons dance clockwise around magnetic field clustered in the center. **1:33m. CREATING THE FORCE OF INTENSITY!**
- 5) Stop everyone and explain how they just created Low Voltage. **30-40 sec.**
- 6) Have last group join in and move counter-clockwise dancing. **30 sec.**  
Dancing for **1:30m. CREATING THE FORCE OF INTENSITY PT 2!**
- 7) Stop everyone and explain how they just created High Voltage. **30 sec.**
- 8) Completed! 9:30-10 minutes