Light is a dynamic element of any space. When correct lighting elements are used effectively, the productivity and wellbeing of inhabitants in a space increase. Efficient and effective lighting, or the lack thereof, can have a great impact on the inhabitants of a space, especially as various tasks are performed throughout the day.

This research project focused on how the combination of various elements impact the form and function of a lighting fixture. There are numerous decisions to consider during the design, construction, and implementation of a light fixture. In order to make fully understand the influence of these decisions, research was conducted in the following areas:

1. The construction process of lighting fixtures: What considerations need to be made during the design and construction of a light fixture? How do all of the elements work together?
2. What is most important in the eventual function of a light fixture?
3. How to maximize efficiency in a light fixture: What materials can be used in a light fixture? Which materials are used most often?
4. What are the implications of using various materials in the final design of a light fixture?
5. What designs most effectively light a space?
6. How do lighting choices affect those in a space?
7. How do all of the elements work together?

As a conclusion to this research process, the light fixture, Kinetix, was created. Kinetix implemented the research elements found above through the design phase and into the eventual construction of a model. Kinetix embodied the main principles for effective lighting in order to create a light fixture that was both functional and aesthetically pleasing.

**Design**

KINETIX is a ceiling mounted light fixture unlike anything you’ve seen before. With a simple, streamlined profile, KINEIS looks stunning as a ceiling pendant. But it's more than that...

KINETIX is made of a combination of materials: wood, metal, and glass. Each element was chosen for its unique properties and how they interact with one another. The wood provides structure and stability, while the metal adds strength and durability. The glass allows for light to pass through, creating a soft and diffused illumination. The combination of these materials creates a unique and distinctive aesthetic.

**How it Works**

The KINETIX lighting unit is an interactive approach to a traditional lighting fixture. It comes with two main parts: a power rod, and a base unit.

The main power rod supplies all necessary electricity to the base units. This rod connects to the ceiling, with electrical wiring running down the length of the rod. At the end of the connector segment, this is used to attach the base units to the power supply.

Each base unit is designed to glow when connected to the main power rod (which is hung from the ceiling). In turn, each consecutive connection with other base units allows for a complete circuit in the fixture givning you the flexibility to have colors, yet unique, lighting throughout your space.

The only limit to this dynamic lighting experience is your imagination.

**Resources**