

# Creating Tools for Exploring Diverse Skin Tones and Colors of Light

**Problem:** There are not commercially available resources for providing a variety of skin tones for lighting designers or lighting design students to explore light color choices.

As a result, they often use their own skin, which is not representative of an ethnically diverse cast, and doesn't match common stage makeup.

Wooden mannequins, another regularly used tool in lighting education, are also not accurate representations of skin tone. No one is the color of white pine.

Not even Pinocchio.

Design students of all ethnicities should consider skin tone just as much as set and costume colors when designing, and the lighting BIPOC actors should be normalized.

It is important to allow students to consider skin tone in a thoughtful way, without having to ask a fellow student to serve as a model.

Tools are needed that designers can use over an extended period and allow them to experiment on their own time.



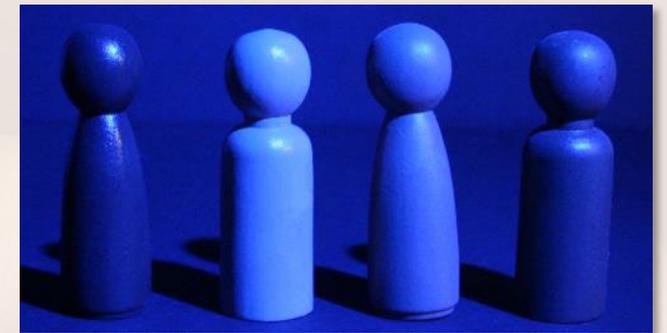
**Solution:** One solution is to create a library of skin tone avatars, using Ben Nye makeup and wooden peg dolls.

These avatars provide a practical tool to use in light labs or on-stage, allowing lighting educators to create projects around exploring how diverse skin tones appear under different lighting conditions.

Each avatar is labeled with the Ben Nye Makeup number and name for easy reference in the classroom, and for matching to makeup used in actualized productions.

These provide real-world examples of color for students to experiment with, but also provide curved surfaces to help demonstrate modeling and intensity light fall off, something a flat surface with paint samples cannot do.

Additionally, one could use the same technique on articulated wooden mannequins, using the most and least saturated options from the kit, specifically for use in classroom assignments.

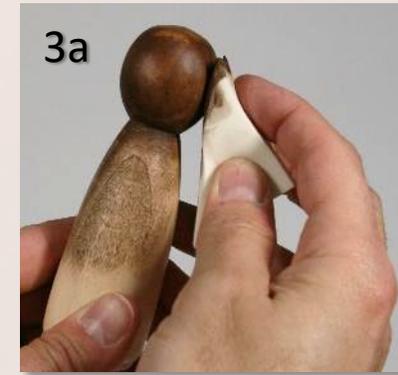
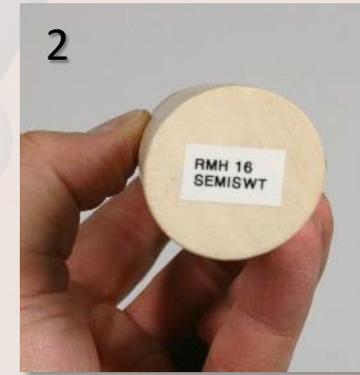


# Materials:

- 1) Wooden peg dolls from Amazon
  - a) A dozen 4.75" unfinished wooden peg dolls were purchased because they were a good size for our light lab.
  - b) These were large enough to see the results of color choices, but easy to store and move, and the large base makes them stable during use.
  - c) Price: \$40.00
  
- 2) Ben Nye Matte HD Olive – Brown Palette
  - 1) Chosen for its variety skin tone options
  - 2) There are MANY other colors and sets for purchase
  - 3) Price: \$64.00
  
- 3) Makeup applicators:
  - 1) Cost: \$5.00
  
- 4) A clear matte lacquer spray.
  - 1) They needed to be more durable, but not glossy
  - 2) Price: \$11.00
  
- 5) Final Cost \$120.00, and approximately 15 hours.



- Process:**
- 1) Each doll was lightly sanded with 0000 steel wool to ensure a smooth surface.
  - 2) Each doll and sponge was labeled by color and number BEFORE applying makeup to prevent errors.
  - 3) Each doll needed between two to three coats depending on saturation:
    - a) First coat or two raised the base tone closer to the finished color.
    - b) Second or third coat represents the finished actor's makeup.
  - 4) The dolls received several coats of the matte lacquer:
    - a) One between each layer of makeup.
    - b) Two coats after the final layer of makeup for durability.



*In process: Completing the bodies first and heads second was less messy*

# Application:

Many of the same color theory exercises can be used, but with realistic skin colors that exist onstage.

It emphasizes the importance of backlight for separation, and how saturation affects visibility.

The point is to allow students to experiment with tools that allow conversations to happen.



Class assignments include:

- 1) Finding color choices that illuminate three different avatars equally.
- 2) Finding colors that allow all actors to remain visible within a group.

