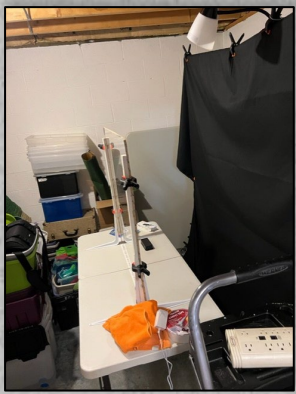


DIY Lightboard: Recycle Your COVID Plexiglass

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The Problems

- How do you create engaging videos to reinforcement complicated topics or flip your classroom?
- What can I do on days I work from home or during the summer?
- What do we do with all this leftover plexiglass?

On a Budget

Complete instructions and supply list are only one page (see right)!

For \$150, all items from a black backdrop to the markers and brackets can be purchased from Amazon or Lowe's. The setup can be assembled quickly (less than 15 minutes) and it is portable and easy to store. I tested three different cameras (iPhone, standard camcorder and professional camcorder) and found the quality of all to be appropriate for classroom use.

The Solution

Lightboard videos are an engaging teaching tool that capture the students' attention by immersing them in the material as the instructor visually and verbally illustrates the concepts.

Additional Adventures

- The University is currently collecting the COVID plexiglass for storage. The cost could be reduced, and more setups could be readily available by recycling this plexiglass. I would recommend a larger plexiglass size.

DIY Inexpensive, Easy to Assemble, Portable Lightboard

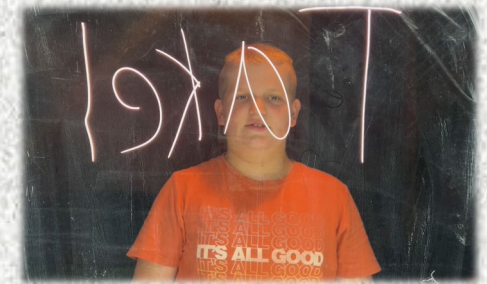
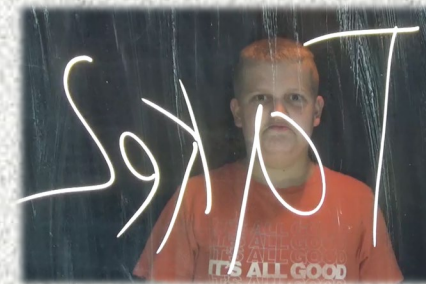
Supplies – From Amazon (prices subject to change – as of 11/25/2022)
Heavy Duty Muslin Clamps 4 ½ inch 6 pack – \$12.99
Black Backdrop 10 x 10 feet – \$31.99
EMART photo video studio 10 ft adjustable background stand backdrop support system kit with carry bag – \$30.99
6000K white LED strip lights, 16.4 ft dimmable LED light strip 6500K bright daylight white, strong adhesive – \$22.49
Expo dry erase neon markers – \$8.96
NO cutout sneeze guard panel for counter and desk, portable clear acrylic shield no opening, protective plexiglass shield 32" w x 24" h x ¼" t – \$59.99

Supplies – From Lowe's
Project source 11.5 in L x 1.875 in W x 9.05 in D white shelf bracket – \$2.98 each (x 4)

Supplies – Other
Table about waist high
Wood pieces – about 12 in x 2 in
Lint-free cloths
Spray bottle with 1:1 [water/vinegar](#)
Double-sided tape

Directions

1. Adjust table height until it is just above waist height. Position the plexiglass at a comfortable writing distance. Brace both sides of the plexiglass with scrap pieces of wood against the plexiglass and then the L-shaped shelf brackets. Both sides will be braced front and back to create a stand. Clamps can hold the brackets on both sides.
2. Next you will run the LED strand around the circumference of the plexiglass. Use double-sided tape on the table to position the LED lights along the bottom of the plexiglass and secure the brackets. You can use tape sparingly to tack the LED lights along the sides and top of the plexiglass.
3. Setup the black backdrop on the support system. Position your camera in front of your set up.
4. Write and record! Neon dry erase markers work best. Clean the board with the [water/vinegar](#) mixture and a lint-free cloth. Use several cloths. Keep one dry for the final swipe before you record.



Can you tell which was taken by an iPhone, standard camcorder or professional camcorder? Note: none of the images were flipped in this test because only the professional camcorder has the option.