

Hot Light

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THIS IS NOT A DEFINITIVE FINAL REPORT

FORMATIVE evaluation studies like this one often:

- **are conducted quickly**, which may mean
 - small sample sizes
 - expedited analyses
 - brief reports
- **look at an earlier version** of the exhibit/program, which may mean
 - a focus on problems and solutions, rather than successes
 - a change in form or title of the final exhibit/program

Hot Light Interview Results 10/9/99

Goals

Determine whether visitors understand:

- (1) What the detector is sensing
- (2) What the graph shows
- (3) What the main point is
- (4) How the exhibit is relevant to the world outside the museum

Method

Randomly selected 10 visitors to try the exhibit and answer questions.

Results

- (1) Most visitors (80%) understood that the detector senses light.
- (2) Most visitors (70%) understood that the graph represents more light by the height of the line.
- (3) Fewer visitors (40%) understood the main point that some light is invisible.
- (4) Few visitors (20%) realized the real-world connection that incandescent light bulbs are inefficient.
- (5) None of the visitors stated that most of the light from the bulb is in the infrared region.

Recommendations

The exhibit seems to be fairly easy to use and understand. A majority of visitors understood how to read the graph. I recommend no major changes to the exhibit.

One minor affordance change:

Add a small niche in the water bottle's platform in front of the detector, so that the bottle can only fit correctly on the platform (i.e., squarely facing the prism). Otherwise, no light gets through.

There were a few minor points in the label text that led to confusion in using the exhibit:

- (a) In "Try This," the visitor is now told to "Turn the crank slowly to move the light detector through the rainbow (or spectrum) created by the prism." This was a bit confusing, because some visitors moved the detector **only** through the visible part of the spectrum.

- (b) The second experiment in “Other Things to Try” should start out by saying, “Remove the water bottle from the detector...” Several visitors, having just done the water bottle experiment, left the bottle on the detector while they dimmed the light bulb. This defeated the purpose of the dimming experiment.
- (c) Add a label to the water bottle’s platform saying something like “water bottle goes here.” A few visitors placed the bottle in front of the arrow on top of the detector.