Fun House Mirrors
Concourse Gallery
Formative Evaluation
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August, 2012

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
Background

After the museum opens in its new home at Pier 15, we anticipate that the first few months will draw large crowds, possibly resulting in long lines to enter the museum. We’d like to make the experience of waiting more pleasant, or even enjoyable. Even after these crowds subside, we’d like to make the corridor leading to ticketing an interesting space, regardless of the length of time visitors spend in line. The Concourse gallery developed a prototype—a series of mirrors—which we hoped would improve visitors’ experience as they waited in line. The mirrors were a variety of shapes and sizes, some with distortion and others without.

Goals

To determine how visitors engage with mirrors while waiting in line.
Methods and Data Collected

We collected data on free day, Wednesday, August 1, 2012, from 10 am to 1 pm. We conducted two studies. For study 1, we randomly selected the third person to cross an invisible line at the start of the section with mirrors, and observed that person for 10 minutes, or until they had passed the mirrored segment. We observed 9 people: 3 adults, 3 teens (13-17), and 3 children (2-12). For study 2, we randomly selected the third child (2-12) to cross an invisible line in front of the “Curvy Shoe” Mirror, and observed that child until he or she moved on from the mirror. We observed 4 children, 3 under 8 and one 8-12.

Findings

Study 1

- Most (7/9) people in line looked at at least one mirror.
- The mirrors people looked at, and the time spent looking, seemed related to the speed of the line as they passed. If the line was moving, a mirror might get a passing glance; if the line was stopped, there was time for deeper exploration.
- Every mirror type was used by at least one person, with no mirror dominating the activity.
- Younger kids (<12) looked at more mirrors than teens or adults. Adults sometimes did not use a mirror themselves, but did watch kids who were using the mirrors.

<table>
<thead>
<tr>
<th># mirrors looked at</th>
<th># of people</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>Adult, Teen</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>Adult, Teen</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Adult</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Teen</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Child</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Child</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>Child</td>
</tr>
<tr>
<td>Average</td>
<td>3.8</td>
<td></td>
</tr>
</tbody>
</table>
Study 2

- All (4/4) children observed spent some time looking at the curvy shoe mirror.
- Two looked at the mirror the entire time they were near it. One child looked for part of the time, and one looked back and forth periodically.
- Two children stayed behind to keep looking as the line moved on.
- Thus, it seems even relatively simple mirrors have the potential to engage children.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Mirror looked at</th>
<th>Time spent</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>8 to 12</td>
<td>Curvy shoe mirror</td>
<td>1:32</td>
<td>looked until line moved</td>
</tr>
<tr>
<td>F</td>
<td>&lt;8</td>
<td>Curvy shoe mirror</td>
<td>0:30</td>
<td>looked until line moved</td>
</tr>
<tr>
<td>M</td>
<td>&lt;8</td>
<td>Curvy shoe mirror</td>
<td>0:36</td>
<td>at first, looking at friends. Then looked at mirror, back to friends, back to mirror. Wiggling legs. Stayed behind in line to play a bit, bending down to look. Eventually moved on and caught up as line moved along.</td>
</tr>
<tr>
<td>M</td>
<td>&lt;8</td>
<td>Curvy shoe mirror</td>
<td>0:19</td>
<td>Bending down to look (after having stood near it without looking for a while). Stayed to look as line moved on.</td>
</tr>
</tbody>
</table>

Additional observations:

- Folding mirrors mounted on walls sometimes got used as clacking noisemakers.
- Large dome mirror sometimes got pounded on
- Mylar loops got moved around, sometimes to show siblings, other times to stack on top of stanchion poles
- As the line slowed, people waited longer in place. The ladderlike mirror pieces started getting carried around further from the base. One girl held mirror sticks up to the other mirrors in that area. Some kids used the pieces to poke other stuff (eg trees, siblings) or to swordfight. When the line finally did move, some kids took care to return the sticks to the base—but later we found some of the sticks had been left on the ground.
- One young kid discovered with delight, "The spoon is a mirror TOO!"
- Though some kids did get out of line, or hang back in line, to use mirrors, it did not seem to obstruct the flow of the line. The kids typically caught up to their families after the line moved a little bit forward.
**General free day/line observations:**

There were 2 questions visitors sometimes asked:

- Why is this line so long/is this really the line? (it seemed some people did not realize beforehand that it was free day.)
- How long will it take to get in? (from people trying to decide whether it was worth it to wait, especially those who arrived later on in the morning)

Both questions were asked by folks arriving to the line. People already in the line seemed resigned to waiting.

**Next Steps**

- We would like to engage teens and adults, and to send a message that the space is for adults as well as children. So, we will experiment with ways to engage these groups; perhaps by placing some mirrors higher up, at adult eye-level.
- When choosing a subset of mirrors, we will look for those that have the potential for both shallow and deep experiences, since the speed of the line fluctuates so much.
- The final set of mirrors selected will also have to work within the constraints of the space in the new building:
  - A small, thin corner mirror could go in the “bump out”
  - Concave mirrors might be inset into the wall behind the West Gallery theater, if the wall can be modified in this way.
  - Multiples of shiny everyday objects (spoons, hubcaps) would match thematically with the wine glass exhibit planned for West Gallery.
  - A curvy fun house type mirror would need to fit in the narrow hallway. We may investigate how shallow the curve can be while remaining interesting.