Visitors’ outdoor plans, preconceptions, and interests

Joyce Ma, Jackie Wong
and Emily Hatch

July 2004
Outdoor Exploratorium – Front-End
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PURPOSE

This front-end study was conducted to identify visitors’ preconceptions about the outdoors, their outdoor plans when visiting, and the types of outdoor activities visitors’ may be interested in at the Exploratorium. More specifically, this study asks the following questions:

• What do visitors associate with the words ‘outdoor’ and ‘Outdoor Exploratorium’?
• What, if anything, do visitors do outside when they come to the Exploratorium?
• Are visitors interested in spending time outside on an Exploratorium activity? How long would they be willing to spend?
• Are visitors interested in outdoor programmatic activities? What about these activities are appealing to visitors and what about these activities dissuade visitors from participating? We asked about three particular activities that we have considered developing as part of the Outdoor Exploratorium project:
  — Then and Now Tour: Visitors can take a self-guided tour around the surrounding area to find out how the area has changed in the last 100 years.
− Toolkit Exploration: Visitors can check out a toolkit of ‘noticing’ tools to explore the outdoors.
− Kite Camera: Visitors can take aerial photographs using a camera mounted on a kite that they fly.

Each represents a different type of outdoor experience in content focus and format, and together they capture a range of experiences we have considered for Noticing Tours, programmatic activities to help visitors notice the outdoors. Although we may decide not to offer these activities as on-going public programs, we hope that this study can reveal what makes some appealing as well as characteristics of promising outdoor activities to develop.

METHOD
• We systematically selected visitors, either as pairs or individuals, for interviews. We chose to interview either individual adults or pairs with at least one adult. This is because we believe that decisions about coming to the Exploratorium and about participating in activities that may require a long time commitment, will largely require adult consent.
• We conducted interviews throughout a half-year period from November to April, and mainly on weekends since we plan to offer these activities mostly on Saturdays and Sundays.

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/5/2003</td>
<td>Wednesday</td>
</tr>
<tr>
<td>11/9/2003</td>
<td>Sunday</td>
</tr>
<tr>
<td>12/6/2003</td>
<td>Saturday</td>
</tr>
<tr>
<td>1/3/2004</td>
<td>Saturday</td>
</tr>
<tr>
<td>2/8/2004</td>
<td>Sunday</td>
</tr>
<tr>
<td>2/15/2004</td>
<td>Sunday</td>
</tr>
<tr>
<td>3/13/2004</td>
<td>Saturday</td>
</tr>
<tr>
<td>4/24/2004</td>
<td>Saturday</td>
</tr>
</tbody>
</table>

• The interview questions can be found in Appendix A.

DATA COLLECTED
• We conducted a total of 80 interviews (N= 80).
• Age Group. The interviewer estimated visitors age group.

<table>
<thead>
<tr>
<th>Age</th>
<th>Count (out of 80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult individual</td>
<td>34 (43%)</td>
</tr>
<tr>
<td>Adult pair</td>
<td>33 (41%)</td>
</tr>
<tr>
<td>Adult-child pair</td>
<td>10 (13%)</td>
</tr>
<tr>
<td>Adult-teen pair</td>
<td>3 (4%)</td>
</tr>
</tbody>
</table>
• Prior visits. As part of their interviews, we asked visitors if they had visited the Exploratorium before and how often they tend to visit.¹

<table>
<thead>
<tr>
<th>Prior visits</th>
<th>Count (out of 79²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None - First time visiting</td>
<td>33 (41%)</td>
</tr>
<tr>
<td>Visited before (over a decade ago)</td>
<td>20 (25%)</td>
</tr>
<tr>
<td>Visits once every few years</td>
<td>22 (28%)</td>
</tr>
<tr>
<td>Visits once every few months</td>
<td>4 (5%)</td>
</tr>
</tbody>
</table>

RESULTS

What do visitors associate with the word ‘outdoors’?

Visitors were asked what comes to mind when they hear or think about the word ‘Outdoors’. Their responses can be broadly classified into 5 categories given in Table 1. A majority of visitors think about the natural world, including both the natural physical and biological world; less than a fifth of the visitors interviewed mentioned any man-made objects or phenomena.

Table 1. What visitors associate with the word ‘Outdoors’

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
<th>Count (Out of 80 visitors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural, Physical World – Visitors</td>
<td>wind, water, earth, sunlight, mountains,</td>
<td>58 (73%)</td>
</tr>
<tr>
<td></td>
<td>weather, fields, rocks</td>
<td></td>
</tr>
<tr>
<td>Biological world – Visitors talk about</td>
<td>butterflies, insects, trees, grass, animals</td>
<td>57 (71%)</td>
</tr>
<tr>
<td>living things they find outdoors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor activities – Visitors talk</td>
<td>Adventure, camping, picnicking, hiking, sports,</td>
<td>36 (45%)</td>
</tr>
<tr>
<td>about things people do in the outdoors</td>
<td>exercise</td>
<td></td>
</tr>
<tr>
<td>Nature – Visitors mention ‘nature’,</td>
<td>Nature</td>
<td>22 (28%)</td>
</tr>
<tr>
<td>often with no additional details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built world – Visitors mention man-</td>
<td>gigantic sculpture, cars, playgrounds, houses,</td>
<td>13 (16%)</td>
</tr>
<tr>
<td>made objects and phenomena found</td>
<td>sidewalks</td>
<td></td>
</tr>
<tr>
<td>outside</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ A large percentage (94%) of the visitors we interviewed would fall under what Marilyn Hood consider ‘infrequent visitors’; that is, visitors who visit only a few times in a few years.

² One out of the 80 visitors interviewed did not answer the question about prior visits to the Exploratorium.
What do visitors associate with the words ‘Outdoor Exploratorium’?  

We also asked what visitors think of when they hear the words ‘Outdoor Exploratorium’.

- The Subject Matter. Many (81%) visitors talked about the subject focus for an Outdoor Exploratorium. Of these visitors, 97% of the visitors mentioned nature or something from the natural world. See Table 2.

Table 2. What subject matter visitors associate with an ‘Outdoor Exploratorium’

<table>
<thead>
<tr>
<th>Subject</th>
<th>Examples</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural world – Visitors mention ‘Nature’ with no further explanation</td>
<td>nature</td>
<td>6</td>
</tr>
<tr>
<td>Physical world – Visitors describe physical phenomena, geographic features and naturally occurring objects in the natural world</td>
<td>Climate, sunlight refractions, water patterns, rocks and stones, wind</td>
<td>36</td>
</tr>
<tr>
<td>Biological world – Visitors talk about living things they find outdoors</td>
<td>insects, trees, animals, plants</td>
<td>41</td>
</tr>
<tr>
<td>Built world – Visitors mention man-made objects and phenomena found outside</td>
<td>engineering experiments, airplanes, bridges, big buildings</td>
<td>9</td>
</tr>
</tbody>
</table>

- The Place. Half of the visitors (40/80) described a place or a setting as part of their vision of an Outdoor Exploratorium. These are broadly classified into 5 categories as shown in Table 3.

Table 3. What types of place visitors envision

<table>
<thead>
<tr>
<th>Place</th>
<th>Examples</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A ‘natural’ ecosystem – Visitors talk about an ecosystem with natural landforms and living things</td>
<td>Muir Woods is a trip to an Outdoor Exploratorium; Things to do with the locale</td>
<td>9</td>
</tr>
<tr>
<td>A landscaped space – Visitors describe a more ‘designed’ space which is landscaped</td>
<td>Gardens, a maze</td>
<td>7</td>
</tr>
<tr>
<td>Trails – Visitors talk about trails or pathways through an environment</td>
<td>Meandering paths, natural obstacle course</td>
<td>10</td>
</tr>
<tr>
<td>A playground – Visitors think about a science playground</td>
<td>playground equipment, play structure, amusement park</td>
<td>8</td>
</tr>
<tr>
<td>Inside Out – Visitors describe the Outdoor Exploratorium as the Exploratorium outside</td>
<td>Something like this but outside the building; This place with the roof off.</td>
<td>10</td>
</tr>
</tbody>
</table>
Do Exploratorium visitors have outdoor plans?
We asked visitors if they had any plans to spend time outside the Exploratorium. Half (40 out of 80) of the visitors interviewed said that they did not have any outdoor plans, and the other half either had plans or had already spent time in the area outside the Exploratorium.

What affects visitors’ decisions?
We looked to see if visitors’ decisions to spend time outside was related to weather or to the number of prior visits.

- We found a significant difference between the number of visitors who decided to spend time outside according to different weather conditions, $\chi^2(2, N = 80) = 8.03, p = .018 < .05$. Less visitors were inclined to spend time outside when the weather was cold, foggy and rainy. We note that the only day that was consistently cold and rainy was on the one and only Wednesday we conducted these front-end interviews. Because a majority of these visitors specifically identified the weather as their chief deterrent in going outside, we believe that the difference can be attributed to weather rather than to day of the week or another factor.

<table>
<thead>
<tr>
<th>Outside weather</th>
<th>Spend time outside</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold/ foggy/ rainy</td>
<td>No 11</td>
<td>Yes 2</td>
</tr>
<tr>
<td>In between (changing weather)</td>
<td>No 11</td>
<td>Yes 18</td>
</tr>
<tr>
<td>Warm/ sunny</td>
<td>No 18</td>
<td>Yes 20</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

- We found no significant difference in the percentage of visitors who decided to spend time outside according to the number of prior visits they made to the Exploratorium; $\chi^2(3, N = 79) = 1.55, p = .67 > .05$. So, first time visitors were just as likely to spend time outside the Exploratorium during their initial visit as visitors who had visited previously.

<table>
<thead>
<tr>
<th>Prior visits</th>
<th>Spend time outside</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None - First time visiting</td>
<td>No 17</td>
<td>Yes 16</td>
</tr>
<tr>
<td>Visited before (over a decade ago)</td>
<td>No 12</td>
<td>Yes 8</td>
</tr>
<tr>
<td>Visits once every few years</td>
<td>No 9</td>
<td>Yes 13</td>
</tr>
<tr>
<td>Visits once every few months</td>
<td>No 2</td>
<td>Yes 2</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>39</td>
</tr>
</tbody>
</table>

3 One visitor did not answer this question.
Visitors who did not plan to spend any time outside the Exploratorium gave the following reasons for not spending time outdoors during their visit.

- They came to visit inside the Exploratorium (14 out of 40 visitors, 35%). They explained:
  
  Visitor14: The Exploratorium has its own draw, with all the toys inside
  Visitor24: All the fun's inside, outside is for when you need some fresh air.
  Visitor45: We live far away. So it's the exhibits we're coming for.

- Visitors did not want to be outside in inclement weather (6 out of 40 visitors; 15%). The weather was foggy, cold and rainy the days these visitors were interviewed.

- They had not planned to visit the Exploratorium or anything immediately outside; their visit was a spontaneous decision (5 out of 40 visitors; 13%).

- They had other plans or time constraints that prevented them from spending time outside (6 out of 40 visitors; 15%).

- A few visitors (less than 10%) mentioned that
  - they have already seen the surrounding area, or
  - they are simply following their group around and do not make any decisions about whether or not they go outside.

What do visitors do outdoors when they visit the Exploratorium?

The other half indicated that they either did or were planning to spend time outdoors. Activities include:

- Walking around the lagoon (24 out of 40 visitors, 60%)
- Wandering around the area with no particular destination (15 out of 40 visitors, 38%)
- Picnicking or eating outside (6 out of 40 visitors, 15%)
- Bird watching (5 out of 40 visitors, 13%)
- In addition, a few visitors (less than 10%) also mentioned:
  - Biking around the area
  - Walking to Chestnut Street and the surrounding neighborhood
  - Walking to the beach (including the Golden Gate Bridge and Crissy Field)
  - Going to another part of San Francisco
  - Taking photographs particularly of the Palace of Fine Arts
  - Driving around
  - Playing outdoor games (e.g. Frisbee)

A majority of visitors who spend time outside the Exploratorium spend time around the lagoon and the Palace of Fine Arts. This area may, therefore, be the most promising to use for Outdoor Exploratorium programs since visitors come interested in exploring this area.
Would visitors spend time outside for an Exploratorium activity?

How much time are visitors willing to spend outside on an Exploratorium activity?
We asked visitors how much time they would be willing to spend outdoors on an Exploratorium activity. If members of the same visitor group did not agree, to be conservative, we picked the smaller of the time estimates they gave. Table 4 and Figure 1 show the distribution of time visitors said they were willing to spend.

Table 4. Amount of time visitors said they would be willing to spend outdoors

<table>
<thead>
<tr>
<th>Time</th>
<th>Count (out of 80 visitors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 15 minutes</td>
<td>71 (89%)</td>
</tr>
<tr>
<td>Up to 30 minutes</td>
<td>69 (86%)</td>
</tr>
<tr>
<td>Up to 1 hour</td>
<td>59 (74%)</td>
</tr>
<tr>
<td>Up to 1.5 hours</td>
<td>46 (58%)</td>
</tr>
<tr>
<td>Up to 2 hours</td>
<td>41 (51%)</td>
</tr>
<tr>
<td>More than 2 hours</td>
<td>20 (25%)</td>
</tr>
<tr>
<td>Depends</td>
<td>9 (11%)</td>
</tr>
</tbody>
</table>

Figure 1. Time visitors were willing to spend on an activity outside (decay curve)
Which activity would visitors be interested in?

We described 3 different outdoor activities: Kite-Cam, the Then and Now Noticing Tour, and Tool Kit Explorations, and asked which ones visitors would be interested in doing. These are activities that the Outdoor Exploratorium Project has considered offering to the general public and are described in Appendix B. All of these activities can involve committing more than 30 minutes of time outside the Exploratorium.

Visitors indicated that were interested in the following activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>1st choice</th>
<th>2nd choice</th>
<th>3rd choice</th>
<th>Total Interested</th>
<th>No interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kite-Cam</td>
<td>39 (49%)</td>
<td>18 (23%)</td>
<td>5 (6%)</td>
<td>62 (77%)</td>
<td>18 (23%)</td>
</tr>
<tr>
<td>Then and Now</td>
<td>23 (29%)</td>
<td>23 (29%)</td>
<td>13 (16%)</td>
<td>59 (74%)</td>
<td>21 (26%)</td>
</tr>
<tr>
<td>Tool kit</td>
<td>18 (23%)</td>
<td>23 (29%)</td>
<td>14 (18%)</td>
<td>55 (69%)</td>
<td>25 (31%)</td>
</tr>
</tbody>
</table>

Most visitors were interested in the three activities as described in the interview. Furthermore, close to half the visitors rated Kite-Cam as their first choice, indicating the potential popularity of this activity as compared to the other two activities.

What makes an activity interesting?

We asked visitors what they thought would be interesting about each activity they chose and coded their responses into broad categories. Note that the categories are not mutually exclusive; that is, a visitor’s response may fall into multiple categories. We did not attempt to define a more general coding scheme applicable across activities because 1) each of the three activities is very different and 2) visitors’ explanations for what made each activity appealing tended to be specific for that activity.

In the following, we give examples of visitors’ responses to better illustrate each category.

*Kite-Cam*

Visitors found the Kite-Cam activity interesting because

- They can get an aerial view (24 out of 57 responses).
  
  Visitor49: I remember my first airplane ride and what things look like from the air. Also you get overall views.
  
  Visitor50: The whole aerial perspective [is neat]. Things look very different from higher up than they do when you’re in the middle.
  
  Visitor74: It’s just, you could see things you could never see before. The idea of seeing things from a perspective you can’t have.

- They thought the activity was fun and adventurous (16 out of 57 responses)
  
  Visitor3: The kite is adventurous.
Visitor31: sounds exciting. I haven’t flown a kite since I was a kid.

- Their kids would enjoy the activity (9 out of 57 responses)
  Visitor37: I’d be more inclined to do it if I was here with kids
  Visitor51: These two (her sons) have rockets that shoot up. I think they would like it.

- It’s unique (9 out of 57 responses)
  Visitor20: I like the novelty of it. I used to like flying a kite when I was little
  Visitor35: it’s something that I wouldn’t get to do otherwise.

- They would like to take photographs (7 out of 57 responses)
  Visitor61: The idea of taking pictures from a kite is neat.
  Visitor78: Because I’m just starting to get into photography better, to look at things differently. When you start taking pictures, [you think about] how do you make it more appealing as a picture. It’s the act of trying to figure out the right lighting and focus. Sometimes you take a picture and you didn’t even see things you were looking at until you look at the picture.

- It’s hands-on (6 out of 57 responses)
  Visitor25: More involved, more interactive and hands-on
  Visitor54: Seems more progressive and interactive

- A few visitors also gave other reasons for finding Kite-Cam interesting. In particular, the activity
  - reminds them of something they did as a child (3 visitors), and
  - may give them a memento (i.e., a photograph) (3 visitors).

Then and Now Tour
Visitors gave the following reasons for choosing this activity

- They have a general interest in history (26 out of 49 responses)
  Visitor27: I like history, like the idea of the evolution
  Visitor50: I’m a history buff.
  Visitor55: I like history. I like San Francisco before and after stories, like the earthquake. [C] I like olden time stuff.
  Visitor75: Because history, especially in SF, intrigues me and I’ve never had a lesson on it. It’s the richest history in California, if not more states. This history of the world’s fair is unique to SF. It’s not duplicated anywhere else. You can go almost anywhere and it’s “here’s where the pioneers live”, you see that everywhere. The World’s fair is fascinating as well as the more current history of Oppenheimer and
how he came to be here. You should go beyond 100 years ago to the gold rush. There should be narratives- history is often portrayed as boring.

- They would like to find out more about the Palace of Fine Arts in particular (15 out of 49 responses)
  Visitor20: It would be cool to hear about this intricate structure and how it got here, I know it's from a world's fair but I'm not sure how it has changed.
  Visitor23: We like architecture and history, want to know why this was built, when, who built it
  Visitor36: we intended to walk around the palace of fine arts anyhow. it would be nice to learn some interesting facts while we're there.

- They have a general interest in architecture (13 out of 49 responses)
  Visitor2: I like history and architecture, it [the palace] reminds me of the lower part of the Louvre.
  Visitor24: I like looking at beautiful buildings and seeing how things have changed, noticing beauty and structural things would be very interesting
  Visitor80: I like architecture. It'd be nice to go look at some of that stuff.

- They like to see how things have changed (10 out of 49 responses)
  Visitor6: I like Then and Now the best because it's history and you can compare things, see how much has changed, see how we've changed as a population, what we can do
  Visitor17: [I] love old black and white photos, seeing SF then and now, interesting to see how things have grown and changed

- In addition, a few visitors found the Then and Now Tour appealing because
  - it would be relaxing (2 visitors), and
  - it's something they can walk through and experience, akin to an immersive environment (2 visitors).

**Tool Kit Exploration**

Visitors thought that this activity would be interesting because

- They would notice things in a new way (15 out of 48 responses)
  Visitor39: I like the idea of noticing things around you
  Visitor49: Too frequently we don't take time to look at things, or we can't see them. This kind of thing we are always trying to point out to our kids and grand kids. Anything which increases our awareness is important.
  Visitor55: You think you see something, but you don't really know what it looks like till you get close.

- Kids would enjoy it (11 out of 48 responses)
Visitor 40: It's probably the best activity for all of us to do together.
Visitor 46: It helps kids, hopefully look at some things in a different way.
Visitor 58: little kids like to get down and see bitty buggies.

- It gives them a chance to look at something in particular, usually a living thing, that is interesting to them (9 out of 48 responses)
  Visitor 12: I like looking at bugs.
  Visitor 66: I always wanted to see what things are in flowers and grass.

- It gives them a chance to explore (7 out of 48 responses)
  Visitor 8: [I] like to discover things
  Visitor 40: you can find interesting things.

- It's hands-on (7 out of 48 responses)
  Visitor 52: It's hands on and what the Exploratorium is about.
  Visitor 54: It's good and interactive. Being's outside means that you'll be more in touch with nature, interacting. But only on sunny days.

- The tools would be interesting (7 out of 48 responses)
  Visitor 37: I like gadgets and looking at things
  Visitor 67: I would like using the tools, especially if I were pointed to look for or look at things, like a treasure hunt.

- Also, a few visitors found the Toolkit Explorations idea interesting because
  - it leads to learning about ‘meaningful’ things in science (3 visitors),
  - they like being with nature (3 visitors),
  - it’s a unique activity (2 visitors), and
  - they can also then do it on their own (2 visitors).

What makes an activity not interesting?
Alternatively, we asked visitors why they did not choose an activity.

Kite-Cam
Visitors explained that they did not choose this activity because:

- They felt that the activity was not age appropriate. They either felt that the children in their group were too young or that the adults in the group were too old for the Kite-Cam activity. (5 out of 18 responses)
  Visitor 21: would need older kids for this, younger ones couldn’t do it
  Visitor 36: they are nice activities, but more catered to kids
They simply did not find this activity interesting and provided no additional information.  (4 out of 18 responses)

The activity was not unique enough to warrant the time (3 out of 18 responses). As one visitor explained:

Visitor4: you can fly a kite anytime

The activity felt too passive (3 out of 18 responses). For example, a visitor said

Visitor40: you don't get to do very much

It would take too much time (2 out of 18 responses)

Signing up beforehand would deter them from participating (2 out of 18 responses)

**Then and Now Tour**

Visitors gave the following reasons for not choosing this activity:

They felt that the Then and Now Tour would not be anything new to them or provide them with a unique experience.  (11 out of 21 responses).

Visitor7: I am familiar with the history already

Visitor66: Just walking around and looking at stuff, you could do on your own or at another museum

Visitor67: you can see it already yourself, you don't need a special tool. It's just there already.

It would not be age appropriate (7 out of 21 responses). Visitors felt that their children would be bored on such a tour or their children were simply too young.

Visitor34: I can't imagine dragging my three kids on a walking tour

Visitor46: You would lose the kids. It's not hands on and they would get bored quickly. History isn't hands on. There's no possibility of breaking something. You can also [physically] lose children in that big a place.

The tour is too passive (4 out of 21 responses). For example,

Visitor31: I like doing stuff outside, but as I said, I like the more active stuff, like flying a kite or running about.

Visitor47: I don't think of it as an outside thing. It's in a whole different category as a cultural resource. It doesn't sound like you're doing anything- just walking around.

They did not find this activity interesting and provided no further explanation.  (4 out of 18 responses)

Some visitors were not interested in history in general (3 out of 18 responses).

There isn't enough change between the then and now to make the tour interesting (2 out of 18 responses). As one visitors put it:
Visitor10: 100 years isn't a long time.

**Tool Kit Exploration**

When asked why they did not choose the Tool Kit Exploration activity, visitors gave the following types of reasons:

- They did not find the activity description interesting but could not articulate a reason why (7 out of 25 responses)

- The activity is not age appropriate for their group (6 out of 25 responses). These visitors felt that it only appeals to children, or alternatively it won’t appeal to young children.
  
  Visitor22: kids might like to crawl around the dirt, but I wouldn’t
  
  Visitor48: Kids don't have an attention span of more than 30 seconds so you need to grab them in the first thirty seconds. I don't think this will do this.

- The activity is not unique (6 out of 25 responses)
  
  Visitor13: Got stuff like that in school, in botany and biology.
  
  Visitor18: It’s the kind of thing we’ve done already: the picture shows flowers and we have done up-close exploration on our own, have taken close-up photographs of nature

- The environment outside the Exploratorium is not conducive to the toolkit exploration they want to pursue (5 out of 25 responses)
  
  Visitor27: might do this in a park because it’s a richer floral environment.
  
  Visitor29: Unless you were to plant native flowers to look into, I don’t think there’s much out there. To do that, I would go to a place that has a lot of different things, specializing in different flowers and plants.

- They activity seem to focus on plants and they had little interest in that subject (4 out of 25 responses)
  
  Visitor30: Just never had any interest in botany and plants

- The activity is difficult (3 out of 25 responses)
  
  Visitor45: The Outdoor explorations is too detailed. It requires too much patience for that sort of inquiry

- The activity lacked structure (2 out of 25 responses). It did not have the same focus as Kite-Cam or as the Then and Now Tour.

What stops people from signing up for the activities they're interested in?

We asked visitors if they would be willing to participate in their first choice activity if it were offered that day. Although most (59 out of 80, or 74%) visitors claimed they would, close to a quarter of the visitors still would not. These are the reasons these visitors gave:

- They have no time (8 out of 21 visitors, 38%).
• The weather is bad (5 out of 21 visitors, 24%).
• They came to see exhibits inside the Exploratorium first (4 out of 21 visitors, 19%).
• In addition, a few visitors mentioned that it would depend on the group they’re with and whether or not the activity would require additional fees.

SUMMARY AND DISCUSSION
This study looked at visitors’ preconceptions about the outdoors, what if anything they do outside when they visit the Exploratorium, and visitors’ interest in participating in outdoor programmatic activities.

Visitors’ Preconception of the “Outdoors” and of the “Outdoor Exploratorium”
Many visitors associate the outdoors with the natural world that includes living things and natural phenomenon; few think about the man-made, built world when they were asked to think about the outdoors. We also found that close to half the visitors thought not only about what is outdoors but also what they do outside; these are mainly recreational activities such as hiking and camping. Based on other evaluation studies with noticing tours, the team had formulated broad classes of phenomena to notice (e.g. the biological world, the built world). This front-end study, however, also suggest that visitors may find a connection to the Outdoor Exploratorium not just through content but activities associated with the outdoors: The outdoors is not just what is outdoors but an experience.

We also asked what visitors thought of when they thought of an Outdoor Exploratorium and coded their responses according to 2 broad types of categories. Many visitors talked about the content area of focus for an Outdoor Exploratorium. Consistent with their preconception of the outdoors, a majority of visitors who talked about the subject focus described an aspect of the natural world, either the biological world or the natural, physical world. Some visitors also envisioned the Outdoor Exploratorium scene although there was no clearly dominant vision of what visitors expect. Some visitors described a natural ecosystem to explore while others talked about a more landscaped area. Some visitors thought it would be similar to what is inside the Exploratorium, but outside, and others talked about trails and playgrounds.

Visitors’ Outdoor Plans
Half of the visitors interviewed had plans to spend time outside the Exploratorium; they don’t come to the Exploratorium just to visit the exhibits inside. Of these visitors, a majority planned to spend time around the lagoon in the Palace of Fine Art (PFA). Over one third planned to wander around the area with no particular destination. Fifty percent of the visitors, therefore, already come to the Exploratorium with outdoor interests and plans, which can serve as a starting point for developing engaging Outdoor Exploratorium activities and exhibits outside the Exploratorium at the PFA.

Of the visitors who did not plan to spend time outside, one third said they came to the Exploratorium to spend time inside the Exploratorium. (This was the most frequent reason given.) We also found that visitors were less willing to go outside when the weather was
cold/rainy/foggy than when the weather was warm and sunny. There was, however, no relationship between prior visitors to the Exploratorium and outdoor plans.

Some of the deterrents against visitors going outside will be difficult to address (e.g. inclement weather). However, the data also suggest that part of the reason that visitors do not plan to spend time outside when they visit the Exploratorium is their perception of the Exploratorium as an indoor experience. Getting visitors to spend time outside may depend on establishing a clear outdoor presence for both first-time as well a repeat visitors. This may mean that we need to create a critical mass of exhibits outside or establish on-going activities or programs so that the Exploratorium is not just what’s inside but also what’s outside.

**Visitors’ Interests in Outdoor Exploratorium Programmatic Activities**

On average, visitors reported being willing to spend 2 hours on outdoor activities at the Exploratorium. When asked about specific programs we planned to offer, we found most visitors found the proposed programs appealing, although a larger percentage rated Kite-Cam as their first choice. Each activity had its own draws for visitors, which are listed in this report to inform program or exhibit development.

However, there were some common reasons given for finding an activity not interesting. These include concerns that: the activity was not age appropriate for a member of their party, the activity was not unique or ‘special’ enough, or the activity felt too passive. Other reasons specific to each program description are given in this report, again to inform future development. Only one of the reasons given was unique to the outdoor environment. (For the Toolkit Explorations, a few visitors did not feel that the area outside the Exploratorium was rich or interesting enough to explore.)

We found that even though visitors may express interest, they may, nonetheless, elect not to participate in the described programmatic activity. The most frequent reason given was that they simply did not have the time. This corresponds with experiences we’ve had in recruiting visitors on the floor for our Then and Now Noticing Tour: visitors would stop by, look at the material, but never take the tour. These findings indicate that recruiting the casual visitor for Noticing Tours can be difficult, and we should explore other ways of getting visitor feedback when studying visitors in this project.

**Next Steps**

This is a front-end study wherein visitors answer questions about activities they envision based on a short paragraph description that we provide. As such visitors’ responses may not be good reflections of their actual reactions to ‘the real thing’. Nonetheless, visitors’ impressions of what may be appealing give us some ideas of the potential of an activity and can identify visitors’ interests which we may build on. Alternatively, their concerns can alert us to issues we would need to address not only in the ways we describe and advertise these activities but also within our development efforts.

To complement this study, we will also look at visitors’ reactions to the three Noticing Tours that were described in our front-end interview. These formative studies will give us a more detailed look at the type of noticing that visitors engage in and explore techniques we use as part of
these tours in encouraging visitors to take another look at the environment outside the Exploratorium.

ACKNOWLEDGEMENTS
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APPENDIX A: Interview Questions

1. When you hear the word “OUTDOOR” what do you think of? [Probe to exhaustion]

2. When you hear the word “OUTDOOR EXPLORATORIUM” what do you think of? [Probe to exhaustion]

3. We’re thinking of creating an outdoor space for our Outdoor Exploratorium. What would you like to do in such an outdoor space?

4. I didn’t have a chance to look outside earlier. What was the weather like when you first came in?

5. When you came to the Exploratorium today, did you have any plans to spend any time around the area outside the Exploratorium?
   YES    NO
   [if YES] Can you tell me a little about what you planned to do outside?
   [if NO] Can you tell me why not?

6. [If YES to Q4 AND weather is pleasant, OR if NO to Q4 AND weather is unpleasant] Would your plans change if the weather were different? [Pick the opposite of current conditions: foggy and cold / warm and sunny]
   YES    NO
   [If YES] How?

7. What is the longest amount of time you think you would be willing to spend on an outside activity with the Exploratorium?

8. I’d like you to look at xxx descriptions of activities we’re thinking of offering to our visitors. There’s the [read title of each and first paragraph]. Which ones do you think you [and your group] would like to do?

9. [If picked more than one and did not already rank] Can you tell me which one would be your first choice, the one you would want to do the most? [If picked all 3] Which would be your second choice?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Activity</th>
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<tbody>
<tr>
<td></td>
<td>Kite Cam</td>
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<tr>
<td></td>
<td>Tool Kit</td>
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<td></td>
<td>Then and Now</td>
</tr>
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10. Can you say a little about why you think you would want to do xxx? [repeat for each one they select]
11. If we were offering this activity <point to top choice activity on description page> today, would you sign up for it?

   YES    NO

   [If NO] Why not?

12. Can you say a little about why you think you would NOT want to do xxx? [repeat for each one they select]

13. 
   a. Have you been to the Exploratorium before?  YES    NO
   b. [Only if YES to above] How often do you come?
**APPENDIX B: Activity Descriptions**

**THEN AND NOW**  
Palace of Fine Arts and Marina District

*Why are there Roman-looking structures outside a science museum?*

Take a walk into the past with our THEN AND NOW Noticing Tour and find out how this area has changed in the last 100 years.

Tour is self-guided. Pick up a map and a tour packet at the THEN AND NOW desk, next to the Information Booth by the Store.

**GO FLY A KITE**  
Photography from high up

*What does this area look like from the air?*

Take photographs from high up, where the birds fly, with a kite that you fly and control.

This activity takes one hour. Sign up for a time slot at the Front Desk.

**OUTDOOR EXPLORATIONS**  
with a noticing toolkit

*What’s really out there?*

Check out a toolkit of ‘noticing’ tools including magnifying glasses, stethoscopes, and telescoping mirrors and take another look and listen to the familiar outside.

Pick up a toolkit and tools at the OUTDOOR EXPLORATION desk, next to the Information Booth by the Store.