



I N S T I T U T E F O R
Learning Innovation

**Formative Evaluation Report
for the LACMALab
nano Exhibition
at the
Los Angeles County Museum of Art
Los Angeles, CA**

September 2004

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EXECUTIVE SUMMARY

The Institute for Learning Innovation designed a holistic evaluation design to assess the effect of LACMALab on its visitors, the internal museum staff, artists and collaborators on exhibitions, and the larger museum profession over time. Diverse and unique as each exhibition is, this research was designed to look for common themes and experiences in various exhibitions that address the overarching goals of the space. The full study is intended to unfold over three to four years, with a focus on a different aspect of the LACMALab experience each year, along with the introduction of one or two new methodology approaches each year. This first study was tightly targeted to focus on specific aspects of the general features of the visitors experience in the participatory environment as well as a focused study of the visitor response area. A combination of methodologies included focused observations, visitor interviews, and written surveys. This data was intended to reflect general findings about the LACMALab experience in *nano* that could be applied to subsequent exhibitions.

The written demographic survey data revealed that, in many instances, there are two different types of experiences and, in effect, two different museums – the East and West campuses. The following list of factors emerged as the strongest patterns:

- LACMALab attracts more repeat visitors.
- LACMA West and LACMALab visitors are more likely to visit both buildings.
- LACMALab visitors are more purposeful and focused in their visits.
- Length of visit at LACMALab is above the national average for comparable size exhibitions of all types.
- LACMALab visitors tend to live in closer proximity to the museum than do other visitors.

Focused observations found a number of important trends in visitor behavior as listed below:

- LACMALab visitors prefer experiences that physically engage them, provide opportunities to observe interesting cause and effect situations, and experiences that relate to their prior experience and/or personal interests.
- LACMALab visitors avoid experiences that are not easily understandable, do not look like fun, or do not have enough physical and mental engagement.
- Quality of engagement and social interaction are strongly related while time spent is not related to either dimension.
- Label reading in LACMALab is relatively infrequent.

The most salient findings in the Visitor Response Area study were as follows:

- Wording and physical presentation of a visitor response question strongly impacts the quality of the responses.
- Visitors responded more favorably when prompts were unusual or unexpected with potential to be thought-provoking and when the prompt stimulated them to make personal connections to their life, work, interests, or experience. Visitors tended not to like questions that they perceived as too open-ended, broad, simplistic, too cute, vague, or confusing.
- Physical format and presentation is an important factor in the increase in frequency and quality of visitor responses.

Recommendations

The main purpose of this visitor study was to assist the LACMA staff in the development of future LACMALab exhibitions. If LACMA continues in its ground-breaking efforts to provide unique participatory experiences for families then periodic reflection on the purpose and evaluation of the progress of this initiative is recommended. The researchers formed the following recommendations to be considered and, hopefully, discussed by LACMA staff with the goal of enhancing the learning and discovery for visitors of all ages.

Seek to integrate the two LACMA campuses and the LACMALab experience.

Data suggest that there is not a two-way flow between the campuses. Visitors intercepted on the West campus tend to include the East campus in their visits more than do visitors intercepted on the East campus. Further efforts to develop a stronger two-way flow are strongly encouraged.

Use visitor preferences for areas and activities and other findings from the study as a template for designing future LACMALab exhibitions as expressed in the following questions:

- ✓ To what extent does this experience engage the visitor physically and mentally and to what end?
- ✓ How does this experience facilitate social interaction for a range of ages?
- ✓ To what extent does this experience provide unique and intriguing opportunities for observing and influencing cause and effect?
- ✓ What prior experiences and personal interests does this experience most address?
- ✓ How easy will it be for visitors to understand how they might engage in this experience? To what degree will staff mediation be needed for visitors to get the full benefit of the experience?
- ✓ How safe will the experience be perceived by visitors – both emotional and physical perceptions of safety?
- ✓ How do labels and wall text facilitate the visitors' experience? For whom is the text intended and why? How is the visitors' experience affected if no text is read during the visit? If the experience is little affected why is the text needed? If the quality of the experience is highly dependent on the text, how will you assure that visitors read it?

Treat the Visitor Response Area as carefully and seriously as the full exhibition.

Visitor response areas are critical components for visitors in the art museum. When thoughtfully designed and implemented it provides visitors with opportunities to reflect and respond in a deeper way to the experience. It sends a strong message to the visitor that the museum is interested in them as thinking beings. In addition, good visitor response areas can be an excellent source of data about how visitors are learning and responding to the museum experience.

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INTRODUCTION

LACMALab is the experimental research and development unit of the Los Angeles County Museum of Art that investigates new models for presenting art and engaging audiences. The hallmark of LACMALab is the participation of commissioned artists to create new works for all ages through a collaborative process. The goals of this innovative venture are to stimulate visitors of all ages to:

- Strengthen visual literacy skills;
- Engage freely in play, exploration, and personal discovery;
- Connect and apply the experience to their own life and interests;
- Participate in the creative process;
- Engage in dialogue and social interaction.

Since LACMALab is such an innovative space developed through a highly collaborative and richly creative process, any evaluation must mirror the goals and process of the project. The Institute designed a holistic evaluation design to assess the effect of LACMALab on its visitors, the internal museum staff, artists and collaborators on exhibitions, and the larger museum profession over time. All of the exhibitions featured in LACMALab to date have been unique and the focus of this study, the *nano* exhibition, was no exception. Diverse and unique as each exhibition is, this research was designed to look for common themes and experiences in various exhibitions that address the overarching goals of the space so that lessons learned through this study could be applied to future LACMALab exhibitions.

The full study is intended to unfold over three to four years, with a focus on a different aspect of the LACMALab experience each year, along with the introduction of one or two new methodology approaches each year. This first study was tightly targeted to focus on specific aspects of the visitor response area and on more general features of the visitors experience in the participatory environment. A unique aspect of this study was that it sought to enhance organizational learning by involving LACMA staff in professional development experiences through involvement in all aspects of the design, data collection and analysis, and interpretation of findings.¹

¹ LACMA staff and volunteers who contributed significantly to the design, data collection and analysis, and interpretation were Rachel Bernstein, Elizabeth Gerber, Jia Gu, Mary Lenihan, Gail Maxwell, Elizabeth Mackey, Braden Schmitt, and Toby Tannenbaum.

This report is organized in two parts with a final conclusion section at the end. The first part addresses the nature of the visitor experience in *nano* with a focus on the quality of their engagement with specific components in the exhibition, the degree of social interaction while engaging with the exhibition, and other related behaviors and responses to the exhibition. The second part looks at the specific function and role of the visitor response area.

PART 1: THE NATURE OF THE VISITOR EXPERIENCE

Introduction

The focus of this phase of the study was to gain a better understanding of how visitors of various age groups engaged with the *nano* exhibition components and how the participatory experience influenced social interaction. In addition, this part of the study sought information on what and why visitors liked or disliked about specific components of the *nano* exhibition. A broader goal of this study was to assess possible relationships between quality of engagement, social interaction, age, and/or social group, in order to design effective exhibits for the LACMALab gallery space in the future.

Towards this end, the Institute researcher provided professional development and training for LACMA staff in data collection for observations and interviews, distribution of written surveys, as well as training on data entry and operation of SurveyPro software. LACMA staff observed and recorded the behaviors of visitors at selected stations in the *nano* exhibition and also conducted interviews as visitors exited the gallery.

Methodology

1. Focused Observations

Four areas of the *nano* exhibition were selected by LACMA staff for the observation portion of this study: (1) Resource Area; (2) Inner Cell; (3) Mandala; and (4) Art-Making Space. LACMA staff observed roughly the same number of visitors (n=33-40) in each of these four areas. To ensure a random sampling, each data collector observed every fifth visitor at their station from the time the visitor crossed an imaginary line around the area to the time they left or after 30 minutes of continuous observation, whichever came first. During the focused observations, data collectors followed protocols that asked them to record when the observation took place; the area observed; crowd conditions; age group of visitor; time spent in the area; and to what extent visitors read text or labels, if at all. Data collectors also rated visitors based on their level of engagement and social interaction. (See Appendix C for the observation protocol with specific engagement and social interaction scale.)

2. Exit Interviews

LACMA staff interviewed fifty-four visitors as they exited the *nano* exhibition in an effort to assess visitor participation, behavior, and social engagement. Visitors were asked a number of questions related to why they visited LACMALab, what areas or activities they found most/least engaging and why, how much time they spent in the *nano*

exhibit, and to what extent they used the exhibit labels and text. (See Appendix D for the exit interview protocol and data collection form.)

3. Demographic surveys

In order to have a basis of comparison, the sample of visitors who were interviewed were also give a short written demographic survey to complete. In addition, a random sample of visitors intercepted in the West LACMA building (not in *nano*) and the East LACMA building were given a written survey only. (See Appendix E for the survey form.)

Results & Discussion

Description of Sample

LACMA staff observed 145 visitors in the *nano* exhibition; 54 people were interviewed and completed the written demographic survey as they exited the *nano* exhibition; 97 visitors to LACMA West (not in *nano*) and 122 visitors to LACMA East completed written demographic surveys. Table 1 provides specific details of the demographic distribution for the four data sources. Because the observation sample did not ask visitors to complete the written survey, the demographic data is minimal and is not considered in the following discussion. Overall, the interview and West and East LACMA samples are comparable on most points, suggesting that the interview sample was fairly representative of most visitors in general. There were, however, some expected and interesting differences. Note that small differences of 10-15 percentage points in Table 2 are not significant as the sample sizes are not large enough. The areas highlighted in yellow indicate differences worth noting and are discussed below. Otherwise the responses are considered roughly equivalent.

Social Group: It is no surprise that the interview sample of visitors exiting the *nano* exhibition would be largely comprised of families with children. The differences between the LACMA West and East samples are curious. No doubt the higher percent of families with children in the LACMA West sample reflects that many of them were going to or had been to the *nano* exhibition. The low percentage of families with children in the LACMA East sample is reflective of the typical art museum audience.

Visits to LACMA: While all three samples had a roughly equivalent percent of first time visitors, the *nano* audience tends to repeat their visits to LACMA more often than regular visitors to LACMA West and much more often than regular visitors or LACMA East. There were also differences in the ways the samples made use of the two buildings. Of the visitors intercepted in the West campus, either in the *nano* exit interviews or for the written surveys in the lobby of the West campus, slightly over half indicated that they had been or were planning to visit the exhibitions and collections in the East campus. Conversely, of those visitors completing written surveys in the East campus, barely one-third indicated that they planned to or had visited the West campus or *nano* during that visit.

Visits to Other Art Museums: The *nano* interview sample tended to visit other art museums less than the LACMA West and East samples. Of the visitors in the interview sample who did visit other art museums, over half were very frequent visitors, a higher percentage than either the West or East campus samples. This finding, together with the tendency of the *nano* interview sample to visit LACMA more frequently suggests that the *nano* visitors are largely loyal to LACMA and that when they do go to other art museums, they go quite often.

Residence: The large majority of all three samples lived less than a 3 hour drive from LACMA. It appeared that slightly more of the East campus sample came from farther away than a three-hour drive than was the case for the interview and West campus samples. This suggests that *nano* and the West campus, by virtue of being the location of the Boone Children’s Gallery, attracts more local people while the East campus attracts more non-local people.

Table 1: Demographic Data by Data Source

	Observation	Interviews	LACMA West	LACMA East
Gender				
Female	N/A	68% (n=36)	66% (n=76)	58% (n=55)
Male		32% (n=17)	35% (n=40)	42% (n=40)
Age Group				
Child/teen	62% (n=90)	28% (n=15)	16% (n=19)	12% (n=12)
20s-30s	8% (n=12)	33% (n=18)	46% (n=56)	43% (n=42)
40s-60s	28% (n=41)	35% (n=19)	35% (n=43)	37% (n=36)
70s+	1% (n=2)	4% (n=2)	3% (n=4)	7% (n=7)
Social Group				
Alone	---	---	11% (n=13)	13% (n=13)
Family/child	100% (145)	85% (n=46)	49% (n=60)	24% (n=23)
Family/adult	---	7% (n=4)	10% (n=12)	16% (n=15)
Family/friends	---	---	27% (n=33)	40% (n=39)
Time Spent	N/A			
Less than 1 hour		4% (n=2)	11% (n=13)	10% (n=10)
1-2 hours		48% (n=26)	51% (n=62)	41% (n=40)
3+ hours		48% (n=6)	39% (n=47)	49% (n=47)
First Visit to LACMA	N/A	28% (n=15)	32% (n=39)	33% (n=32)
LACMA frequency-prior visits	N/A			
None		5% (n=2)	12% (n=9)	15% (9)
Once		18% (n=7)	27% (n=20)	25% (n=15)
2-3 times		32% (n=12)	35% (n=26)	43% (n=26)
4+ times		45% (n=17)	27% (n=20)	18% (n=11)
LACMA East/West Visitation	N/A			
LACMA East		56% (n=30)	56% (n=66)	97% (n=92)
LACMA West		100% (n=54)	96% (n=114)	31% (n=29)
<i>nano</i> exhibition		---	---	22% (n=21)
Visits Other Art Museums in 12 months	N/A	50% (n=27)	78% (n=95)	78% (n=76)
Frequency of other art museum visits	N/A			
None		--	--	--
Once		11% (n=3)	34% (n=28)	24% (n=18)
2-3 times		33% (n=9)	42% (n=34)	45% (n=34)
4+ times		56% (n=15)	25% (n=20)	32% (n=24)
Residence				

Walking Distance	N/A	11% (n=6)	6% (n=7)	12% (n=12)
Less than 3hrs drive		83% (n=45)	84% (n=102)	63% (n=61)
More than 3hrs drive		6% (n=3)	11% (n=13)	25% (n=24)

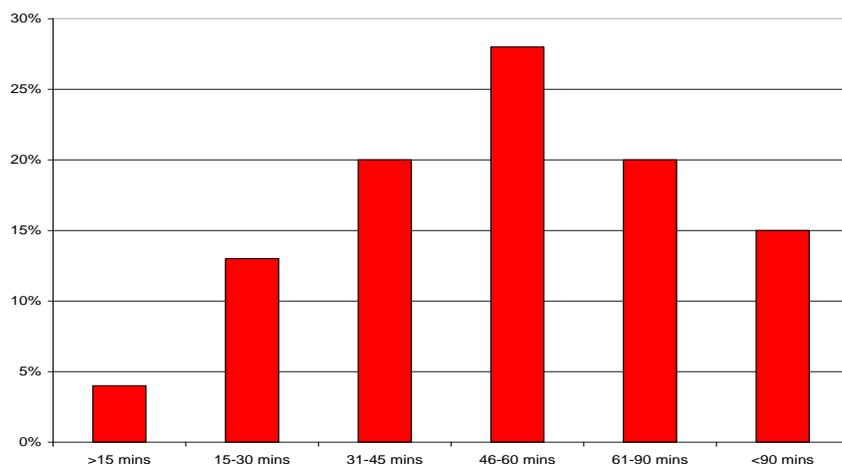
nano Visit History & Reason for Visiting

Visitors in the exit interview sample were asked questions about their visit history to the LACMA Lab exhibitions, why they were visiting the *nano* exhibition that day, and how much time they had spent or were planning to spend both in the exhibition and at LACMA.

Almost two-thirds (63%, n=34) of the interviewed visitors were visiting the *nano* exhibition for the first time. Of those who had previously seen the exhibition, 85% (n=18) said they had been there 2 or more times. This finding supports the demographic survey evidence that suggested *nano* visitors were more commonly repeat visitors than were non-*nano* visitors. Almost half of the visitors (44%, n=24) said they had visited other exhibitions in the LACMA Lab space. The most commonly remembered exhibition was *Making* (71%, N=15) followed by *Made in California* (48%, n=10) and *Seeing* (24%, n=5). One person mentioned *Music for the Eyes*.

Most of the interviewed visitors had a clear reason for coming to LACMA that day. Just under half (43%, n=23) said they came to see the *nano* exhibition; 42% (n=22) said their purpose for visiting was to spend quality family time together and the LACMA Lab space was their choice for doing that. Fifteen percent (n=8) of the interviewed visitors said they had no particular purpose and just happened upon the *nano* exhibition. *nano* visitors spent approximately the same amount of time at the museum as did visitors in the West and East campus samples. When asked to indicate how much time they spent in the *nano* exhibition the times range between less than 15 minutes and over 90 minutes. The specific breakdown of time spent in *nano* is included in Table 3.

Chart 1: Length of time spent in *nano*



Visitor Behavior, Engagement, and Social Interaction in nano

Most and Least Engaging Areas

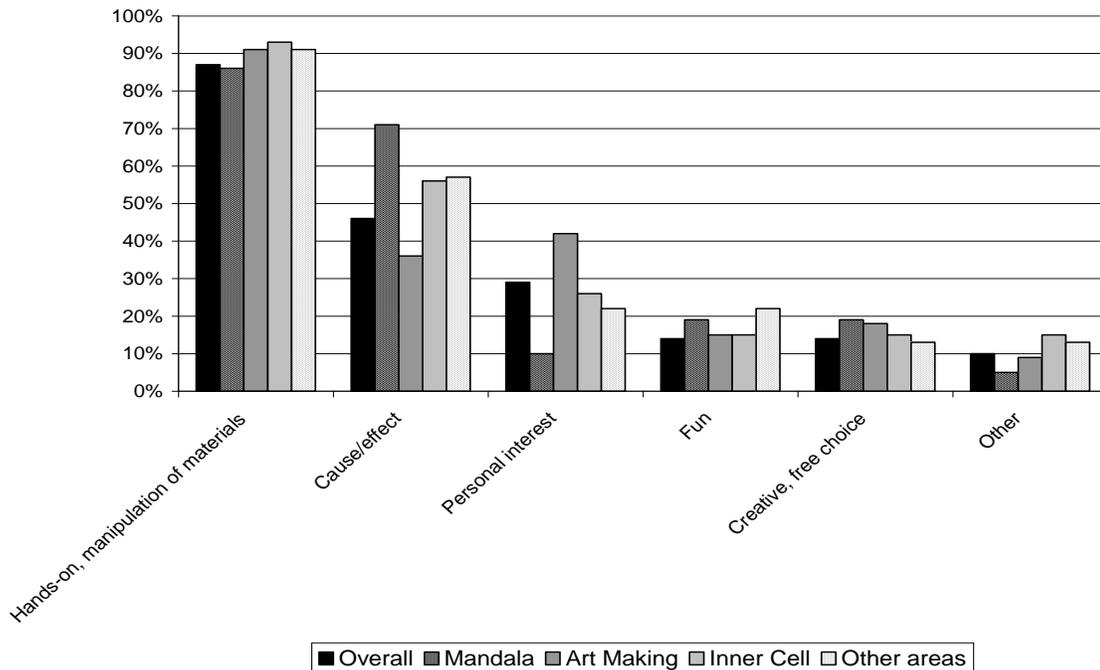
Visitors who were interviewed after their *nano* visit were asked to indicate the areas or activities they found most engaging. These preferences are listed below:

- Art Making (61%, n=33)
- Inner Cell (50%, n=27)
- Mandala (39%, n=21)
- 3-d Draw (22%, n=12)
- Tunnel (13%, n=7)
- Prism (7%, n=4)
- Resource Area (6%, n=3)

The following areas were mentioned twice each: area with blue balls, control room, and the exhibition introduction wall.

When asked to explain why they found a particular area engaging, visitors gave a variety of reasons with the hands-on factor being most mentioned. Chart 2 provides a breakdown of the categories of reasons for liking an exhibition component by the overall count and across the four areas that were the subject of the focused observations.

Chart 2 Reasons for liking specific areas



It is clear that all of the areas that visitors found engaging were favorites because they engaged people physically, they were “hands-on” as many visitors put it. Watching

changes and seeing a cause and effect relationship were frequently cited reasons that visitors liked the Mandala, the Inner Cell, and the other areas. When an area related to a personal interest, such as the art making area, visitors found that engaging.

Interviewed visitors were also asked to identify areas they found least engaging. These areas are listed below:

Nothing	(52%, n=28)
Tunnel	(19%, n=10)
Blue Balls	(13%, n=7)
Resource Area	(9%, n=5)
Inner Cell	(6%, n=3)

Two people mentioned not liking the 3-d Draw, mostly because it required a staff to use it, and one person each mentioned not liking the art making area and the prism.

The most frequent reason visitors gave for not liking an area was that they did not understand what to do or found it confusing (50%, n=13). Slightly over one-fourth (27%, n=7) of those not liking something said it was because it was not interesting or fun; 15% (n=4) said there was not enough to do; 15% (n=4) said it was not age appropriate, either too hard or too easy for their child; 12% (n=3) of the visitors said they did not like something if it was dark or scary for their child. Two people did not like something because it was not working or was disappointing in its effect.

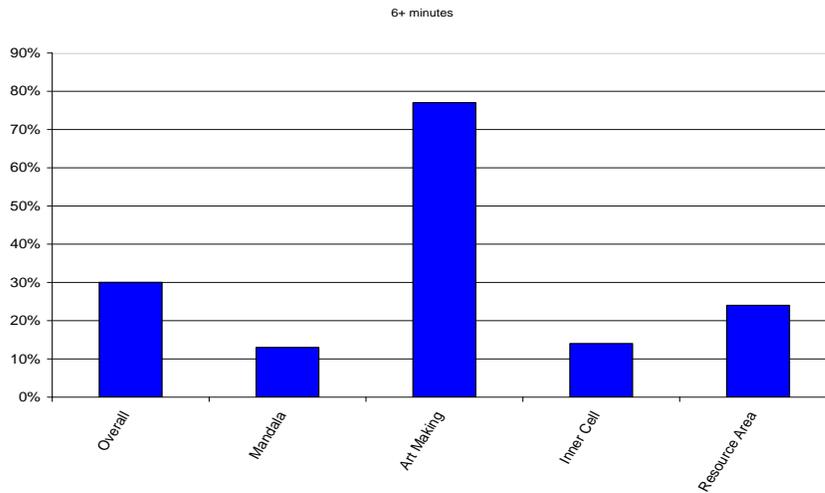
The focused observations were designed to assess specific aspects of visitor behavior at four specific exhibition components: the Inner Cell, Mandala, Resource Area, and Art Making. Data were collected on approximate time spent in the area, quality of engagement, and quality of social interaction.

Time Spent at Focused Observation Stations

On average, most visitors (70%, n=101) spent between 1-6 minutes at a particular station. When this data is analyzed by individual station, the average time does not hold consistent across stations. Chart 3 indicated the percent of visitors who stayed at a station longer than 6 minutes. Clearly the Art Making station held the most visitors for the longest time. The slight difference across the other 3 areas is not significant. In those other 3 areas, slightly over one-third (38%, n=55) stayed 1-2 minutes and 32% (n=46) stayed 3-6 minutes.

A number of studies have been conducted examining the amount of time visitors spend in exhibitions. For instance, Beverly Serrell investigated the amount of time visitors spent across 108 exhibitions, including science centers, zoos and aquaria, history museums, and art museums (Serrell 1997). From this data, Serrell posits that visitors tend to spend, on average, approximately 13 minutes in an exhibition, regardless of its size or topic. In this way, the *nano* exhibit is well above average in terms of time spent.

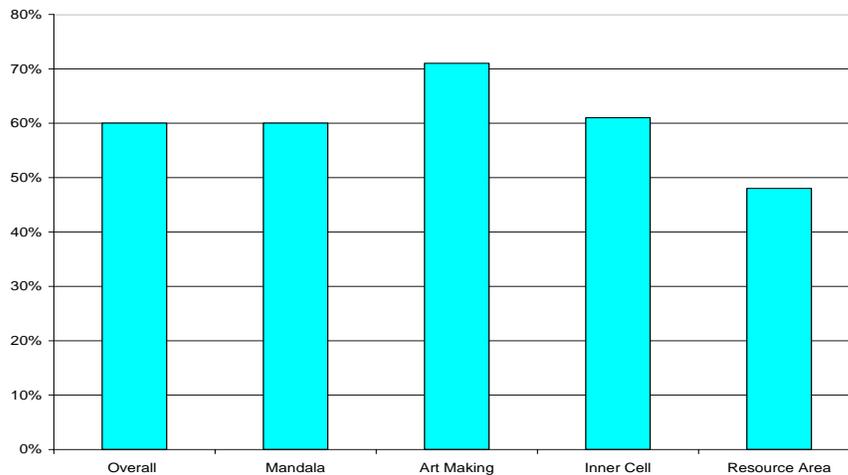
Chart 3: Percent of visitors at a station for over 6 minutes



Quality of Visitor Engagement

Visitors were also rated according to the quality of their engagement at the four stations. (See appendix C for the engagement rating rubric.) The four-part rubric was collapsed into a two-part rubric with ratings 1 & 2 combined into a Low rating and 3 & 4 combined into a High rating. Overall, 60% (n=87) of the visitors were rated as having a High quality of engagement at a station. This distribution shifts a bit when analyzed by individual station as indicated in Chart 4 below.

Chart 4: Percent of High Quality Engagement Ratings by Station



Not surprisingly, the Art-Making space showed a higher percentage of 3 and 4 scores than the other three areas, as visitors who did become involved in art projects tended to remain focused until they completed the project. On the other hand, the Resource Area reflected a slightly lower percentage of “high” engagement ratings. This is no doubt due to the nature of the activities at each station.

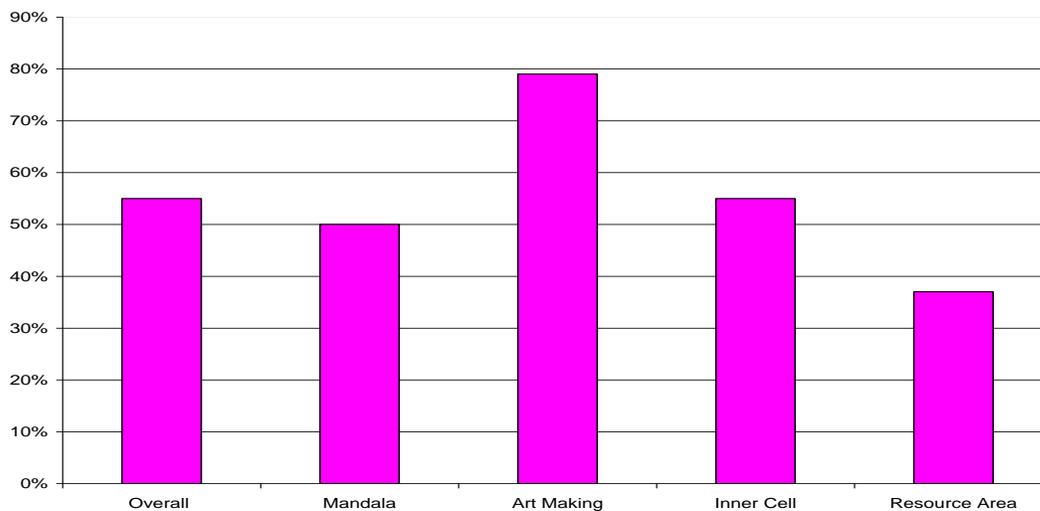
Researchers also sought to draw connections between age group and engagement levels. While the data sample at each individual station was too small to generalize correlations between age and engagement levels, the general trend was that preschoolers and young children showed the largest percentages of high engagement in all four areas—roughly 75% for each area—while other age groups generally fell in the 50% range.

Adults who were highly engaged in exhibit activities were often accompanying children. For example, many adults were observed helping a child work on art projects or using exhibit components to play and explore with their children. A few adults were highly engaged on their own—for example, one adult spent 15 minutes in the Resource Center building a structure and another spent 8 minutes playing with the sand in the Mandala activity—but this was not the norm. The highest level of adult engagement was in the Art-Making space (58% of adults were rated “high”), which likely reflects the fact that the children and teens they accompanied were most engaged in this area the adults then became involved through a social/family connection. Still, adult engagement in this area was not as high as child and teen engagement, possibly because some adults used this space to occupy their children while they relaxed or carried on unrelated conversations with other adults.

Quality of Social Interaction

Visitors were also rated according to the quality of their social interaction at the four stations. (See appendix C for the social interaction rating rubric.) The four-part rubric was collapsed into a two-part rubric with ratings 1 & 2 combined into a Low rating and 3 & 4 combined into a High rating. Overall, 55% (n=80) of the visitors were rated as having a High quality of social interaction at a station. This distribution shifts even more than in the quality of engagement rating when analyzed by individual station as indicated in Chart 5 below.

Chart 5: Quality of Social Interaction Rating by Station



Similar to engagement levels, the largest percentage of high ratings was found in the Art-Making space (79%; n=27) and the lowest in the Resource Area (36%; n=12). This may be due to the fact that activities in the art-making area were more conducive to social interaction, or that resource areas are generally places for more individual exploration.

Further, visitors were rated the same or within one point on social interaction and engagement in the majority of cases. This finding suggests that engagement and social interaction levels are often connected—an idea examined later in this report.

Observation data also suggest that exhibition components were in fact facilitating social interaction to a great extent. The majority of observation data on high social interaction—regardless of the station—included comments that reflected social groups (most often families) talking about an activity (such as the sand Mandala); working together on a project (such as parents and a young child who built objects together in the Resource Area); pointing out interesting elements (such as a father who directed his son to look at changes in the Inner Cell’s floor pattern); speculating on the scientific process of various exhibit components; or exploring components together (such as a young child who invented a game with the Bucky balls in the Inner cell and actively involved her father and peers in the component).

When social interaction was lower than the quality of engagement, the reason was often because a visitor was so focused on the activity that they did not seem to need or want social interaction—such as a preschooler who played with her shadow and rolled Bucky balls in the Inner Cell for approximately five minutes on her own, but did not attempt to involve her mother in the activities. In other cases, no one else was around to interact with socially, so the social interaction rating was naturally low.

Relationship between time, engagement, and social interaction

When several different measures are used to assess ways in which visitors engage with specific areas, as was the case in this study, it can be difficult to determine how to interpret the various findings. Using the relative categories of “cool,” “warm,” and “hot,” help to create a more complete picture of the ways visitors are interacting with components. Table 2 illustrates broad trends in visitors’ reactions to the four *nano* stations. A component was rated as “Cool” when the percents reported above separately feel between 0% and 30%; the “Warm” category included percents between 31% and 60%; and the “Hot” category included percents between 61% and 100%.

Table 2: Relationship between time, engagement, and social interaction

	Cool	Warm	Hot
Time Spent	nano Mandala Inner Cell		Art Making

	Resource Area		
Quality of Engagement		<i>nano</i> Mandala Resource Area	Art Making Inner Cell
Social Interaction		<i>nano</i> Mandala Resource Area Inner Cell	Art Making

One interesting finding was that the amount of time visitors spent in an area did not necessarily reflect their engagement and social interaction levels. For example, duration was relatively short in the Inner Cell and Mandala, while the same visitors scored fairly high on participation and interaction at those stations. Similarly, visitors tended to stay longer in the Resource area than in the Inner Cell or Mandala, but were rated lower on engagement and interaction.

Out of all the visitors observed at all four stations (n=145), 60% (n=87) were rated high on engagement and 55% (n=80) were rated high on social interaction. As this discrepancy is rather small, it is safe to conclude that there is a fairly high connection between engagement and social interaction. The question naturally arises, however, as to whether high engagement leads to high social interaction or, similarly, low engagement leads to low social interaction.

Those visitors who were highly engaged in an exhibition component often involved others in their social group (such as the young child who invented a game with the Bucky balls in the Inner Cell), and social interaction was more often built around engagement in activities than not.

On the other hand, social interaction was often influenced by engagement—either by encouraging it (for example, one boy was distracted at an activity and then brought back into it by his family) or by discouraging it. In a few cases, a visitor would become initially engaged in a component but would leave the area when they did not receive a positive social response from the rest of their group. Sometimes it was a child whose peers or parents were not engaged in the component, and sometimes adults unsuccessfully tried to engage their children in an activity. Either way, it was generally important for all members of a visitor’s social group to become engaged in an activity (even if initiated by a single visitor), in order to sustain high levels of engagement and social interaction.

In some cases, however, social interaction and engagement did not seem connected at all. For example, some visitors were rated as having a high level of engagement and low social interaction—indicating that social interaction is not essential to sustaining individual engagement. Still, the data suggest that high engagement in exhibition components does stimulate social interaction to some extent.

Label Reading Behavior

One small part of both the observation and the exit interview data was to determine visitors' patterns of label reading in other museums, to what extent they read labels in the *nano* exhibition, which labels they found most informative or interesting and why, and which labels they found to be confusing or uninteresting and why. In the observations conducted in the Resource Area, 60% (n=20) of the visitors did little or no reading with 12% (n=4) of the visitors in this sample reading labels briefly. The remaining visitors in this data set were not old enough to read (i.e. preschoolers or young children) and thus could not be rated on this scale.

Based on the exit interviews, however, a more nuanced picture of visitors' label reading practices emerged. When asked to describe their general use of labels in museums, 17% (n=9) said that they were frequent label readers and about the same percentage (13%, n=7) said they were infrequent or cursory label readers. Over half of the responses (55%, n=28) read labels on a conditional basis. The most frequently cited reason (35%, n=18) that this group gave for reading a label was if it interested them, if they were interested in the subject or had a personal connection to the object or topic. Some visitors (12%, n=6) said they read labels when they visited a museum without children but usually did not read labels when with their children. A few visitors (8%, n=4) said they read labels with their children when the information was age-appropriate.

When asked if they read labels in the *nano* exhibition specifically, 60% (n=32) of visitors interviewed said they had. Of those visitors, 60% (n=18) reported that they either read a few or most labels thoroughly; while 40% (n=12) said they read a little from either a few or most labels. When these visitors were asked to identify which labels were most informative and why, there was no pattern to their response.

PART 2: VISITOR RESPONSE AREA

Introduction

In December 2003, the Institute researcher facilitated staff training for data collection in the LACMALab's visitor response area. The purpose of the visitor response area study was to gauge the visitors' interest in and level of engagement in the *nano* exhibit as reflected by the content and number of the response cards. To that end this part of the study was designed to determine how the type of question as well as the physical design of the response area influenced the nature and quality of visitors' responses. An additional goal of this evaluation was to be able to apply the results to future LACMALab exhibitions, and to formulate more effective question and design strategies for future visitor response areas.

Methodology

The methodology employed in this study consists of two components: 1) question testing and 2) response card tabulation.

1. Question Testing

During this phase of the study, LACMA staff approached visitors as they left the response area and conducted brief interviews with visitors asking them to select their favorite, second favorite, and least favorite question out of a list of six possible prompts or questions. Visitors were then asked to explain why they liked or disliked a particular question and to provide a possible answer to their favorite question. In addition, visitors were also asked how often they tend to write a response when they see visitor response areas or books in museums. (See Appendix A for a list of the questions and prompts tested during this phase and the interview protocol.)

2. Response Card Evaluation

This phase was designed to better understand the effect of the type of question as well as the influence of physical design of the response material. See Appendix B for the protocol and data form for this phase of the visitor response area study.

First, from mid-December 2003 to the end of February 2004 LACMA staff collected, counted, and categorized visitor responses for the original visitor response area question prompt, “Tell us about your *nano* experience. What do you think? What do you feel?” The categories into which visitors responses were sorted are included in Appendix B. White 4” x 6” note cards and small golf-style pencils were made available for visitors to write their responses to this question. The white cards had pre-punched holes so visitors could thread their cards on pegs that were places all over the backboard in this area. Illustration 1 below shows what this area looked like during this first stage.

Second, the question that received the highest percentage of first- and second-choice ratings in the first Question Testing phase, “What connections do you see between art and science?” replaced the original question in the visitor response area. The same pre-punched white 4” x 6” note cards and small golf-style pencils were made available for visitors to write their responses to this question. From the end of February to the end of March 2004, visitor responses from this configuration were collected, counted and categorized by LACMA staff.



Illustration 1: Original Visitor Response Area



Illustration 2: Revised Visitor Response Area

Third, the question “What connections do you see between art and science?” remained but the white cards and small pencils were replaced by bright blue die-cut hexagonal-shaped pieces of paper with pre-punched holes and regular-sized #2 pencils. Between the end of March to the beginning of May 2004, LACMA staff again collected, counted, and categorized the visitor responses.

Results & Discussion

1. Question Testing

LACMA staff surveyed a total of 56 visitors to assess which questions interested visitors the most and why. Two similar questions (#2 and #6) elicited the most frequent “favorite” and “second favorite” selection by visitors. Interestingly, both of these questions directly addressed connections between art and science. Question #6 reads “What connections do you see between art and science?” and received the most votes for most or second favorite (n=20; 36%). Question #2, “How do art and science connect in your life?” ranked second (n=11; 20%). Thus, a total of 56% of visitors surveyed responded favorably to making connections between art and science. Table 1 provides a breakdown of the specific findings for each question.

Table 3: Visitor Response Area Question Testing Results
 Percentages will exceed 100% as multiple answers were accepted from visitors

	Most/2nd Favorite	Least Favorite	Notes
What connections do you see between art and science?	20 (36%)	4 (7%)	+ Elicited extended & rich responses, thought provoking, made personal connections - Too intellectual, not related to nano
How do art and science connect in your life	11 (20%)	3 (5%)	+ Tended to like thinking about the connections; answers to question were rich - Didn't prefer the question
Questions are often more thought provoking than answers . . . What are your nano questions?	12 (21%)	3 (5%)	+ Tended to elicit extended responses; many questions from visitors were thoughtful - Too open ended
What's important about nano to you?	10 (18%)	16 (29%)	+ Tended to relate to personal interest and/or professional experience; connect to life Other answers tended more towards answer to the question – somewhat interesting answers - Found it confusing, plain, basic, too broad, or didn't understand the whole nano thing
Tell us about your nano experience? What do you think? What do you feel?	7 (13%)	4 (7%)	+ Don't have to think as much, got "I like it" responses - Too many questions together, too vague
Got a nano second? Tell us about your nano experience today.	4 (7%)	10 (18%)	+ Tended to find it "cute" - Thought it cute but trite, not as thought provoking as other questions
No Least Favorite/Liked all equally	14 (25%)		
Disliked all questions		1	

The reasons that visitors gave for preferring questions #2 and/or #6 revolved around a two main themes: 1) the prompt was unusual or unexpected with potential to be thought-provoking; and 2) the prompt stimulated them to make personal connections to their life, work, interests, or experience. The following is a sampling of responses to illustrate these trends:

"I do art and I think art and science are more connected than people think."

"I think there are a lot of different connections between art and science."

"It's good to see at an art museum how art and science go together."

"[It's] not something that's asked a lot, but it's important"

"[The connection between art and science] is not usually what you think about."

"Because my favorite subject at school is science and I also like to draw."

"Because partly that's what I do. I'm a professor at UC Davis, [and] teach a class called Nature and Culture."

"[This question allows] for kids to be able to connect daily with things they see here."

LACMA staff also asked visitors to provide possible responses to the question they selected as their favorite. The possible responses that visitors gave to questions #2 and #6 were generally rich and detailed, and illustrated that visitors were able to make thoughtful connections between art and science. For example, some people viewed both science and art as having an interdependent relationship and one that was often associated with creativity as the following quotes illustrate:

“Artists need to draw the human body; science helps them understand the bones”

“To make colors in art you have to use science”

“I see innovation and creativity as interconnected – it’s what drives both science and art”

“Art and science are both imaginative ways of finding out what’s out there”

“I would say art and science are an important contribution to society because we need both for creativity and inventions”

Some visitors also referred to personal connections in their possible response, such as *“I work in the arts and live in Silicon Valley. Science and technology are a big part of my community”* and *“In my life, I use science in my art. I dye fabric, I have used topographical lines...to make an art piece.”*

The third most popular question (n=12; 21%) was question #4, which reads “Questions are often more thought-provoking than answers...What are your *nano* questions?” The types of reasons visitors gave for selecting question #4 suggest that they would appreciate the opportunity to explore ideas in more depth, learn more by asking questions, and learn from other people’s questions. Some examples are:

“Because I could ask anything and be provoking, go more in depth.”

“There are so many unknowns, and the way we learn is by asking questions.”

“A lot of people have questions that others might not have thought of.”

“Because the concept of the nano, I don’t know a lot about it. This would give me the chance to ask questions.”

Interestingly, those who chose this question as their least favorite (n=3; 5%) disliked the open-endedness—the exact reason why so many others liked the question. Given that four times as many people selected this question as a favorite, it is reasonable to expect that more people are likely to respond favorably to similar types of thought-provoking, more open-ended questions.

The last three questions chosen as favorites or second favorites deserve brief mention, as the data associated with them provide further insight into why questions are or are not appealing to visitors in general. While 18% (n=10) of the visitors selected “What’s important about *nano* to you?” as their favorite or second favorite question, a large percentage (n=16; 29%) chose this as their least favorite. These visitors felt the question was confusing, plain, basic, or too broad, or they said that they didn’t really understand the *nano* concept and thus could not answer the question.

The question “Tell us about your *nano* experience. What do you think? What do you feel?” did not get much response either way, with only 11 visitors choosing it as a favorite or least favorite. While more people liked it (n=7) than did not like it (n=4), the possible responses tended to be simple “I like it” answers and a few visitors felt the question was too vague. Finally, ten visitors selected “Got a *nano* second? Tell us about your *nano* experience today” as their least favorite, while only four selected it as a favorite or second favorite primarily because they found the wording to be “cute.” Those who did not like the question also found it cute, but often trite, and felt it was not as thought-provoking as the other questions—confirming the trend that interesting, thought-provoking questions were generally more appealing to visitors.

2. Response Card Evaluation

This section examines the results of the three configurations that were tested at LACMA in the *nano* exhibition. For the first configuration (original question and white cards with short pencils) 1,732 cards were collected and a random sample of 300 cards were sorted; 298 cards were collected and sorted for the second configuration (new question and same white cards and small pencils); and 379 cards were collected and sorted for the third configuration (new bright blue hexagonal cards and regular pencils).

A number of interesting trends emerged from the data. Most important, the number of unrelated responses decreased significantly when the question was changed from the original, “Tell us about your *nano* experience. What do you think? What do you feel?” to the most popular test-question, which was, “What connections do you see between art and science?” Seventy-seven percent of the responses to the first *nano* question were unrelated. This number dropped to 58% when the second question was used, even though the physical design of the cards remained the same.

Most importantly, the percentage of specific comments—those related to the *nano* exhibition—increased from 4% related responses on the first question to 28% related responses on the second question. Following are examples of those “specific” responses to the second question:

“The thread of perception joins color, smell, touch, sound, and expands our sense of real beyond what we see.”

“Art imagines and science discovers. They are both creative.”

This finding suggests that the nature of the question definitely influences the depth and complexity of visitor responses. The results of the initial Question Testing aligned well with the findings from the Response Card Evaluation phase, as the highest-ranked question elicited the highest number of specific, complex, and rich responses.

During the third phase, the question remained the same but the design components were changed to bright blue hexagonally-shaped die-cut cards to replace the plain white index cards and regular No. 2 pencils replacing the short golf-style pencils in the first configuration. The percentage of “unrelated” responses for this question decreased from 58% (with the white cards) to 40% (with the blue cards), and “specific” responses nearly doubled, increasing from 28% (with the white cards) to 50% (with the blue cards). These findings strongly support Hayes (2003) research that while the question itself has an important effect on the quality of visitor responses, the physical design of the response areas plays a prominent role in eliciting richer responses and decreasing unrelated ones.

OVERALL CONCLUSIONS & RECOMMENDATIONS

The Nature of the Visitors’ Experience Conclusions

Differences in Visitor Demographics

The written demographic survey data revealed that, in many instances, there are two different types of experiences and, in effect, two different museums – the East and West campuses.

LACMALab attracts more repeat visitors: LACMA West and the *nano* exhibition specifically attract many more family visitors than does LACMA EAST. The LACMALab space tends to attract more repeat visitors than does the West campus non-Lab visitors and many more repeat visitors than does the East campus visitors. In addition, while LACMALab visitors tended to visit other art museums less often than regular visitors, when they did visit other art museums then tended to repeat their visits more frequently.

LACMA West and LACMALab visitors are more likely to visit both buildings: There were also differences in the ways the samples made use of the two buildings. Of the visitors intercepted in the West campus, either in the *nano* exit interviews or for the written surveys in the West campus lobby, slightly over half indicated that they had been or were planning to visit the exhibitions and collections in the East campus. Conversely, of those visitors completing written surveys in the East campus, barely one-third indicated that they planned to or had visited the West campus or *nano* during that visit.

LACMALab visitors are more purposeful and focused in their visits: *nano* visitors had a clear reason for coming – to see the exhibition specifically or as a destination for a family experience. Few visitors just happened by the space and decided to visit.

Length of visit at LACMALab is above the national average for comparable size exhibitions: *nano* visitors spend considerable time in the gallery. Most visitors spend over 45 minutes and many of those spent 90 minutes or more in the space. This average length of stay is above the national average according to Serrell (1998) for time spent in a comparably-sized exhibition

LACMALab visitors tend to live in closer proximity to the museum than do other visitors: The large majority of all three samples lived less than a 3 hour drive from LACMA. It appeared that slightly more of the East campus sample came from farther away than a three-hour drive than was the case for the interview and West campus samples. This suggests that *nano* and the West campus by virtue of being the location of LACMALab attracts more local people while the East campus attracts more non-local people.

Visitor Engagement & Social Interaction

LACMALab visitors prefer experiences that physically engage them, provide opportunities to observe interesting cause and effect situations, and experiences that relate to their prior experience and/or personal interests: *nano* visitors did have preferences for certain areas: Art Making, Inner Cell, and the *nano* Mandala were most frequently cited as favorite areas. Focused observations revealed little difference in the quality of engagement with the components across the four focus stations: Art Making, Inner Cell, Mandala, and Resource Area, with the Resource Area rating slightly below the other three in terms of quality of engagement. It is clear that all of the areas that visitors found engaging were favorites because they engaged people physically; as many visitors put it they were “hands-on.” Watching changes and seeing a cause and effect relationship were other frequently cited reasons that visitors liked the Mandala, the Inner Cell, and the other areas. When an area related to a personal interest, such when a child was particularly interested in making art or another child liked to build things, visitors noted that as a reason for their preference for that area.

LACMALab visitors avoid experiences that are not easily understandable, do not look like fun, or do not have enough physical and mental engagement: *nano* visitors tended to explain their reasons for not preferring certain exhibition areas in several ways. They rated an area as low preference if they could not understand what to do or how to work something. If an area did not appear to be interesting or “fun” visitors tended to avoid it. If a child or parent thought an experience was too easy or too difficult, essentially not age appropriate, they did not rate it highly. A few parents noted that their young children did not like an experience if it was dark or in away seemed threatening or scary.

Quality of engagement and social interaction are strongly related while time spent is not related to either dimension: The four observed stations stimulated a high level of social interaction and there is strong evidence to suggest a relationship between engagement with the component and social interaction. There was evidence that the influence of the social group both had the capacity to stimulate engagement with the activity, as when a child calls a parent over to look at something, and discourage engagement, as when a child is drawn away from something that interests her/him by a parent or friend who is not interested. There were exceptions, as when visitors were intensely focused on an activity by themselves. The amount of time visitors spent in an area did not necessarily reflect the quality of their engagement and social interaction levels. This finding is important because it lessens the importance of time spent as a variable in analyzing the quality of the visitor experience.

Label reading in LACMA Lab is relatively infrequent: The small amount of data on label reading in this study does not provide a full understanding of this trend. It appears that visiting with children does impede parents' label reading and children, themselves, were usually not interested in reading in nano. This finding is consistent with other studies in a wide variety of museum types that find that adults, when with children, do not read labels to any significant degree.

Visitor Response Area Conclusions

Data collected during this study illustrate that the wording and physical presentation of a visitor response question strongly impacts the quality of the responses. The Question Testing phase indicated that visitors responded more favorably when prompts were unusual or unexpected with potential to be thought-provoking and when the prompt stimulated them to make personal connections to their life, work, interests, or experience. Visitors tended not to like questions that they perceived as too open-ended, broad, simplistic, too cute, vague, or confusing.

This phase of the Visitor Response Area study found that while the type of question influences the frequency and quality of visitor response, physical format and presentation increases frequency and quality even further. The number of related responses increased significantly when the question was changed from the original "Tell us about your *nano* experience. What do you think? What do you feel?" to the most popular test-question, which was "What connections do you see between art and science?"

Related responses nearly doubled when the new question was tested with a slightly enhanced physical format – replacing white index cards and short pencils with bright blue hexagonal cards and regular pencils. These findings strongly support Hayes' research (2003) that while the question itself has an important effect on the quality of visitor responses, the physical design of the response areas plays a prominent role in eliciting richer responses and decreasing unrelated ones.

Recommendations

The main purpose of this visitor study was to assist the LACMA staff in the development of future exhibitions. If LACMA continues in its ground-breaking efforts to provide unique participatory experiences for families then periodic reflection on the purpose and evaluation of the progress of this initiative is recommended. The researchers formed the following recommendations to be considered and, hopefully, discussed by LACMA staff with the goal of enhancing the learning and discovery for visitors of all ages.

Seek to integrate the two LACMA campuses and the LACMALab experience: That the audiences for the two campuses and the Lab are different on many levels is most probably not surprising to the LACMA staff. How to better integrate the two areas is clearly a case of “easier said than done.” It will be natural for the museum to focus more on the East campus as it houses the majority of collections and exhibitions. However, the loyalty and motivation of LACMALab exhibition visitors warrant careful consideration. The overall museum would be well served if it were to consider and implement strategies to better inform East campus visitors of the existence and unique opportunities in the West campus. This would create a more even two-way flow as the data suggested that West campus visitors are more likely to visit the East campus than vice-versa.

Use visitor preferences for areas and activities and other findings from the study as a template for future LACMALab exhibitions: Although each LACMALab exhibition is unique in focus and manifestation, the data from this study did provide a potentially helpful framework to assist the staff in the decision-making process about what to include in future exhibitions. Apply the test questions to each component of an exhibition:

- ✓ To what extent does this experience engage the visitor physically and mentally and to what end?
- ✓ How does this experience facilitate social interaction for a range of ages?
- ✓ To what extent does this experience provide unique and intriguing opportunities for observing and influencing cause and effect?
- ✓ What prior experiences and personal interests does this experience most address?
- ✓ How easy will it be for visitors to understand how they might engage in this experience? To what degree will staff mediation be needed for visitors to get the full benefit of the experience?
- ✓ How safe will the experience be perceived by visitors – both emotional and physical perceptions of safety?
- ✓ How do labels and wall text facilitate the visitors’ experience? For whom is the text intended and why? How is the visitors’ experience affected if no text is read during the visit? If the experience is little affected why is the text needed? If the quality of the experience is highly dependent on the text, how will you assure that visitors read it?



Treat the Visitor Response Area as carefully and seriously as the full exhibition:

Visitor response areas are critical components for visitors in the art museum. When thoughtfully designed and implemented it provides visitors with opportunities to reflect and respond in a deeper way to the experience. It sends a strong message to the visitor that the museum is interested in them as thinking beings. In addition, good visitor response areas can be an excellent source of data about how visitors are learning and responding to the museum experience.

Since both the prompt and the physical presentation positively influence the quality of visitors' responses it advised that the LACMA staff continue to test possible prompts for future exhibition and carefully consider both the placement of the visitor response area as well as the physical design of the space. The early designs for the next LACMA Lab exhibition appear to be already acting on this recommendation by giving this space as much real estate and aesthetic attention as the rest of the exhibition.

References

- Hayes, F. (2003). *Are We Listening?: A Study of Visitor Response in Interactive Art Spaces*. Unpublished Master's Thesis. Tampa, FL: University of South Florida.
- Serrell, B. (1998) *Paying Attention: Visitors and Museum Exhibitions*. Washington, DC: American Association of Museums.

Appendix A: Visitor Response Area Questions & Protocol

Sample Visitor Response Questions

- 1.) What's important about *nano* to you?
- 2.) How do art and science connect in your life?
- 3.) Got a *nano* second? Tell us about your *nano* experience today.
- 4.) Questions are often more thought provoking than answers.....
What are your *nano* questions?
- 5.) Tell us about your *nano* experience.
What do you think? What do you feel?
- 6.) What connections do you see between art and science?

Question Testing Protocol

What: Get a sense of which proposed questions for the response area are most interesting to visitors and why

When: Over Christmas holidays (2-weeks)

Who: Main Contact: Elizabeth Neal_
Other data collectors: Elizabeth 2 & Rachel

How: List of questions (7 or less) are printed in large type and glued to foam-core board or on clipboard. When visitors leave response area they are approached, staff introduces self and explains what we are doing. Sample script:

Hi, my name is ___ and I work here at LACMA. We are in the process of developing this response area and we would like your opinion about some of the questions we are thinking about putting in this area? It will take about 5 minutes and we would really appreciate your help. Great!
Here is a list of some of the questions we are considering. Take a moment and tell me which of these questions you would be most interested in answering – if you were so inclined to leave a response in this area.
(Visitor make a selection; staff makes note of the choice)
Can you tell me why that question interested you more than the others?
How might you answer that question – given the experience you have had here in the *nano* exhibition so far?
(Second choice is optional)
Which question is your least favorite and why?
So when you see visitor response areas or response books in museums would you say you often, occasionally, or almost never write something?
Thanks for you help and would you mind giving us some information about you? (Staff hands visitor clipboard with short-response demographic form and a pencil/pen. Staff keeps short response form and interview form together.)

Desired Sample Size: 45-60 visitors

So What? Staff keeps count of number of “votes” for each question and reviews reasons for question selection and how visitors answered it to assist them in deciding which 3-4 questions to test during the run of *nano*
Staff enters data from short-response sheets in Survey Pro. This is part of larger quick-response demographic survey.

Response Area – Question Testing Data Form

<p>FIRST Choice Question : # _____</p> <p>Why did you like that question the most?</p> <p>How might you answer this question in a response area?</p>
<p>(Optional) SECOND Choice Question : # _____</p> <p>Why did you like that question the most?</p> <p>How might you answer this question in a response area?</p>
<p>Least Favorite Question : # _____ or All are OK</p> <p>Why do you NOT LIKE that one?</p>
<p>When you see visitor response areas or response books in museums, how often do you WRITE a response?</p> <p>ALMOST NEVER OCCASIONALLY OFTEN</p>

Appendix B: Effect of Question & Physical Design on Quality of Visitor Response

What: To test effectiveness of various questions and 1-2 physical design treatments of response area.

When: January – August 2004

Who: Main Contact: Elizabeth Neal

How: Staff and ILI develop a “testing” schedule. E.g., January – test question that got most “votes” in Phase A above, in the current physical configuration. February – keep that question and change physical design configuration. March – keep new physical design configuration and change question to “2nd” most-selected question... and so on. Every 3-7 days, staff cleans off board, leaving a few responses on view to encourage visitors to respond.

Coding of visitor responses:

During each testing segment (e.g., each month) responses are coded using the following rubric:

- Unrelated to exhibition, graffiti, tags, undecipherable (*I love Joey, nano nano Boo Boo, Sylvia was here*)
- General reference to exhibition or museum (*Cool! This is great!*) Approves or disapproves of the exhibition but does not indicate why or how.
- Specific reference to exhibition, shows some degree of thoughtfulness, expands on opinion of exhibition (*I like rolling the balls*), provides some insight into how visitor engaged (*I looked, wandered, touched, explored*), or relates a thought or feeling to the exhibition experience (*I feel like a small cog in the great machinery of the universe*)
- Other – responses that do not fit in any of the above categories. E.g., poems or quotes or drawings that do not seem to relate to the exhibition experience but are interesting or thoughtful all the same

Visitor responses are sorted in these categories, counted and put in envelopes for each category. Make note of the number in that category, the dates of the particular testing segment. Place the 4 envelopes together with a photo of the response area for that segment – showing the question and any physical/design configurations. Wrap all these together and clearly mark.

When you clear off the response area, be sure to leave some higher quality responses on the board to “salt” the area. If you are changing the paper (color or shape) you will need to have staff make up some responses. Be sure to code these so the leftover visitor responses can get into the proper envelope or the staff-generated responses can be discarded before counting the responses

Be sure you only change one thing at a time – either change the question or the physical configuration – not both at the same time.

Sample Size: TBA

So What?

Staff keep a count of coded question responses in each of the four categories across the different testing segments to assist in deciding which kind(s) of questions elicit the most thoughtful responses and which type of physical design configuration. Look for questions and designs that reduce unrelated/graffiti responses and increase thoughtful, related responses. You will never do away with unrelated/graffiti but you can reduce it. When you determine the question and the physical configuration that works best, maintain in for about 3-4 months (or more) and continue coding and counting responses. If responses are large in number, throw them all in a box, shuffle them up and randomly select 30-40. Code and count them. Set them aside. Randomly select 30-40 more from the same box, code and count. If the distributions of both sets are similar then you can feel confident that the sub-samples are representative of the whole and there is no need to code and count all of the responses.

Question & Physical Design Testing Report Form

Testing Segment Dates: _____ to _____

What was tested? (List question or describe physical design – attach photo if possible)

	Unrelated	General - Related	Specific Reference	Other
Number/Count				
Percent				

Comments/Examples of Representative Responses:

Appendix C: Observation Protocol and Data Form

What: To get a better understanding of how visitors engage in selected areas and how that experience influences the degree and quality of social interaction among visitors.

Selected areas:

1. Resource Area
2. Inner Cell
3. *nano* Mandala
4. Art-Making Space/Studio

When: January 2004

Who: Main Contact: Elizabeth Neal

Other data collectors: Mary, Max, Elizabeth, Toby

How:

Draw an imaginary line around the selected area. Note the directions from which people can enter the area. Stand in an inconspicuous place where you can see visitors coming from all possible directions. Begin by selecting the 5th visitor to cross your imaginary line (if a baby in a stroller is the 5th, select the next older child or adult). Observe what the person does in the area and the nature of interaction with others. If the visitor leaves the area, the observation is over. If that visitor comes back before you begin observing the next 5th visitor over the line, you can pick up the observation again, noting a re-entry. If the visitor comes back when you are observing someone else, ignore that returning visitor and continue with the observation you are on.

Complete the observation protocol for each visitor.

Sample Size: 30-60 each area (100 each area is most desirable)

So What? Staff enters observation data in computer. Analyses of areas will assist staff in making informed decisions about retro-fitting existing areas, if needed, and to inform decisions about future participatory spaces.

Focused Observation Data Form

When: (circle one) WEEKEND WEEKDAY FRIDAY NIGHT

Observer: _____

Area Observed: (circle one)

1. Resource Area 2. Inner Cell 3. *nano* Mandala 4. Art-Making Space/Studio

Crowd Conditions: (circle one)

Low/Quiet Moderate Very Crowded

Age of Visitor Observed: (circle one)

Pre-school young child pre-teen teen young adult adult senior

Time in Area: _____ minutes

Text/Label Reading? (circle one)

N/A No/none Brief/Cursory Some Reading Thorough Reading

Engagement Rating

1	2	3	4
No engagement Passes by	Limited engagement Pauses, looks briefly, may touch something in cursory, non-studied way	Moderate engagement Looks, studies with apparent interest; and/or touches, participates in the activity with attention	High engagement Looks or studies with intense interest and/or participates fully, exploring, experimenting

Description of behavior, examples of rating:

Social Interaction Rating

1	2	3	4
No social engagement within social group or with others (staff, other visitors)	Unrelated social engagement Interacts with others (within group and/or outside group) but not about the area	Related social engagement Interacts with others related to area – mostly about how to work it, or what something is	In-depth related social engagement Interacts & engages with others to deeply explore area

Description of behavior, examples of rating:



Appendix D: Exit Interview Protocol and Data Form

Exit Interview Protocol

Approach the visitor, introduce yourself, and invite them to help LACMA provide better experiences for visitors by taking part in our study today. Briefly explain what it will entail (Answer a few questions that take about 10 minutes and then receive a small token of appreciation for their time).

Ask the following questions as consistently as you can but keep the tone as informal and conversational as you can. People often answer different questions than the ones you ask, sometimes they answer another question you have on the list before you ask it. Definitely follow that question and, when all has been said, go back to your other questions. If a visitor is not answering your question, ask it again another way, maybe giving an example or providing some context. If the visitor still doesn't address your question on the 3rd try then move on. Just note how you rephrased the questions and the answers you did get.

During the interview you may want to record the conversation, take a few minimal notes on blank paper while talking with the visitor and then, immediately after the interview, sit down, listen to the tape and write out your notes on the data form. You will write what visitors actually say, NOT your summary of what they say. Handwriting must be legible or the interview will be thrown out.

The data form provides places for you to begin coding visitor responses. For example, in question #1 you are asking visitors to talk about why they came to *nano* today. You are seeking to find out if *nano* was a destination (purposeful) or a happy accident (non-purposeful). You would certainly not use the words "purposeful" and "non-purposeful" with visitors as that sounds too technical and awkward. But you will code their response as being either purposeful or non-purposeful.

Be vigilant in following up on visitor comments asking for clarification or examples. Do not feel you are being nosy. It is flattering for people to feel that their ideas, experiences, and opinions matter.

Specific question issues

1 – about visit motivation. Remember you are not asking the visitor to determine if their visit was purposeful or non-purposeful. You will determine that from their responses.

2 & 3 – Most and Least interesting. Certainly it will be helpful to find out what specific areas or activities visitor did and did not like. What will be most helpful will be WHY they responded to certain areas as they did. For example, if a visitor says "I liked it because it was fun!" Don't stop there. Follow up with something like "What was fun about it?"

4 – Time – be sure that visitors realize you are asking about how much time they spent at *nano*, not how much time they will spend at LACMA in general. If visitors say they spent the most time at one of the areas that were their favorite then you do not need to follow up with a Why question.

5 & 6 – Labels/Text – You will probably find that visitors do not distinguish a difference between label and text or wall panel. It's all labels to them. Asking about their label-reading behavior may be tricky. You don't want people to feel they are being judged, that there is a right answer to these questions. E.g., Yes, label reading is good. People are also inclined to tell you what they think you want to know so you may have to play with this question a bit. We may find that starting with question #6 about their label reading behavior at other museums might be a good way to ease them into this topic. Then follow that question with #5, label reading specific to *nano*.

Again, in Question 5B and 6, the choices/list is there for you to code after the interview. You will not ask visitors to select from that list. You will have to ensure that you get enough information from them so that you can determine how to code them. Also remember that we may need to adjust the coding scales on the

data form. These were developed based on our prior studies and what we think we know about visitors. That may or may not be the case with *nano* visitors.

Exit Interview Questions

1. Why did you visit the *nano* exhibition today?
(purposeful visit or part of the whole LACMA experience/happened by)

[If purposeful visit] How does what you expected you would see and do here (at *nano*) today compare with what you actually did today?

2. What areas or activities were MOST engaging or interesting to you?
What did you do there?
Why did that area interest you?
3. What areas or activities were LEAST engaging or interesting to you?
To what degree did you engage in that area(s)/activity?
Why was that area your least favorite?

4. About how much time did you spend in the *nano* exhibition?

Where did you spend the most time?
(If different from # 2 answer ask WHY?)

5. Did you read any labels or wall text in *nano*? YES NO

5A. If NO, did you notice labels/wall text? YES NO
If, yes, why did you avoid or what prevented you from reading labels?

5B. If YES, how would you describe your reading of labels in *nano*?

- Read most labels thoroughly
- Read a few labels thoroughly
- Read a little from a lot of labels
- Read a little from very few labels

What, if anything, did you find informative or interesting in the labels? Please explain.

What, if anything, was confusing or not interesting in the labels? Explain

6. When you visit other museums how would you describe your typical reaction to or use of labels and text panels?

Rarely ever read labels in any museum
Sometimes read a few, depending on subject or my interest
Usually just grab the first sentence and/or basic information from a lot of labels
Depends on the type of museum or exhibition – In some museums I read a lot of labels, in others, not so much
Other:



Exit Interview Data Collection Form

7. Why visit?		Purposeful	Non-purposeful
	If PURPOSEFUL	Expectation Experience	
2. What areas or activities were MOST engaging or interesting to you?			
Area:	WHAT did	WHY interesting	
Area:	WHAT did	WHY interesting	
Area:	WHAT did	WHY interesting	
3. What areas or activities were LEAST engaging or interesting to you?			
Area:	WHAT did	WHY not interesting	
Area:	WHAT did	WHY not interesting	
Area:	WHAT did	WHY not interesting	
4. Time spent in nano		<input type="checkbox"/> > 15 minutes <input type="checkbox"/> 46 -60 minutes <input type="checkbox"/> 15 – 30 minutes <input type="checkbox"/> 61 minutes – 90 minutes <input type="checkbox"/> 31 – 45 minutes <input type="checkbox"/> < 90 minutes	
	Where spent MOST time?	WHY? (If different from Q# 2)	
5. Read labels / text in nano?		<input type="checkbox"/> YES <input type="checkbox"/> NO	
	If NO, noticed labels?	<input type="checkbox"/> YES <input type="checkbox"/> NO If YES, why AVOID or what PREVENTED reading?	
	If YES, how?	<input type="checkbox"/> Read most labels thoroughly <input type="checkbox"/> Read a little from a lot of labels <input type="checkbox"/> Read a few labels thoroughly <input type="checkbox"/> Read a little from very few labels	
	What labels informative or interesting? WHY?		
	What labels confusing or not interesting? WHY?		
6. Pattern of label reading in other museums		<input type="checkbox"/> Rarely read <input type="checkbox"/> Sometimes read, if interested <input type="checkbox"/> Cursory read <input type="checkbox"/> Depends on museum/exhibit <input type="checkbox"/> Other _____	

Appendix E: Written Demographic Survey Form

Survey Form for Exit Interview Sample and General LACMA West Visitors

Tell us something about you!

Gender: Female Male

Age Group:

- 7-12 teen 20s 30s 40s
 50s 60s 70s 80s+

With whom did you visit today?

- By myself With family (including children) With family (all adult)
 With Friends With combination of friends & family Other _____

About how much time do you plan to spend at LACMA today?

- Less than 1 hour 1-2 hours 3-4 hours more than 4 hours

Which of the following do you plan to visit or have you already visited today?

(Check all that apply)

- Exhibitions or collections at LACMA East (main building)
 Exhibitions or collections at LACMA West (this building)

Is this your first visit to LACMA? Yes No

If NO, how often have you visited LACMA in the past 12 months?

- None Once 2 - 3 times 4+ times

Have you been to another ART MUSEUM in the past 12 months? Yes No

If YES, how often?

- Once 2 - 3 times 4+ times

Where do you live?

- Within walking distance of LACMA
 Under 3 hours driving time from LACMA
 More than 3 hours driving time from LACMA

Survey Form for LACMA EAST Sample

Tell us something about you!

Gender: Female Male

Age Group:

- 7-12 teen 20s 30s 40s
 50s 60s 70s 80s+

With whom did you visit today?

- By myself With family (including children) With family (all adult)
 With Friends With combination of friends & family Other _____

About how much time do you plan to spend at LACMA today?

- Less than 1 hour 1-2 hours 3-4 hours more than 4 hours



Which of the following do you plan to visit or have you already visited today?

(Check all that apply)

- Exhibitions or collections at LACMA West
- Exhibitions or collections at LACMA East (this building)
- nano* Exhibition

Is this your first visit to LACMA? Yes No

If NO, how often have you visited LACMA in the past 12 months?

- None
- Once
- 2 - 3 times
- 4+ times

Have you been to another ART MUSEUM in the past 12 months? Yes No

If YES, how often?

- Once
- 2 - 3 times
- 4+ times

Where do you live?

- Within walking distance of LACMA
- Under 3 hours driving time from LACMA
- More than 3 hours driving time from LACMA