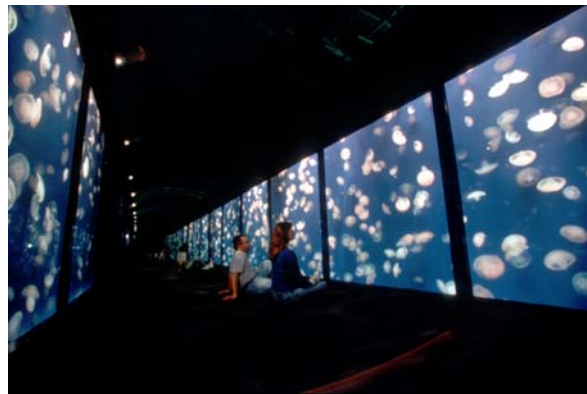
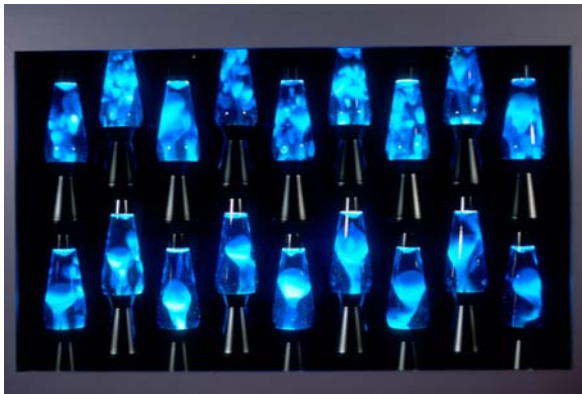
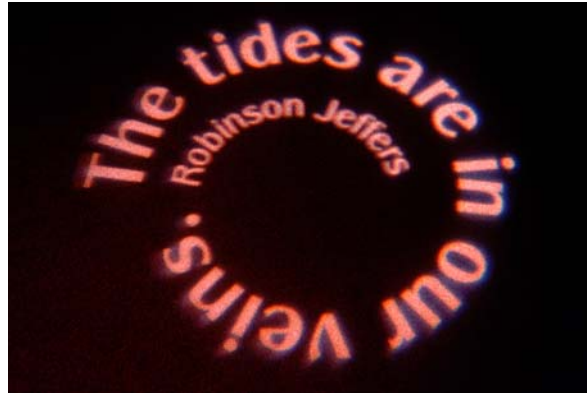


Jellies: Living Art
Summative Evaluation
2004



MONTEREY BAY AQUARIUM®

Jellies: Living Art
Summative Evaluation

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Executive Summary, *Jellies: Living Art* Summative Evaluation

Overview: In 2003 and 2004 a summative evaluation of the *Jellies: Living Art* exhibition was conducted. The exhibition is a 4,650 square foot special exhibition at the aquarium that is open from April 2002 through January 2005. It includes live displays of domestic and exotic jellies and a collection of artwork in a variety of media: paintings, sculpture, works on paper, and three large site-specific installations. Though the aquarium has displayed art previous to *Jellies: Living Art*, this exhibition represents the first time the aquarium has displayed both art and live species together.

Purpose of the Study: To evaluate visitor behavior in and reaction to the *Jellies: Living Art* special exhibition at the Monterey Bay Aquarium.

There were seven main questions the study desired to answer:

1. How are visitors using the exhibition? What are they attending to, where are they spending their time?
2. What sorts of affective responses are occurring in the exhibition?
3. For the visitor, what is the relationship between the art and the animals being exhibited?
4. What sorts of conservation messages are visitors getting? Where are they getting these messages?
5. Is there a group of visitors who are coming back repeatedly to see the exhibition? Who are they and why are they coming back?
6. How much reading is going on in the exhibition? Is it more or less than in other exhibitions?
7. Does adding a Spanish translation to the English introductory panels, which doubles the overall amount of text, negatively affect visitor use of the label?

In addition, there were a number of additional research questions that either related to the seven main questions, or added to understanding visitor reactions to *Jellies: Living Art*. Results from these questions are reported in the specific sections for each method.

Methods:

To examine how visitors are using and reacting to *Jellies: Living Art*, it was determined that it would be necessary to use multiple research methods.

Method	Sample Size	Description
Timing and tracking	163 visitors	Unobtrusive observation of the visitor path, what visitors attended to, and for how long
Interviews	420 visitors	Structured interviews, using forced-choice and open-ended questions
Observation of Label Use	300 visitors	Unobtrusive observation of three introductory panels, testing the use of Spanish/English and English-only versions

Main Findings:

This section specifically addresses the seven research questions for the evaluation.

1. How are visitors using the exhibition? What are they attending to, where are they spending their time?¹

The average visitor to *Jellies: Living Art* is spending nine and a half minutes and stops at a little over one-third of the exhibits. When comparing types of exhibits, visitors were attending to the live animal displays the most, making up ten of the fourteen exhibits with the highest percentages of visitors attending to them. However, visitors attended to the Dale Chihuly installation the most of all exhibits. Interactive or hands-on exhibits had the longest stay times, followed closely by the live animal exhibits. The moon jelly room, a tank, had the longest stay time for individual exhibits and was the only element with a stay time of over one minute (86 seconds). The feeding and stinging exhibit had the second longest stay time at 54 seconds. See Appendices B and C for behavioral information about specific exhibits.

2. What sorts of affective responses are occurring in the exhibition?

Visitors' general reactions were very positive to the exhibition, and many mentioned the aesthetic aspects, such as the jellies and the art. People used words like relaxing, peaceful, colorful and beautiful to describe many of the experiences. This was true for both the art and the jellies. Some visitors did have a negative affective reaction to the numbers of people in the exhibition, mentioning it being crowded or suggesting making the exhibition larger. This is expected since data collection was done during the busy summer months. Overall, visitor affective responses were overwhelmingly positive to the *Jellies: Living Art* exhibition.

3. For the visitor, what is the relationship between the art and the animals being exhibited?

Visitors clearly saw the relationship between the art and the living animals. While the majority (two-thirds) of visitors said they were surprised to see art in the exhibition, they had no problem explaining why art was included. They said that jellies inspire art, it shows the relationship between nature and man-made art, and that jellies are like living art. Other reasons included that the art showed the beauty of jellies, it was another way to look at jellies (as art) and that it allowed a comparison between jellies and the art in the exhibition. The most popular art installations were the large, multi-element installation pieces.

¹ This report uses "attending to" rather than "stopping at" to describe the attracting power of the various exhibits. The more traditional stopping measure fails to incorporate the time someone may be looking at an exhibit while walking through a space. Therefore, the time a visitor spends looking at an exhibit may be underestimated using this method. With "attending to" this time is taken into account, allowing a more accurate measure of how long a person is looking at an exhibit. Also, some exhibits or labels are designed to provide an overview by glancing at a title and/or subtitle, so this is a worthwhile measure to be included in a timing and tracking study. "Attending to" is when a visitor spends 2 or more seconds looking at or interacting with an exhibit.

4. *What sorts of conservation messages are visitors getting? Where are they getting these messages?*

Almost half of all visitors questioned said they remembered seeing something in *Jellies: Living Art* about conservation. While roughly half of these visitors, or 25% of all visitors, were unable to remember exactly where they saw the information, around 10% said they saw conservation information in multiple labels. Visitors were more able to come up with examples of what they saw. One-quarter (26%) of those who remembered seeing conservation information mentioned mangroves, which was included in three of the focus labels accompanying live jellies. Other conservation content mentioned was a decline in jelly populations, the end quote by Williams², or the need to conserve jellies in general.

5. *Is there a group of visitors who are coming back repeatedly to see the exhibition? Who are they and why are they coming back?*

One-quarter of aquarium visitors (24%) had seen *Jellies: Living Art* during a previous visit. At the time of data collection the exhibition had been open 18 months. Of repeat visitors to the exhibition, 62% had seen the exhibition two or more times before the present visit. Of this group 16% had seen it six or more times, so there is an indication that people are returning to the exhibition many times. Specific questions in the evaluation did not address why they might be coming back to see the exhibition. However, monthly exit surveys indicate that even after being open for two years, it is still a factor in visiting the aquarium for roughly half of aquarium visitors.

6. *How much reading is going on in the exhibition? Is it more or less than in other exhibitions?*

The group of four introductory labels in *Jellies: Living Art* had, on average, a higher attracting power and holding power than other introductory labels tested in the aquarium (see 2003-2004 MBA Label Study). However, when visitors were asked whether they were reading more, less or about the same amount as in other MBA exhibitions, roughly half (48%) said about the same. The two remaining categories, reading more and reading less, each made up roughly one-quarter (27% and 25%, respectively). While people may be reading introductory panels at a higher rate in *Jellies: Living Art*, visitors did not report more reading in the *Jellies: Living Art* exhibition compared to other exhibitions they had seen.

7. *Does adding a Spanish translation to the English introductory panels, which doubles the overall amount of text, negatively affect visitor use of the label?*

No, having twice the amount of text with the introductory labels does not negatively affect visitor use of these labels.

² "It is no longer survival of the fittest, but the survival of compassion." Terry Tempest Williams quote projected onto the wall just before the exit to *Jellies: Living Art*.

Summary, Timing and Tracking

Purpose of the Timing and Tracking:

There were two main research questions the timing and tracking needed to answer:

1. How are visitors using the exhibition? What are they attending to, and where are they spending their time?
2. Is having the intro labels in both English and Spanish affecting use of these labels?

Method:

In June 2003, 163 visitors were unobtrusively observed during their visit to the *Jellies: Living Art* exhibition. Visitors were randomly selected as they entered, timed for how long they were in the exhibition, which exhibits they attended to and in what order, and how long they attended to each exhibit. Visitors were unobtrusively observed until they left the exhibition. Only adults (those 18 and over) were included in the sample.

NOTE: This report uses “attending to” rather than “stopping at” to describe the attracting power of the various exhibits. The more traditional stopping measure fails to incorporate the time someone may be looking at an exhibit while walking through a space. Therefore, the time a visitor spends looking at an exhibit may be underestimated using this method. With “attending to” this time is taken into account, allowing a more accurate measure of how long a person is looking at an exhibit. Also, some exhibits or labels are designed to provide an overview by glancing at a title and/or subtitle, so this is a worthwhile measure to be included in a timing and tracking study. “Attending to” is when a visitor spends 2 or more seconds looking at or interacting with an exhibit.

Main Findings:

1. How are visitors using the exhibition? What are they attending to, and where are they spending their time?

The average visitor to *Jellies: Living Art* is spending nine and a half minutes and stops at a little over one-third of the exhibits. When comparing types of exhibits, visitors were attending to the live animal displays the most, making up ten of the fourteen exhibits with the highest percentages of visitors attending to them. However, visitors attended to the Dale Chihuly installation the most of all exhibits. Interactive or hands-on exhibits had the longest stay times, followed closely by the live animal exhibits. The moon jelly room, a tank, had the longest stay time for individual exhibits and was the only element with a stay time of over one minute (86 seconds). The feeding and stinging exhibit had the second longest stay time at 54 seconds. See Appendices B and C for behavioral information about specific exhibits.

2. Is having the intro labels in both English and Spanish affecting use of these labels?

Whether having the labels in both languages affects visitor behavior is not specifically addressed in the timing and tracking portion of the evaluation, but the group of four introductory labels in *Jellies: Living Art* can be compared to use of introductory labels in other exhibits. On average the introductory labels in *Jellies: Living Art* performed better than other introductory labels in the aquarium. However, additional factors such as design, physical position in the exhibition and content may influence visitor use of these

particular labels. A separate study was conducted for this evaluation in which introductory labels were tested in two conditions: with both English and Spanish, and with English only (see Bilingual Label Study in the latter part of this report).

Context for Time and Attending Percentage Numbers for Jellies: Living Art

One of the most difficult things about interpreting results from timing and tracking studies is that sometimes it is confusing what is a "normal" amount of time or what is "typical" in terms of stopping percentage. This section provides context by comparing data from the *Jellies: Living Art* timing and tracking to data from a meta-analysis conducted by Beverly Serrell.

The following statements come from Beverly Serrell's (1998) book *Paying Attention: Visitors and Museum Exhibitions*. They provide some context in terms of the amount of time museum visitors typically spend in exhibitions. The results are a compilation of timing and tracking studies in 110 museum exhibitions.

The following are direct quotes from Serrell's book (1998, p. IX):

- In 80% of the exhibitions, the average total visit time was less than 20 minutes regardless of the size or topic of the exhibition
- Frequency distributions of time spent in exhibitions show that most visitors spend relatively little time and fewer visitors spend longer times
- Visitors typically stopped at about one-third of the exhibition elements
- In general, the amount of time visitors spent in an exhibition was directly and positively related to the number of elements at which they stopped
- Comparisons across groups of exhibitions suggest that time and stops differed among three subgroups of the data (large exhibitions, old or pre-renovation exhibitions, and diorama-like exhibitions), but did not differ significantly among exhibition topics or types of museums
- Among the 110 exhibitions in this study, exceptionally thoroughly used exhibitions were uncommon. These included exhibitions that charged a fee, were newly opened, contained elements that were extremely captivating, or attracted an audience that was apparently very intentional about being thorough

Timing and tracking data for *Jellies: Living Art* was compared to the group of exhibitions in Serrell's book that were between 3,000 and 6,000 square feet. This range was selected because the *Jellies: Living Art* exhibition was 4,650 square feet. In comparison, the median percentage of exhibits stopped at was relatively the same. However, on average visitors spent more time in the other museum exhibitions compared to *Jellies: Living Art*. Information is also included from the Vanishing Wildlife exhibition.

<u>Comparison</u>	<u>Square Feet</u>	<u>Total Time</u>	<u>Sweep Rate Index (SRI)³</u>	<u>Number of Exhibits</u>	<u>Median % Exhibits Stopped at</u>
<i>Jellies: Living Art</i>	4,650	9.5	490	42	34.0%
Serrell Study	3,000 – 6,000	15.9	337	39	36.3%
Vanishing Wildlife	1,702	5.7	299	16	22.0%

NOTE: The "Number of Exhibits" for the Serrell study refers to the average number of exhibits in the comparison group.

³ SRI is Sweep Rate Index, which measures how quickly visitors move through an exhibition (Serrell, 1998). It is calculated by dividing the square footage of the exhibition by the average number of minutes visitors spend in the exhibition. The lower the SRI, the more slowly visitors go through the exhibition.

Context for Time and Attending Percentage Numbers for Jellies: Living Art

This section includes both the mean and the median measures for time and attending percentages. Both are included as a comparison, although the mean is used in reporting the values throughout the report. The distributions are normal enough to warrant using means instead of medians.

Mean - the "average" number. This measure can be influenced by outliers (really high or really low numbers) since each number exerts the same influence over the calculated mean.

Median - the number at which 50% of the sample is higher than that number, and 50% is lower than that sample. This measure reduces the amount which outliers (really high or really low numbers) affect the results

Visitor Behavior in Jellies: Living Art

<u>Measure</u>	Range		<u>Mean</u>	<u>Median</u>
	<u>Low</u>	<u>High</u>		
% Exhibits Attended to	3%	76%	36%	34%
Time in Exhibition (in min:sec)	00:15	43:56	09:28	08:04

Percentage of Visitors Attending to Each Exhibit, from Highest to Lowest

See Appendix B for a visual representation of these data.

<u>Exhibit</u>	<u>Percent Attending</u>	
Dale Chihuly Installation	96%	
Moon Jelly Room (Tank)	90%	
Upside Down Jelly Tank	85%	
Sea Nettle Jelly Tank (in Shape & Size)	77%	
Spotted Jelly Tank	74%	
Blue Jelly Tank	69%	
Cork Marcheschi Installation	69%	TOP THIRD
Comb Jelly Tank	65%	
Black Sea Nettle Jelly Tank	60%	
Lava Lamps	56%	
Box Jelly Tank	54%	
Tank of the Month	53%	
Body Interactive	52%	
Crystal Jelly Tank	43%	
Life Cycle Interactive	42%	
Spiral Projected Poem	40%	
Rich Satava Installation	38%	
Feeding and Stinging Console	36%	
Rhythm and Movement Video	35%	
Artist Statements Panel	28%	
Shape Size Video	26%	MIDDLE THIRD
Ernst Haeckel Installation	21%	
Color and Pattern Video	20%	
Upside Down Jelly Tank Label	20%	
Swarm Video	19%	
Roger Brown Installation	18%	
Blue Jelly Tank Label	17%	
<i>Jellies: Living Art</i> Intro Panel	16%	
Rhythm and Movement Intro Panel	15%	
Shape Size Intro Panel	15%	
Color and Pattern Intro Panel	14%	
Poem at Exit (Terry Tempest Williams)	13%	
Moon Jelly Tank Label	12%	
David Hockney Installation	11%	
Stupid Candy #2 Installation	11%	BOTTOM THIRD
Stupid Candy #1 Installation	10%	
Ray Troll Installation	10%	
Pegan Brooke Installation	10%	
Closer Look Intro Panel	8%	
Blaschka Installation	7%	
Evaluation Panel	2%	
Poem at Entrance	1%	

NOTE: “Installation” denotes a work of art.

Average Time Spent at Each Exhibit for Those Who Attended, from Highest to Lowest

See Appendix C for a visual representation of these data.

<u>Exhibit</u>	<u>Average Time (in sec.)</u>	
Moon Jelly Room (Tank)	86	
Feeding and Stinging Console	54	
Comb Jelly Tank	45	
Life Cycle Interactive	44	
Upside Down Jelly Tank	42	
Spotted Jelly Tank	35	
Black Sea Nettle Jelly Tank	34	TOP THIRD
Rhythm and Movement Video	31	
Sea Nettle Jelly Tank (in S&S)	31	
Artist Statements Panel	27	
Body Interactive	27	
Swarm Video	27	
Shape Size Video	26	
<u>Tank of the Month</u>	<u>26</u>	
Blaschka Installation	24	
Ernst Haeckel Installation	24	
Blue Jelly Tank	23	
Box Jelly Tank	23	
Crystal Jelly Tank	23	
Ray Troll Installation	22	
Dale Chihuly Installation	21	MIDDLE THIRD
Rich Satava Installation	19	
Upside Down Jelly Tank Label	19	
Rhythm and Movement Intro Panel	18	
Closer Look Intro Panel	17	
Blue Jelly Tank Label	16	
Roger Brown Installation	16	
<u>Cork Marcheschi Installation</u>	<u>16</u>	
Lava Lamps	15	
Color and Pattern Video	14	
Shape Size Intro Panel	14	
Stupid Candy #2 Installation	14	
David Hockney Installation	13	
Color and Pattern Intro Panel	11	
Moon Jelly Tank Label	11	BOTTOM THIRD
Pegan Brooke Installation	8	
Spiral Projected Poem	8	
Evaluation Panel	6	
Stupid Candy #1 Installation	6	
<i>Jellies: Living Art</i> Intro Panel	4	
Poem at Exit (Terry Tempest Williams)	4	
Poem at Entrance	2	

NOTE: “Installation” denotes a work of art.

Comparisons of Type of Exhibit by Percent Attending, and by Average Time for a Stop

Reading the Table: The following table groups exhibits together into the seven types of exhibits listed below. Percent attending represents the percentage of people who attended to an exhibit (those who looked at or interacted with an exhibit for two or more seconds). Therefore, if an exhibit element were a live jelly tank, then typically two-thirds of visitors would attend to it. The same principle applies to the average time in seconds. If an exhibit element were a live jelly tank, visitors who did attend to it would do so for an average of 36 seconds. Number of exhibits refers to the number of exhibits in the exhibition that were grouped into that category.

<u>Type of Exhibit</u>	<u>Percent Attending</u>	<u>Average Time, Sec.</u>	<u>Number of Exhibits</u>
Live Jelly Tank	67%	36	10
Interactive, Hands-On	43%	41	3
Art	32%	17	11
Video	25%	24	4
Projected Text (Spiral, Poems)	18%	4	3
Jelly Label	16%	15	3
<u>Text Panel, Stand Alone</u>	<u>14%</u>	<u>13</u>	7
Average	35%	22	
Statistically significant?	YES	YES	

NOTE: Type of exhibit DOES affect the percentage of visitors attending to an exhibit
 NOTE: Type of exhibit DOES affect the average time visitors spend at an exhibit

Comparisons of Intro Panels by Percent Attending, and by Average Time for a Stop ⁴

<u>Exhibition</u>	<u>Percent Attending</u>	<u>Range % Attend</u>	<u>Average Time, Sec.</u>	<u>Number of Intro Panels</u>
<i>Jellies: Living Art</i> Intro Panels	15%	14% to 16%	12	4
Vanishing Wildlife Intro Panels	11%	3% to 12%	---	3
Nearshore Exhibition Intro Panels	5%	0% to 10%	25	11

⁴ There was a difference in who was included in the samples for computing average time at the labels. In the Nearshore study, only those who physically stopped at the exhibit were included, while for the *Jellies: Living Art* evaluation any attention toward the panels of two or more seconds was considered “attending to” it. Therefore, the Nearshore would only include those who stopped and may overestimate the amount of time someone spent attending to a panel because it does not include those who looked at it as they walked by.

Summary, Interviews

Purpose of the Interviews:

There were five main research questions the interviews needed to answer:

1. What are visitors' general reactions to the exhibition? What do they like and don't like?
2. Are visitors reading more, the same number, or fewer labels than in other MBA exhibitions?
3. What is the visitor reaction to the art in the exhibition and what relationship do they see between the art displayed and the animals in the tanks? Which pieces of art do they enjoy the most and why?
4. What conservation messages are they getting from the exhibition? What conservation content do they remember?
5. Do prior visits to MBA and to *Jellies: Living Art* affect their responses? Do those who have seen the exhibition multiple times experience it differently than first-time visitors?

Method:

In August 2003, 420 randomly selected adult visitors were interviewed about their experience in *Jellies: Living Art*. As visitors were leaving the exhibition they were approached and asked if they would be willing to answer some questions about the exhibition. An interviewer asked questions and recorded their answers on an interview form. A photoboard with pictures of the different art pieces in the exhibition was used for the question about which piece of art they enjoyed the most. This was to eliminate any confusion about which piece of art they were referring to, as well as to give the visitor the entire art collection to choose from.

Main Findings:

This main findings section specifically address the research questions for the interview portion of the evaluation.

1. What are visitors' general reactions to the exhibition? What do they like and don't like?

Almost three-quarters (71%) gave the exhibition an "excellent rating," a 9 or a 10 on a 10-point scale. Almost every visitor (96%) gave *Jellies: Living Art* an excellent (9 to 10) or good (7 to 8) rating. Asked what would improve the exhibition, 48% had no suggestions. Visitors typically mentioned the jellies or specific species (36%) or the moon jelly mirror room (32%) as the part they enjoyed the most. The artwork (12%) and exhibit-related experiences (9%) were also popular. When asked to give any general thoughts or feelings about the exhibition they were overwhelmingly positive: 88% were positive comments, 5% were neutral, 4% were negative and 4% were comments about the whole aquarium.

2. Are visitors reading more, the same number, or fewer labels than in other MBA exhibitions?

Timing and tracking data from other MBA studies (including a 2003-2004 Label Study) have revealed that introductory panels in *Jellies: Living Art* were being read more frequently than introductory panels in other MBA exhibitions. However, visitors did not report a significant increase in reading behavior in *Jellies:*

Living Art compared to other exhibitions they had seen during their visit. Approximately half said they read the same amount, while a quarter said they read more and another quarter said they read less. Of visitors who said they read more, they said they were simply more interested in the exhibition, didn't know a lot about jellies, thought there was simply more to read, or said it was the way the labels were done.

3. What is the visitor reaction to the art in the exhibition and what relationship do they see between the art displayed and the animals in the tanks? Which pieces of art do they enjoy the most and why?

When asked, two-thirds of visitors said they were surprised to see art in the exhibition. When asked why art was included, however, they said because jellies inspire art, the exhibit shows the relationship between nature and man-made art, or that like the title, jellies are living art. Other reasons included that it showed the beauty of jellies, it was another way to look at jellies (as art) and that it allowed a comparison between jellies and the art in the exhibition. The Chihuly glass installation was reported by visitors to be their favorite art piece in the exhibition, followed by almost equal numbers who mentioned the Satava or Marcheschi installations.

4. What conservation messages are they getting from the exhibition? What conservation content do they remember?

Almost half (49%) of visitors interviewed said they remembered seeing something in *Jellies: Living Art* about conservation. While most of these visitors (46%) did not give specific information about exactly where they saw the information, they were more successful at recalling what they saw. Mangroves were mentioned frequently by visitors, which is not surprising considering that three of the jelly focus labels specifically mentioned mangrove destruction as a threat to jellies. Other content visitors remembered related to a general decline in jelly populations, the need to conserve jellies, destruction of their habitats or pollution in general. A smaller group was able to remember specific content from the labels, including jellies being transported in the ballast of ships, jellies in the Black Sea, Washington Harbor or jellies caught in fishing nets.

5. Do prior visits to MBA and to Jellies: Living Art affect their responses? Do those who have seen the exhibition multiple times experience it differently than first-time visitors?

In comparing visitors by whether they had previously been to MBA or *Jellies: Living Art*, there were very few differences in how they responded to the interview questions.

Profile of Visitors, Interview:

A little more than two-fifths of visitors (43%) were first-time visitors to the aquarium, 18% of these were members. There was an almost equal split between males and females, and over half (54%) of the groups were visiting with children. Three-fifths of visitors (60%) were from California, one-third (33%) were from another U.S. state and 7% were international. Only 9% were under 25, while 40% of visitors were between the ages of 25 and 44. More than two-thirds (69%) had a college degree or higher.

Additionally, to determine whether those included in the interview sample represented general visitors to the aquarium, demographic data from the *Jellies: Living Art* interviews were compared to monthly exit survey data. Since the *Jellies: Living Art* interviews were done in August, a comparison was made to aquarium visitors in the month of August. In comparing the demographic variables, there were no statistically significant differences. This means that those interviewed for *Jellies: Living Art* do represent general aquarium visitors. This should not be surprising since exit surveys indicate that 86% of visitors see the *Jellies: Living Art* exhibition during their visit.

	August, 2003 <i>Jellies: Living Art</i> <u>Interview</u>	August, 2003 <u>Exit Surveys</u>	Statistically Significant <u>Difference?</u>
First-Time Visitors:	43%	47%	No
Members:	18%	12%	No
Males/Females:	45%/55%	43%/56%	No
Visit With Children:	54%	50%	No
Where visitors live:			No
California	60%	63%	
Other U.S. State	33%	29%	
International	7%	8%	
Age			No
Under 21	4%	5%	
21 to 24	5%	6%	
25 to 34	14%	22%	
35 to 44	26%	27%	
45 to 54	27%	23%	
55 to 64	17%	13%	
65 or older	7%	5%	

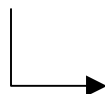
	August, 2003 <i>Jellies: Living Art</i> <u>Interview</u>	August, 2003 <u>Exit Surveys</u>	Statistically Significant <u>Difference?</u>
Level of Education			No
Some high school	1%	1%	
High school grad	7%	4%	
Some college	23%	23%	
College grad	32%	34%	
Post grad degree	37%	38%	

Previous Experience in the Aquarium and *Jellies: Living Art*

Of those interviewed, more than half had been to the aquarium previously, and 44% of the visitors had seen the *Jellies: Living Art* exhibition before their visit that day. Of those who had seen *Jellies: Living Art* previously, 38% had seen it once, 45% had seen it between two and five times and 17% had already seen the exhibition six or more times.

Is this your first visit to the aquarium?

Yes 43% (181 out of 418)
No 57% (237 out of 418)



If “No:” Is this your first visit to the *Jellies: Living Art* exhibit?

No 44% (102 out of 234)
Yes 56% (132 out of 234)



NOTE: 24% (102 out of 418) of ALL VISITORS had visited *Jellies: Living Art* during a past visit

How many times have you been to this exhibit before today?

	<u>If seen JLA before today</u>	<u>All Visitors</u>
Never	-----	76%
Once	38% (27 out of 71)	9%
2 to 3 times	35% (25 out of 71)	9%
4 to 5 times	10% (7 out of 71)	2%
6 to 10 times	16% (11 out of 71)	4%
More than 10 times	1% (1 out of 71)	<1%

Rating of Jellies: Living Art Exhibition

The majority of visitors (71%) gave *Jellies: Living Art* an excellent rating, a 9 or 10 on a 10-point scale. Almost all visitors (96%) gave the exhibition a rating of 7 or above. When visitors were asked what would make it even better, almost half of visitors could not think of anything (42%) or said it was great the way it is (6%). Over one in ten (11%) did say it would be better with more jelly species represented. Data were collected in summer, during the aquarium’s busy season, so it is not surprising that 5% mentioned crowding as a problem in the exhibit. Other responses, each less than 5%, included making it bigger in general, having more jellies and less art, having bigger jellies, telling where the jellies are from, and having more information. Some of these responses (i.e., fewer people, make it bigger, more information) are similar to what you hear when asking this question for other exhibitions as well.

Overall Rating

	Frequency	Percent	Cumulative Percent
Excellent (9 to 10)	299	71.4	71.4
Good (7 to 8)	104	24.8	96.2
Fair (4 to 6)	15	3.6	99.8
Poor (1 to 3)	1	.2	100.0
Total	419	100.0	

Can you tell me something that would make it even better?

	Frequency	Percent
Can't think of anything	176	41.9
More jellies, More species	48	11.4
Great as is, don't change it	25	6.0
Fewer people in exhibit	20	4.8
Make it bigger, Have more	15	3.6
More jellies, less art	15	3.6
Bigger jellies	9	2.1
Tell where jellies are from	9	2.1
More information	8	1.9
More natural history info (what eat, how reproduce)	7	1.7
Music is too loud	6	1.4
More audio explanation	6	1.4
More for kids	5	1.2
More hands-on exhibits	4	1.0
Better lighting, it's too dark	4	1.0
More music	4	1.0
Make it permanent	4	1.0
Place to touch jellies	4	1.0

More benches, places to sit	3	.7
Bigger tanks, hard to see them in crowds	3	.7
More videos	3	.7
Better labels, signage	3	.7
Make lighting in tanks better	3	.7
More information about artists, art	3	.7
Miscellaneous	33	7.9
Total	420	100.0

What Visitors Learned in the Exhibition

Visitors were most likely (43%) to say that before their visit they didn't realize how many different species of jellies existed. Around one-tenth (12%) commented on the beauty or elegance of jellies. The third most common response was that people didn't realize jellies were used in art or inspired art (6%). Some of the answers were how jellies didn't fit with their preconceived notions that jellies could make a rainbow of colors by breaking down white light (4%), were actually colorful (4%) and interesting or complex (4%). Besides the variety of species, some visitors mentioned the variety in size (3%), especially as it related to the small jellies.

Please complete the following sentence about the *Jellies: Living Art* exhibit: "I never realized that..."

	Frequency	Percent
So diverse, Variety	174	42.9
Beautiful, Elegant	48	11.8
Inspired art, used in art	25	6.2
Created light, Had rainbow colors	17	4.2
So colorful	16	3.9
So interesting, Complex	15	3.7
Upside down jellies	12	3.0
Nothing, Nothing new	12	3.0
Were different sizes, so small or large	10	2.5
Live in mangroves	6	1.5
So dangerous, could kill or hurt humans	6	1.5
How they move	6	1.5
Impacted nature so much, That there are so many	6	1.5
How they reproduce	5	1.2
Can be transparent, Invisible	4	1.0
Flower hat jellies	3	.7
Delicate, Fragile	3	.7
Don't sting each other	3	.7
How they eat	2	.5
Miscellaneous	33	8.1
Total	406	100.0

Main Message of the Exhibition

The largest group of visitors thought the main message of the exhibition was about how nature inspires art and how jellies are like art. This was followed closely by those who thought it was about communicating how beautiful jellies are. The third most popular answer was about conservation and protection of jellies.

Of the statements below, the 1st, 2nd, 3rd, 6th and 7th response categories contain elements of the main message of the exhibition. This means that 63% of all visitors to *Jellies: Living Art* were got elements of the main message by visiting the exhibition.

What do you think the main message of the exhibit is?

	Frequency	Percent
Nature inspires art, Jellies are like art	90	21.5
Beauty of jellies/nature	80	19.1
Must conserve and protect jellies/nature	53	12.6
The diversity of jellies/nature	28	6.7
To learn about jellies, educate	28	6.7
Raise appreciation and awareness of jellies/nature	25	6.0
Fragility of jellies/nature	16	3.8
There is more to jellies than we know	14	3.3
Describes jellies and how they live	14	3.3
To understand what's out there, lots to know	11	2.6
Jellies are a part of nature	10	2.4
Reference to God's work	5	1.2
Jellies are simple, elegant	5	1.2
Miscellaneous	22	5.3
Don't know/Nothing	18	4.3
Total	419	100.0

Part Enjoyed the Most

Visitors were most likely to mention the living animals (36%) or the Moon Jellies Mirror Room (32%) as the part they enjoyed most about the exhibition. The artwork was mentioned by 12%, while 3% specifically mentioned the combination of art and jellies. Of those who mentioned the living animals, almost half simply mentioned the jellies in general, not citing a particular species. The comb jellies (with their rainbow-like colors) and the sea nettles were the most mentioned jelly species. Of the artwork, the glasswork in general and the Chihuly installation were most often mentioned. Of the exhibit-related aspects (10%), visitors talked about the videos, the life cycle interactive and the gilded frames around the tanks.

Which part of *Jellies: Living Art* did you enjoy the most?

NOTE: The answers in caps and bold text represent groups of responses or major categories. A few of these major categories (jellies, artwork and exhibit-related) are further broken down into subcategories.

	Frequency	Percent
JELLIES	150	35.9
The live jellies (non-specific)	64	15.3
Comb jellies, phosphorescent	22	5.3
Sea nettles	13	3.1
Flower Hat jellies	12	2.9
Small jellies, Box jellies	10	2.4
Upside Down jellies	8	1.9
Variety of jellies	7	1.7
Blue jellies	3	.7
Spotted jellies	2	.5
Crystal jellies	2	.5
Miscellaneous (jellies)	7	1.7
MOON JELLIES SWARM ROOM	135	32.3
ARTWORK	49	11.7
Glass art (non-specific)	21	5.0
Chihuly installation	13	3.1
The artwork (non-specific)	7	1.7
Satava installation	4	1.0
Marcheschi installation	1	.2
Haeckel installation	1	.2
Miscellaneous (about art)	2	.5
EXHIBIT-RELATED	41	9.8
Videos, a specific video	14	3.3
Life cycle interactive	6	1.4
Picture frames around tanks	5	1.2
Exhibit or tank design	5	1.2
Miscellaneous (exhibit-related)	11	2.6
COMBINATION OF JELLIES & ART	13	3.1
SEEING JELLIES CLOSE UP	5	1.2

JELLIES MOVEMENT, WATCHING THEM MOVE	4	1.0
VISUAL BEAUTY	2	.5
DON'T KNOW, CAN'T SAY	4	1.0
ALL OF IT	15	3.6
Total	418	100.0

Remembering Conservation Information in the Exhibition

Almost half of visitors (49%) said they remembered seeing something in *Jellies: Living Art* about conservation. Those who said they saw something about conversation were asked where in the exhibit they saw it and what they saw. Almost half of this group (46%) either said something ambiguous like all through the exhibit, in the middle/beginning/end or they couldn't remember. Another 10% said they saw conservation information in multiple labels. For specific answers, 8% mentioned mangroves (a reference to multiple labels), 7% referred to the quote about nature ⁵, 6% said the Upside Down jelly label, 6% mentioned a label about the Black Sea and 3% mentioned the Moon Jelly swarm video.

Visitors were more successful telling us what they saw about conservation. The largest group (25%) mentioned cutting down mangroves, which was present in multiple labels. 14% said they simply couldn't remember what they saw about conservation. 8% mentioned a decline in jelly populations, 7% mentioned the end quote about the survival of compassion and another 7% referred to needing to conserve jellies in general.

Do you remember seeing or hearing anything in *Jellies: Living Art* about conservation?

		Frequency	Percent	Valid Percent
Valid	Yes	204	48.6	48.7
	No	215	51.2	51.3
	Total	419	99.8	100.0
Missing	System	1	.2	
Total		420	100.0	

Could you tell me where it was? (If remember something)

		Frequency	Valid Percent
Valid	All through the exhibit, Various places	29	14.9
	Specific section (beginning, middle, end)	24	12.4
	Can't remember - Couldn't give specific example of what	20	10.3
	Multiple labels, All labels	19	9.8
	Can't remember - Gave specific example of what	16	8.2
	Mangroves	15	7.7
	Exit Quote, Williams	13	6.7
	Upside Down jellies	11	5.7
	Black Sea	11	5.7

⁵ “It is no longer the survival of the fittest, but the survival of compassion.” Terry Tempest Williams quote projected onto the wall just before the exit to *Jellies: Living Art*.

Swarm video before Moon Jelly room	6	3.1
Washington Harbor	4	2.1
Comb jellies	3	1.5
Crystal jellies	3	1.5
Box jellies	3	1.5
North Sea	2	1.0
Moon jellies	2	1.0
Brown painting, Where have all the fishes gone?	2	1.0
Flowerhat jellies	1	.5
Spotted jellies	1	.5
Bering Sea	1	.5
Miscellaneous	8	4.1
Total	194	100.0

What did it say about conservation? (If remember something)

	Frequency	Valid Percent
Valid Mangroves - People cut them down	48	24.6
Nothing specific, Can't remember	28	14.4
Decline in jelly population	15	7.7
End poem (Williams)	13	6.7
Need to conserve jellies	13	6.7
Destruction of habitats	11	5.6
Pollution in general	10	5.1
Overfishing	7	3.6
Jellies transported in ship ballast	7	3.6
Ecosystem is out of balance	6	3.1
Something about jellies in (Black Sea, Washington, etc.)	5	2.6
Jelly blooms, Overpopulation	4	2.1
Jellies caught in fishing nets	4	2.1
Jellies eating plankton	4	2.1
Jellies eating anchovies	3	1.5
Dredging	2	1.0
Mangrove - Need to conserve them	2	1.0
Miscellaneous	13	6.7
Total	195	100.0

Noticing Organization of the Exhibition

Just under one-third (31%) of visitors said they noticed how things were organized or grouped together in the exhibition. Of those who said they noticed, 20% were able to mention one of the main areas of the exhibit (i.e., Shape and Size, Rhythm and Movement, Color and Pattern). 8% of those who noticed how things were organized were able to mention at least 2 of the 3 main areas. Some visitors thought the exhibition was organized by either the jelly species (9%), by the artists (5%) or by going from jelly to art to jelly, etc. (9%). Others didn't know what the organization was, but they said the exhibition flowed well (9%) or that they liked it (7%).

Did you notice how things were organized or grouped together in the exhibit?

		Frequency	Percent	Valid Percent
Valid	Yes	129	30.7	30.8
	No	290	69.0	69.2
	Total	419	99.8	100.0
Missing	System	1	.2	
Total		420	100.0	

If Yes, How were they organized?

		Frequency	Valid Percent
Valid	Shape and Size	7	5.2
	Rhythm and Movement	4	3.0
	Color and Pattern	5	3.7
	Mention 2 of 3 main areas	7	5.2
	Mention all 3 main areas	2	1.5
	By the jellies, by species	12	9.0
	Interchanging jellies then art	12	9.0
	It flowed well	12	9.0
	By theme or groups	10	7.5
	Don't know but liked it	9	6.7
	Art corresponded to type of jelly	9	6.7
	By the art or artist	7	5.2
	Art is at the beginning	7	5.2
	Big to small, small to big	4	3.0
	Don't know	12	9.0
Miscellaneous	15	11.2	
Total		134	100.0

Reading Compared to Other MBA Exhibitions (just those who had seen other exhibitions)

Half of visitors to the exhibition (48%) said they did about the same amount of reading compared to other exhibitions. The remaining visitors were split almost evenly between those who said they did less reading (25%) and those who said they did more reading (27%).

When asked why they might have read more than in other exhibits, visitors said they were simply more interested, don't know a lot about jellies, thought there was simply more to read or said it was the way the labels were done. Others said the exhibit was fascinating, they weren't as distracted by their own kids, they wanted to know more, were curious about jellies or it was not as crowded in the exhibit.

Compared to other exhibits you've seen today, how much reading did you do in *Jellies: Living Art*? Was it....

		Frequency	Percent	Valid Percent
Valid	About the same amount	167	47.9	47.9
	Less reading	88	25.2	25.2
	More reading	94	26.9	26.9
	Total	349	100.0	100.0

Why do you think you read more here?

		Frequency	Valid Percent
Valid	More interesting, Captured attention	21	22.1
	Don't know a lot about jellies	8	8.4
	More to read, More info	8	8.4
	Way labels are done, Layout	8	8.4
	Fascinating, Extraordinary	7	7.4
	Kids with someone else, asleep	6	6.3
	Wanted to know more	6	6.3
	Interested in jellies, Curious	6	6.3
	Not as crowded	6	6.3
	First time in exhibit	4	4.2
	Find out about art	2	2.1
	Miscellaneous	13	13.7
	Total	95	100.0

Surprised to See Art in the Exhibition

Two-thirds of visitors said they were surprised to see art in the exhibition. We also asked visitors why they thought we put art in the exhibition. The most common answer (20%) was that jellies inspire art or to show the relationship between nature and art (11%). Another 9% said that, similar to the title, jellies simply are living art. Others thought the exhibition was to show the natural beauty of jellies (8%) or to present another way to look at jellies, as art (8%).

Did it surprise you to see art in this exhibit about jellies?

		Frequency	Percent	Valid Percent
Valid	Yes	282	67.1	67.1
	No	138	32.9	32.9
	Total	420	100.0	100.0

Why do you think we put art in this exhibit?

		Frequency	Valid Percent
Valid	Jellies inspire art, Art imitates nature	84	20.2
	Show relationship between nature/jellies and art	45	10.8
	Jellies are art	36	8.7
	Show the beauty of jellies	32	7.7
	Another way to look at jellies, as art	31	7.5
	Enhance the exhibit, Make it interesting	23	5.5
	Compare/contrast jellies and art	19	4.6
	It attracts people, Draws attention	16	3.9
	The two go together	16	3.9
	Unique way to do an exhibit	9	2.2
	The art looks (physically) like jellies	7	1.7
	Show how jellies relate to humans	7	1.7
	To get people to think	6	1.4
	People like art	6	1.4
	Show colors	3	.7
	Think about conservation of jellies	3	.7
	Don't know	39	9.4
	Miscellaneous	33	8.0
	Total	415	100.0

What art pieces were enjoyed the most

See Appendix F for pictures of the art installations.

The most popular piece of art, chosen by 70% of visitors, was the Chihuly installation. The next two most popular, receiving roughly one-third each, were the Satava and Marcheschi pieces. The Haeckel prints were next, followed by the lava lamps and Blaschka’s jelly models.

When we asked visitors why they selected a specific piece of art, answers varied by which work of art they selected. In general, visitors chose certain installations because of the art itself (e.g., the colors, patterns, the detail, it was different, the movement) or because of its relationship to the jellies (e.g., looked like jellies, can see the connection). For specific pieces, visitors picked the Chihuly installation because it was colorful, beautiful, the shapes, it looks like jellies and it’s glass. The Satava installation was chosen because it looks so realistic and the glasswork is amazing. The Marcheschi installation was chosen for the colors, the movement and that it was different.

Which two works of art did you enjoy the most?

Note: Visitors picked two works so percentages will total to more than 100%

		Frequency	Percent
Valid	Chihuly	295	70.2
	Satava	144	34.3
	Marcheschi	135	32.1
	Haeckel	59	14.0
	Lava lamps	41	9.8
	Blaschka	34	8.1
	Stupid candy	26	6.2
	Faust	27	6.4
	Brooke	22	5.2
	Hockney	21	5.0
	Brown	17	4.0
	Total	420	

Top 3 works of art enjoyed the most:



Chihuly installation.



Satava installation.



Marcheschi installation.

Why did you pick _____?

NOTE: See Appendix F for pictures of the art installations.

Dale Chihuly – colorful, beautiful, the shapes, looks like the jellies, like glass

“Because of the colors and the craft and the creativity of glassblowing.”

“I like glass and it was beautiful”

“Colorful, display artfully done”

Rich Satava – looks so realistic, glasswork is amazing

“It’s like one’s essence, captured”

“Interesting that something so delicate could be created by man or woman”

“I couldn’t believe a human could make it, they’re so delicate”

Cork Marcheschi – the colors, movement, was different

“The colors and mimicry of natural jellyfish”

“Different things to look at, very sensory”

“Because it had lights and motion.”

Ernst Haeckel – the pattern, symmetry, detail, historical significance

“The age and similar symmetry to jellyfish”

“Surprised he could capture details of these animals, over 100 years ago”

“Unique, so long ago, so fresh. Symmetry, before modern artists”

Lava lamps – like lava lamps, can see the connection, the movement

“I like lava lamps – it’s weird how they’re so similar”

“Reminded me of when we were growing up”

“Neat, because they have the motion of jellies”

Blaschka – how old they are, very lifelike

“The fact they were old and so well done”

“They’re very life-like and amazing”

“Father and son made it over a century ago”

Stupid candy – using candy, very colorful

“Had never seen candy depicted that way”

“It was cool to see the connection between jellies and something edible”

“I like photography, color attracted me”

Faust – bright colors, patterns and designs

“Brightness of color and shapes”

“Variety of colors – pictures hidden inside the picture”

“Just the colors and design, brightness and contrast”

Pegan Brooke – more subtle, softer, beautiful

“Mirrored the subtlety of the jellyfish”

“Softer, less bold”

“It is art and it’s pretty”

David Hockney – the colors, simple, relate to water

“Love Hockney’s great understanding of color”

“It’s calming and simple”

“Contrast light and color, not too busy”

Roger Brown – unique and different, interesting

“Looking at it and trying to see different things”

“Made you think and couldn’t just walk past it. It made you stop and think”

“Interesting, unique and totally different”

General Thoughts or Feelings about Exhibit

Of all those interviewed, 78% had a final thought about the exhibit that they shared. Of this group, the large majority (88%) were positive comments (e.g., wonderful, enjoyed it, make it permanent, etc.). 5% of the comments were neutral in nature (e.g., more info on jellies, the Frank Zappa bit was interesting, etc.). Only 4% of the comments were negative. These included things like more jellies, less art; more information, more wayfinding; progression, or theme, too subtle for me. However, this was only a small group of visitors and not representative of visitors in general.

Any other thoughts or feelings about the *Jellies: Living Art* exhibit you wanted to share with us?

		Frequency	Valid Percent
Valid	Positive comment	252	87.5
	Negative comment	12	4.2
	Neutral comment	14	4.9
	Comment unrelated to <i>Jellies: Living Art</i>	10	3.5
	Total	288	100.0

Summary, Bilingual Label Study

Purpose of the Bilingual Label Observations:

Past label research has indicated that as the number of words on a label increases, the number of those reading it decreases (Serrell, 1996)⁶. However, studies typically only test the effect with labels in one language, not whether it is the number of words or some other factor that yields this effect. The purpose of this portion of the evaluation was to determine whether adding a Spanish translation to the English introductory panel, which doubles the amount of text, negatively affects visitor use of a label.

There were two main research questions the bilingual label observations needed to answer:

1. Does the inclusion of introductory panels in both Spanish and English affect how often people attend to or read the panels?
2. Are there any noticeable differences in those reading the bilingual or English-only versions of the panels?

Method:

In February, 2004 visitors were observed in the *Jellies: Living Art* exhibition at one of three introductory panels: Shape and Size, Rhythm and Movement or Color and Pattern. Three panels were chosen to minimize any effect that content or specific placement of the panel might have on label reading behavior. For each of the three panels, a Spanish/English version and an English-only version were tested. As a result, this experiment had six conditions, two for each panel:

Shape and Size Intro Panel:	1) Spanish/English version, 2) English-only version
Rhythm and Movement Intro Panel:	3) Spanish/English version, 4) English-only version
Color and Pattern Intro Panel:	5) Spanish/English version, 6) English-only version

Each version of the label tested included an equal number of observations for both weekends and weekdays, as well as time of day (morning or afternoon). In this manner, any potential effect of crowding or type of visitor during the period of data collection was controlled for and would not adversely affect the results.

An observer was stationed at one of three intro panels (Shape and Size, Rhythm and Movement, Color and Pattern), with either the full Spanish/English version or the English-only version. Visitors were then randomly selected as they approached the panels. For each visitor, it was noted whether or not they attended to the intro panel. For those who did attend to the panel, the amount of time they looked at it was recorded, in seconds.

Terms used in this study relating to label behavior:

Didn't attend – those passed by without looking at the label

Attended to – those who looked at the label at all, for any amount of time. Includes these two groups:

Glanced at – those who attended to the label between 1 and 2 seconds

Read – those who attended to the label for 3 or more seconds

⁶ Serrell, B. (1996). *Exhibit labels: an interpretive approach*. Walnut Creek, CA: Altamira Press.

Main Findings:

Does the inclusion of introductory panels in both Spanish and English affect how often people attend to or read the panels?

In comparing the Spanish/English to the English-only versions of panel presentation, there was no difference in attracting power (% attending to the label) or holding power (how long someone attended to the label). This indicates that while doubling the amount of text for an English-only panel may reduce reading time, adding the same amount of text in another language does not have the same effect.

Are there any noticeable differences in those reading the bilingual or English-only versions of the panels?

There were no noticeable differences in age or gender for those reading the two versions of the panels. It was determined that estimating ethnicity, while possible, would not serve the purpose of answering the question. Not all those who are Hispanic read Spanish, so even if ethnicity were guessed correctly, it would not indicate whether someone could read the panel. Future evaluations will attempt to answer this question in more detail.

Introductory Label Use Behavior

In examining all three labels together, 38% attended to the labels as they passed through the area. Of this group, 17% glanced at the label (1 to 2 sec. of attention) while 21% read the label (3 or more sec. of attention).

Label-Reading Behavior, all Types of Labels

Note: These numbers include both bilingual and English-only versions of the labels.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Didn't attend to it	372	62.0	62.0	62.0
Glanced at (1 to 2 sec.)	103	17.2	17.2	79.2
Read (3+ sec.)	125	20.8	20.8	100.0
Total	600	100.0	100.0	

Comparison to Other Introductory Panels

Since the aquarium conducted a label study in 2003-2004, it is possible to compare label use at these introductory panels in *Jellies: Living Art* to other introductory panels in the aquarium. The label reading behavior in comparing all six introductory panels across the two studies is very similar. This means that label use for the panels included in this study is representative of introductory panels overall.

<u>Type of Label</u>	<u>Sample Size</u>	<u>Didn't Attend</u>	<u>ATTENDED TO</u>	
			<u>Glanced at (1 to 2 sec.)</u>	<u>Read (3+ sec.)</u>
<i>Jellies: Living Art</i> summative	600	62%	17%	21%
Label Study Phase I ⁷	300	64%	18%	18%

⁷ The following introductory panels were included in Label Study Phase I: 1) Vanishing Wildlife main entrance Intro Panel, 2) Deep Reefs (Nearshore) Intro Panel, 3) Life in the Outer Bay (Drifters Gallery, Outer Bay) Intro Panel.

Label-Reading Behavior, Specific Labels

There was a statistically significant difference in label behavior in looking at the three panels included in this study. The Color and Pattern label was most likely to be read (24%), followed by Rhythm and Movement (21%) and Shape and Size (18%). However, of the three panels, visitors were most likely to just glance at the Shape and Size label (29% vs. 13% and 10% for the others). One possible explanation is that this panel is located just before the first jelly tank in the exhibition, which may be a focus of attention and draw visitors past this panel.

Label-Reading Behavior, by Specific Label

This analysis looks at the difference in label behavior by which introductory label was being observed.

			Label			Total
			Color and Pattern Intro Panel	Rhythm and Movement Intro Panel	Shape and Size Intro Panel	
Time at Label behavior	Didn't attend to it	Count	126	138	108	372
		% within Label	63.0%	69.0%	54.0%	62.0%
	Glanced at (1 to 2 sec.)	Count	26	20	57	103
		% within Label	13.0%	10.0%	28.5%	17.2%
	Read (3+ sec.)	Count	48	42	35	125
		% within Label	24.0%	21.0%	17.5%	20.8%
Total		Count	200	200	200	600
		% within Label	100.0%	100.0%	100.0%	100.0%

Statistically Significant Difference? **YES**

Time at Label, those Who Attended to It

The following table looks at the average amount of time visitors spent at a label when they did attend to it (includes either glancing at it or reading it). While the Shape and Size label had a lower average and median time, there was not a statistically significant difference in the labels.

<u>Specific Label</u>	<u>Sample Size</u>	<u>Average Time at Label</u>	<u>Median Time at Label</u>
Shape and Size	92	5 sec.	2 sec.
Rhythm and Movement	62	8 sec.	4 sec.
<u>Color and Pattern</u>	<u>74</u>	<u>8 sec.</u>	<u>3 sec.</u>
All Three Labels	228	7 sec.	3 sec.

Statistically Significant Difference? **NO**

Label Behavior, Bilingual Panels

In comparing the bilingual (Spanish/English) panels to the English-only version, there was no difference in label behavior. Visitors were no more or less likely to attend to, glance at, or read an English-only panel compared to the bilingual version.

Label-Reading Behavior, by Label Type

			Label Type		Total
			English and Spanish	English only	
Time at Label behavior	Didn't attend to it	Count	192	180	372
		% within Label Type	64.0%	60.0%	62.0%
	Glanced at (1 to 2 sec.)	Count	45	58	103
		% within Label Type	15.0%	19.3%	17.2%
	Read (3+ sec.)	Count	63	62	125
		% within Label Type	21.0%	20.7%	20.8%
Total		Count	300	300	600
		% within Label Type	100.0%	100.0%	100.0%

Statistically Significant Difference? NO

Appendix A Timing and Tracking Sheet

7 Lava Lamps
—

9 Spiral
—

11 Label
—

13 Feeding & Stinging
—

15 Stupid Candy #2
—

8 Box Jelly
—

10 Closer Look
—

12 Upside Down Jelly
—

14 Stupid Candy #1
—

1 Poem —	5 Nettle Tank —	18 Intro —
2 Intro —	6 Body Interactive —	19 Satava —
3 Hockney —	16 Ray Troll —	20 Artist Statements —
4 Variety Video —	17 Brown —	21 Poem —

Date: _____

Time of Day Started: _____

Total Time: _____

Observer: _____

Family
 Adults Only
 Alone

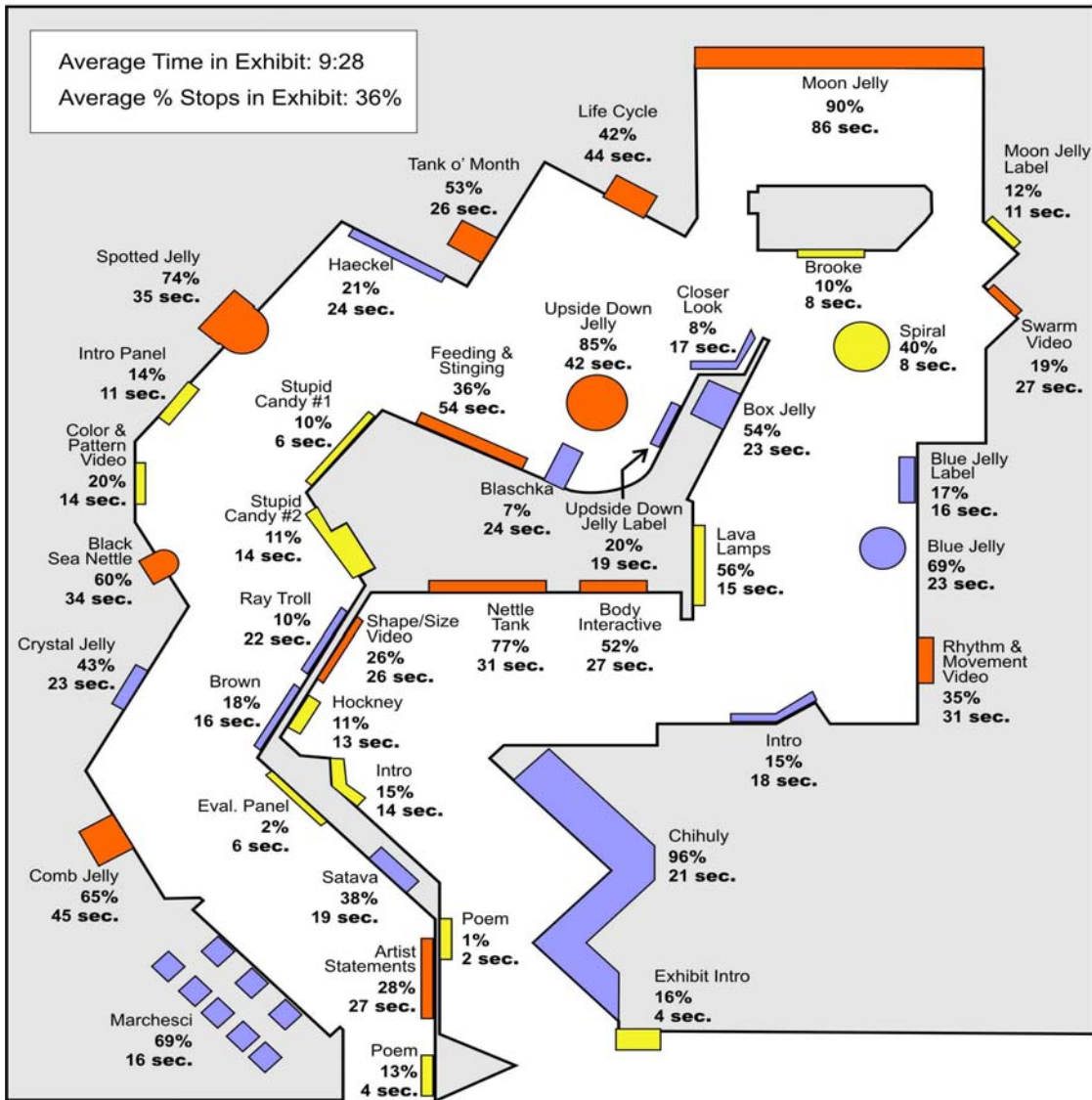
Estimated Age: _____

Gender: _____

Appendix C
Average Time Spent at Exhibits

Jellies: Living Art Average Time Spent at Exhibit

Including Percent Stopping



KEY

— % = Percentage of visitors stopping at exhibit

— Sec. = Average Stop Time (only for those who stopped)

Top 1/3 Length (Orange)

Mid 1/3 Length (Blue)

Low 1/3 Length (Yellow)

4/6/04

Appendix D
List of Exhibits and Type of Exhibit

<u>Exhibit Type</u>	<u>Exhibit</u>
Live Jelly	Sea Nettle Jelly (in Shape and Size) Blue Jelly Box Jelly Moon Jelly Upside Down Jelly Tank o' Month Spotted Jelly Black Sea Nettle Crystal Jelly Comb Jelly
Art Installation	Chihuly Installation Hockney Installation Lava Lamps Installation Brooke Installation Blaschka Installation Haeckel Installation Stupid Candy #1 Installation Stupid Candy #2 Installation Ray Troll Installation Brown Installation Satava Installation Marcheschi Installation
Video	Shape and Size video Rhythm and Movement video Swarm video Color and Pattern video
Text Panel, Stand Alone	<i>Jellies: Living Art</i> intro panel Shape and Size intro panel Rhythm and Movement intro panel Color and Pattern intro panel Evaluation panel
Projected Text	Poem at Entrance Spiral Projected Poem Poem at Exit
Interactive/Hands-On	Body Interactive Life Cycle Interactive Feeding and Stinging

Jelly Label

Blue Jelly label
Moon Jelly label
Upside Down Jelly label

Appendix E
Interview Form

NOTE: Original interview form was on legal-sized paper (8 1/2 X 14), so formatting is not exact.

Date: _____

Interviewer: _____

Hello! We are trying to get some feedback about the *Jellies: Living Art* exhibit. Do you have a few minutes to answer some questions? It would really help us out.

1. [Interviewer fills out] Gender: M F

2. On a scale from 1 to 10, where 1 is poor and 10 is excellent, how would you rate the *Jellies: Living Art* exhibit? _____

3. Can you tell me something that would make it even better? _____

4. Please complete the following sentence about the *Jellies: Living Art* exhibit: **“I never realized that...”**

5. Which part of *Jellies: Living Art* did you enjoy the most? _____

5a. Why did you enjoy that part the most?

6. What do you think the main message of the exhibit is? [Probe: What is this exhibit about?]

7. Do you remember seeing or hearing anything in *Jellies: Living Art* about conservation? Yes No

[If Yes,] 7a. Could you tell me where it was? _____

[If Yes,] 7b. What did it say about conservation? _____

8. Did it surprise you to see art in this exhibit about Jellies? Yes No

8a. Why do you think we put art in this exhibit? _____

9. Which two works of art did you enjoy the most? You can just read me the letters. **[show pics]**

A B C D E F G H I J K [All of them]

Why did you pick ____? _____

10. Did you notice how things were organized or grouped together in the exhibit? Yes No

[If Yes,] How were they organized? _____

11. Compared to the other exhibits you've seen today, how much reading did you do in the *Jellies: Living Art* exhibit? Was it...

Less More About the same amount [This is our first exhibit today]

[If More,] Why do you think you read more here? _____

12. Is this your first visit to the aquarium? Yes No **[If Yes, skip to Q13]**

12a. Is this your first visit to the *Jellies: Living Art* exhibit? Yes No **[If Yes, skip to Q13]**

12b. **[If No to 12a]** How many times have you been to this exhibit before today? _____

13. Are you a member of the aquarium? Yes No

14. What year were you born? _____

15. What are the ages, not including yourself, of the adults in your group? ____ ____ ____ ____ ____

16. Are you visiting with anyone under 18? Yes No

[If Yes,] What are the ages of the children in your group? ____ ____ ____ ____ ____

17. Please stop me when I reach the highest level of education you've completed so far **[pause in between]:**

Some high school High school grad Some college College grad Post grad. degree

18. What is your zip code (or country of origin)? _____

19. Any other thoughts or feelings about the *Jellies: Living Art* exhibit you wanted to share with us?

Thank you very much for your time!

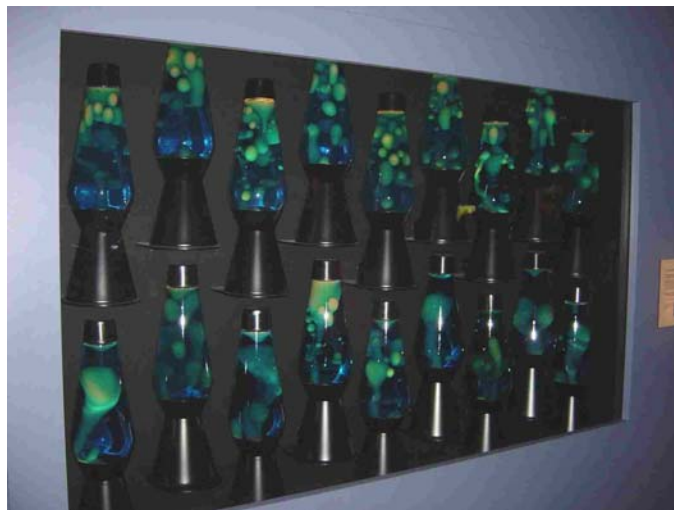
Appendix F
Pictures on Photoboard for Interview



Chihuly



Hockney



Lava lamps



Brooke



Blaschka



Haeckel



Stupid Candy



Faust



Brown



Marcheschi



Satava

Appendix G Pictures of Bilingual Panels

