

# USE AND INTERACTION EVALUATION

## Frist Art Museum: Report

### 2011

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## BACKGROUND/PURPOSE

Three interactive stations in 2011 *Martin ArtQuest* were observed in order to assess the original intention of interactives set by educators against actual use by visitors. The evaluation grew from the FLING [Family Learning in Interactive Art Galleries] research program; a three-year study examining the motivation, value and use families place on interactive spaces. For more information go to [www.artmuseumfamilyspaces.org](http://www.artmuseumfamilyspaces.org).

## MARTIN ARTQUEST

In 2011, the *Martin ArtQuest* Gallery is an interactive, hands-on space with approximately 30 activities, many of which change with each new exhibition in the rest of the museum. Visitors of all ages are invited and encouraged to create prints and collages, sketch and paint, or explore the essentials of art, including color, pattern, texture, and perspective.

Martin ArtQuest was designed to support the Frist's vision to change the way people look at the world through art by offering educational and outreach experiences that provide visitors with new ways to access art. The interactive gallery is located next to the exhibition galleries on the upper level and on average hosts 200-250 visitors each day. *Martin ArtQuest* is staffed by trained art educators and knowledgeable volunteers who help visitors create and learn about art.

Three of the interactive stations were included in this study:

- Images in Reverse
- Print Making
- Art in the Round

## METHODS

The method for this study included focused observations using an Observation Form. Education staff conducted the observations at 30-minute intervals for a total period of 2½ days. The sample included anyone who visited the interactive station during the 30-minute period of observation. Observations were conducted in December 2010 and data was compiled into an Excel spreadsheet.

## DESCRIPTION OF SAMPLE

Researchers observed a total of 198 visitors engaging with one of three interactive stations (*Images in Reverse*, *Print Making*, or *Art in the Round*) between October and December, 2010. Of those 198 visitors, 34 (16%) observed the interactive quickly and then left without directly engaging, while another 11 visitors (6%) were repeat visitors, meaning they were observed engaging with the interactive multiple

times during the time the observations were taking place. For the purposes of this study, visitors who only observed the interactive but did not stop to engage, as well as repeat visitors, were not included as part of the final sample. A final total of 153 visitors were included in the findings presented below.

Of the 153 visitors, 55 people (36%) were observed engaging with *Images in Reverse*, 53 (35%) were observed engaging with *Print Making*, and the remaining 45 (29%) were observed engaging with *Art in the Round*. Overall, children made up 59% of the sample (90 people), while adults made up the remaining 41% (63 people). The majority of children (59%, n=53) were ages 5 to 12, another 33% (n=30) were under the age of 5, and the remaining 8% (n=7) were age 13 or older. Fifty-one percent of visitors (n=78) were females, and the remaining forty-nine percent (n=75) were males.

## FINDINGS

This report presents the combined results of all 3 interactive stations. Individual interactive station results can be found in **Appendix A-C**.

### Use

#### CAPACITY

During the days when observations were conducted, crowd levels inside *Martin ArtQuest* ranged from being nearly empty (or 0-30% full), to moderately visited (or 31-50% full), to extremely crowded (or 51-100% full). Most of the time, the interactive gallery was either mostly empty (55% of the time) or moderately visited (40% of the time). Only on a few occasions was the gallery extremely crowded (5% of the time).

#### COMBINING ART FROM OTHER STATIONS

Observers noted whether visitors used art from other interactive stations located throughout the gallery when engaging with the interactive that was the target for this study. Only three visitors (2%) were observed demonstrating that behavior.

#### READING INSTRUCTIONS

For each interactive, museum staff created instructional panels to help visitors understand the purpose of the interactive and support visitors' use of the activity. For this study, observers noted whether visitors utilized the instructional panels during their engagement with the interactives. Only 10 instances of this behavior were recorded. Not surprisingly, in all but one case, an adult read the instructions; in 5 instances, an adult read the instructions on his/her own, and in 4 cases, an adult staff member read the instructions to a child. Only one child was observed reading instructions.

#### MAKING CONNECTIONS BETWEEN THE INTERACTIVE AND ART IN OTHER GALLERIES

One of the key goals for staff when creating *Martin ArtQuest*, was to encourage adults and children to make connections between the art on view in the museum and the activities in *Martin ArtQuest*. As a way to find out whether that was happening, observers listened in on visitors' conversations and noted when they heard evidence of families making connections between the art on view and the interactive activity. This behavior was observed a total of 23 times. In most instances (70%, 16 times), museum staff

initiated these conversations with both adults (7 times) and children (9 times). Visitors were also observed making these connections on their own (30%, 7 times). Children were just as likely to make these connections as were adults.

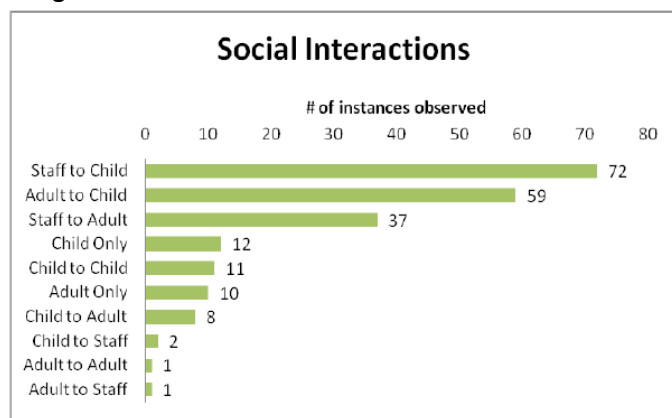
#### DIRECTED VERSUS SELF-INITIATED EXPERIENCES

Many of the activity stations located in *Martin ArtQuest* were designed to allow for multiple points of entry and engagement for the visitors. While the interactives encourage self-initiated discovery, support for directed experiences is also available for those who want it. These visitors can access information through the use of the instructional panels by talking with on-site museum educators and volunteers or by discussing the activity with a member of their own group. In an effort to know more about which types of experiences were occurring in *Martin ArtQuest* and to what degree, observers recorded the number of directed (or an activity that was directed by someone else to the person creating the artwork) versus self-initiated instances (or an activity where an individual used his/her own initiative to create an art work).

Directed experiences were by far the most frequent type of interactions observed. Observers noted 135 instances of directed experiences, versus only 12 instances of self-initiated experiences. In a majority of the directed experiences, either an adult visitor (41%, 56 instances) or museum staff member (50%, 68 instances) was identified as the person directing, or guiding, the experience. In the remaining 11 instances (9%), a child directed the experience; usually this involved directing the experience for another child, but in some cases the child directed the experience for an adult in his/her group or for a museum educator/volunteer. In the 12 instances of self-initiated experiences, 8 instances involved a child directing his/her own experience, and the remaining 4 instances involved an adult initiating his/her own experience.

Finally, the museum staff was also interested in finding out the degree to which visitors observed other visitors prior to engaging in the activity themselves; this behavior was observed 33 times. All three audiences, adults (12%), children (28%), and museum educators (60%) engaged in this behavior.

**Figure 1: Instances of Social Interactions**



## Social interactions

As a way to find out more about the types of social interactions that happen in *Martin ArtQuest*, observers recorded verbal and non-verbal interactions between adults, children, and museum educators, noting the directionality of those interactions, e.g. who initiated the interaction and who, if anyone, was the target of that interaction. A little over half of the interactions (51%) were initiated by museum staff, while another 34% of interactions were initiated by adult visitors. Children initiated 15% of the total observed interactions. (See Chart Figure 1 for details).

## CONCLUSIONS/RECOMMENDATIONS

The purpose of this evaluation was to observe three interactive stations in *Martin ArtQuest* in order to assess original intention of interactives set by educators against actual use by visitors.

### *Visitors are NOT combining art from other stations*

Findings from this report confirm the staff's hypothesis that not many people combine art from other stations when engaging with the activities. This offers a great opportunity for educators to consider if where making these connections is important or not when developing new and/or revisiting existing interactive stations.

### *Visitors do not follow prescribed visit patterns*

Findings from this report showed a disconnect from museum's original intentions and what visitors actually do. Originally, Frist educators created the interactive stations with the intent that visitors would follow a clear pattern of behavior before interacting (e.g., start with reading the instructional panels or take direction from staff). However, observations revealed that visitors do not follow such patterns, preferring a more fluid approach to engaging with each station. This finding reinforces the importance of having multiple interpretation opportunities within the station (e.g., instructional panels, staff, artworks and examples on display) so that visitors have choice and control over their learning experiences.

### *Museum educators and volunteers play a significant role*

Frist educators and volunteers were observed interacting with children and adults. Overall, staff played a key role in helping visitors make meaning in the galleries by helping to direct their experiences and draw connections between the activities and the art located in the galleries. This finding supports the Frist's intention that *Martin ArtQuest* be staffed at all times and that those staff support families in their endeavors to learn more about and have fun with art.

### *Families engage with each other through the interactive stations*

Families were observed interacting with each other at the interactive stations. The types of interactions observed among families ranged from directed experiences to self-initiated experiences, which supports the FLING study which demonstrates that parents/caregivers/guardians encourage and develop their child's learning using a variety of direct and independent learning styles.

### *Minimal connections were made at interactive stations with the wider Art Museum*

Although some visitors made connections at the interactives, the number was very low (**only 23 instances observed**). There is an opportunity to continue observations, focusing in on this topic. One way to discover more about what connections, if any, visitors are making with the wider Art Museum, would be to include interviews with visitors.

### *Minimal use made of instructional information*

Visitors were only observed reading instructional information a few times. There are opportunities to develop observations to include informal interviews with visitors about their use or nonuse of the instructional material.

## APPENDIX A

### *IMAGES IN REVERSE*

*Plexi-glass easels ask visitors to leave their mark by drawing self-portraits, still life, or scenes from their imaginations.*

#### DESCRIPTION OF SAMPLE

- ☐ A total of **55** visitors engaged with *Images in Reverse* over a 3.5 hour period
- ☐ **55%** were female and **45%** were male
- ☐ **42%** were adults and **58%** children
- ☐ Of the children, **31%** were under the age of five, **63%** were between the ages of five and twelve, and **6%** were over the age of twelve



#### FINDINGS

##### CAPACITY

- ☐ **57%** of the time the interactive stations were a quarter full
- ☐ **43%** of the time they were half full.

##### READING INSTRUCTIONS

- ☐ Visitors were observed using the informational instructions 7 times
  - In **57%** of instances, museum educators read instructions to children
  - In **29%** of instances, adults read on their own
  - In **14%** of instances, children read on their own

##### COMBINING ART FROM OTHER STATIONS

- ☐ None of the visitors used objects from other interactive stations while interacting with the target interactive

##### MAKING CONNECTIONS BETWEEN THE INTERACTIVE AND ART IN OTHER GALLERIES

- **15 instances** of visitors making connections between the interactive and art located in other galleries were observed. Most of these interactions (**53%** of total) were initiated by museum staff; **27%** were initiated by children, and **20%** were initiated by adults.

### **DIRECTED VERSUS SELF-DIRECTED EXPERIENCES**

- Instances of directed activity were observed **49** times
  - **41%** of directed activity involved an *adult directing a child*
  - **24%** of directed activity involved a *museum educator directing a child*
  - **18%** of directed activity involved a *museum educator directing an adult*
  - **12%** of directed activity involved a *child directing another child*
- Instances of self-initiated activity were observed **7** times
  - **57%** of self-initiated activity was observed among *children*
  - **29%** of self-initiated activity was observed among *adults*
- Instances where an activity was initiated by watching others first were observed **11** times
  - **27%** of these cases involved a *child observing another child*

### **SOCIAL INTERACTIONS**

In total **26%** of activity was *adult to child* interaction, **22%** of activity was *museum educator to child* interaction, **20%** of activity was *museum educator to adult* interaction, and **10%** of activity was *child to child* interaction.

## APPENDIX B

### PRINT MAKING

*Using large architectural foam pieces, children can turn fabrics and foam into imaginative spaces of their own.*

#### DESCRIPTION OF SAMPLE

- ☐ A total of **53** visitors engaged with *Print Making* over a 2 hour and 50 minute period
- ☐ **38%** were adults and **62%** were children
- ☐ Of the children, **30%** were under the age of five, **64%** were between the ages of five and twelve and, **6%** were over the age of twelve
- ☐ **43%** were females and **57%** were male



#### FINDINGS

##### CAPACITY

- ☐ **43%** of the time the interactive stations were a quarter full and **57%** of the time half full

##### COMBINING ART FROM OTHER STATIONS

- ☐ **4%** of visitors used objects from other interactive stations.

##### READING INSTRUCTIONS

- ☐ Visitors did not read any informational instructions.

##### MAKING CONNECTIONS BETWEEN THE INTERACTIVE AND ART IN OTHER GALLERIES

- ☐ **7 instances** of visitors making connections between the activity and the art in the museum were observed; in all 7 instances, museum staff initiated the conversation.

##### DIRECTED VERSUS SELF-DIRECTED EXPERIENCES

- ☐ Instances of directed activity were observed **42** times
  - **81%** of directed activity involved a *museum educator directing a child*
  - **17%** of directed activity involved a *museum educator directing an adult*



- **2%** of directed activity involved a *child directing a museum educator*
- No instances of self-initiated activity were observed
- Only **1** instance was observed where an activity was initiated by watching others first

### **SOCIAL INTERACTIONS**

Overall, the majority of activity was initiated by a *museum educator* – *both with children (76%)* and with *adults (20%)*. **2%** of interactions were initiated by *children* with *museum educators*, and **2%** of interactions involved adults only.



## APPENDIX C

### *ART IN THE ROUND*

*Plexi-glass easels ask visitors to leave their mark by drawing self-portraits, still life, or scenes from their imaginations.*

#### DESCRIPTION OF SAMPLE

- ☐ A total of **45** visitors engaged with *Images in Reverse* over a 3.5 hour period
- ☐ **55%** were female and **45%** were male
- ☐ **44%** were adults and **56%** children
- ☐ Of the children, **40%** were under the age of five, **48%** were between the ages of five and twelve, and **12%** were over the age of twelve



#### FINDINGS

##### CAPACITY

- ☐ **67%** of the time the interactive stations were a quarter full
- ☐ **17%** of the time they were half full
- ☐ **17%** of the time they were more than half full

##### READING INSTRUCTIONS

- ☐ Visitors were observed using the informational instructions **3 times**
  - In **100%** of these instances, and adult read on his/her own

##### COMBINING ART FROM OTHER STATIONS

- ☐ Only one visitor used objects from other interactive stations while interacting with the target interactive

##### MAKING CONNECTIONS BETWEEN THE INTERACTIVE AND ART IN OTHER GALLERIES

- ☐ Only **1 instance** of visitors making connections between the interactive and art located in other galleries were observed. This interaction was initiated by museum staff when speaking with a child.

### **DIRECTED VERSUS SELF-DIRECTED EXPERIENCES**

- Instances of directed activity were observed **52** times
  - **65%** of directed activity involved an *adult directing a child*
  - **15%** involved a *museum educator directing a child*
  - **12%** involved a *museum educator directing an adult*
  - **6%** involved a *child directing an adult*
  - **2%** involved an *adult directing another adult*
  
- Instances of self-initiated activity were observed **5** times
  - **80%** of self-initiated activity was observed among *children*
  - **20%** of self-initiated activity was observed among *adults*
  
- Instances where an activity was initiated by watching others first were observed **13** times
  - **62%** of these cases involved a *museum educator observing a child*
  - **15%** involved a *child observing another child*
  - **15%** involved an *adult observing a child*
  - **8%** involved a *child observing an adult*

### **SOCIAL INTERACTIONS**

In total **49%** of activity was *adult to child* interaction, **23%** of activity was *museum educator to child* interaction, **8%** of activity was *museum educator to adult* interaction.