

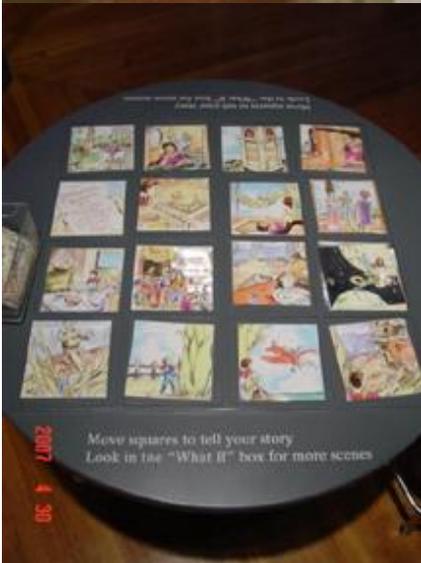


Interactive Learning in *Building Books:* *The Art of David Macaulay*

Summative Study
for the
Speed Art Museum

Marianna Adams, Ed.D., & Jeanine Ancelet, M.A.
of Audience Focus Inc
For the Institute for Learning Innovation

October 2007



EXECUTIVE SUMMARY
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The Speed Art Museum has a long-term commitment to visitor studies and this summative study in the most recent effort to use evaluation findings to further refine their professional practice. To enhance the *Building Books: The Art of David Macaulay* exhibition (February 4 – May 13, 2007), the Speed Art Museums educators, curators, and designers, experimented with ways to more fully engage visitors through five interactive areas. The staff worked together to enhance the existing graphics that came with the traveling exhibition originated by the Norman Rockwell Museum, to integrate the interactive areas into the displays of Macaulay's art, and to display the works in the exhibition at a height more accessible to both children and adults. To assess the effectiveness of these interactive areas and provide useful feedback to the interdepartmental exhibition team, the Speed Art Museum enlisted the services of Dr. Marianna Adams, to design and implement a summative evaluation study to address the following questions: How do visitors engage with and use the interactive experiences in the exhibition? and To what degree do the interactive experiences enhance visitor learning and social interaction?

The evaluation questions were addressed through a mixed methods design involving observation and exhibition exit interviews with a written survey to capture learning over time. In addition, drawings created in three areas and photographs of constructions made in the block building area will serve to round out the picture of the visitor experience.

Clearly, the interactive experiences enhanced visitors' overall experience in the David Macaulay exhibition. The majority of visitors used all five interactive areas to some degree. People were drawn to the interactive areas because they were visually appealing and, once there, immediately realized they could touch, manipulate, and participate in a variety of ways. Through these sensory experiences, visitors made personal connections, engaged socially with those around them, and enjoyed challenging their intellect with meaningful and unique tasks. The relaxing, family-friendly atmosphere put people at ease and encouraged visitors to remain in the areas a bit longer than they normally do in a traditional exhibition. The museum staff believes that the exhibition attracted new visitors because of the layers of interactivity. However, the scope of this study did not encompass data collection that spoke to this issue.

Although all of the stations were effective for visitors on some level, they each had their own strengths. The *How Does it Work*, *Reading, How to...*, and *Scrambled Stories* areas were effective in encouraging visitors to take a closer look at the artwork on display, as well as the displayed work other visitors left behind on display. Unsurprisingly, the *Build* area was effective in encouraging visitors to actively engage and explore, creating a variety of unusual constructions. The *How to...* area was also particularly successful at enticing visitors to engage fully in the task of creating a sequenced drawing and was the station with the highest average time spent. Visitors spent the shortest time, on average, at *Scrambled Stories*. Many visitors chose to display their drawings at the three stations that provided drawing tasks and materials. Consequently, the drawings were a rich source of data, and the variety, thoughtfulness, and inventiveness of their creations was remarkable.

When asked to rate their learning across seven dimensions, visitors tended to give all the dimensions above-average marks, suggesting that the presence of the interactive areas heightens visitor learning in the broadest sense. To summarize, the interactive areas:

- stimulated visitors to feel a sense of awe and wonder for the art and artist on exhibition;
- stimulated visitors' sense of curiosity and their desire to know more about the art and artist;
- enhanced and expanded upon visitors' prior knowledge of the artist and his themes;
- encouraged social interaction and dialogue about the art and artist;
- facilitated visitors as they made connections between their own experience and the work of the artist;
- stimulated visitors to look more carefully and thoughtfully at the art in the exhibition; and
- communicated to visitors something new about the art and artist.

The Art of David Macaulay
Summative Study for the Speed Art Museum

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Interactive Learning: Evaluation of the David Macaulay Exhibition Interactive Areas Summative Study for the Speed Art Museum

Marianna Adams, Ed.D., & Jeanine Ancelet, M.A.
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Introduction

The Speed Art Museum has a long-term commitment to visitor studies and this summative study is the most recent effort to use evaluation findings to further refine their professional practice. To enhance the *Building Books: The Art of David Macaulay*¹ exhibition (February 4 – May 13, 2007), the Speed Art Museum's educators, curators, and designers, experimented with ways to more fully engage visitors through five interactive areas. The staff worked together to enhance the existing graphics that came with the traveling exhibition, to integrate the interactive areas into the displays of Macaulay's art, and to display the works in the exhibition at a height more accessible to both children and adults. (See Appendix A for the exhibition floor plan and location of interactive areas.)



1. Big Ideas: The workings of everyday objects and the makings of the world's most complex architectural structures are the focus of this section. Dramatic original drawings from these and other books were included: *The New Way Things Work*, *Cathedral*, *Mill*, *Castle*, *City: A story of Roman Planning and Construction*, *Underground*, *Unbuilding*, *Pyramid* and *Mosque*. The interactive area focused on the question: How Does It Work? Visitors could draw or write their ideas about how the objects were used and post them for others to think about. Mystery objects changed regularly and the answers were available in the reading area.



2. Building Ship, Exploring the Artists Process: The artist's process through the creation of a book from concept to completion was explored through this exhibit. This section featured an extensive selection of images and artifacts relating to the book, *Ship*, and reflected Macaulay's collaboration with historians and archeologists around the world. The interactive area focused on the prompt: How to... Strips of high quality drawing paper were accordion-folded into five segments and visitors were invited to be an explainer like David Macaulay and then put their ideas on display for others to see.



3. Journey Books: The Evolution of Ideas: This section explored inventive and non-traditional picture books inspired by the artist's love of travel and appreciation for the places that imagination can take us. *Shortcut*, *Black and White*, *Rome Antics*, *Angelo*, *Why Did the Chicken Cross the Road?* and *Baaa!* were some of the books

¹ The *Building Books* exhibition was originated by the Norman Rockwell Museum. The interactive areas were enhancements added by the Speed Art Museum staff and installed in the exhibition while at the Speed Art Museum only.

featured in this section. In this interactive area, visitors could mix story scenes on the “Scrambled Stories” grid on the oval table shown in the photo above, they could draw a story scene in the drawing area, they could insert their drawing or one done by someone else into the table grid, and they could display their drawing.



4. & 5. About the Artist: This biographical section offered museum visitors insight into David Macaulay’s life and career. Personal artifacts such as the Caldecott medal and family photographs were included. Two interactive areas adjacent to each other included Build, an open area filled with blocks for construction activities, and the Reading Area, where a selection of David Macaulay’s books and other reference books were available for visitors to browse. The books were color-keyed to the area of the exhibition where the artwork was shown.

To assess the effectiveness of these interactive areas, the Speed Art Museum enlisted the services of Dr. Marianna Adams, to design and implement a summative evaluation study to address the following questions:

- How do visitors engage with and use the interactive experiences in the exhibition?
- To what degree do the interactive experiences enhance visitor learning and social interaction?

Intended Use of Results: Results from this study will provide useful feedback to the interdepartmental exhibition team and will assist them in the development of future interactive experiences in the museum’s permanent collections and special exhibitions. In addition, the findings further support the efficacy and value of the interactive experience for visitors.

Methodology: The evaluation questions were addressed through a mixed methods design involving observation and exhibition exit interviews with a written survey to capture learning over time. In addition, drawings created in three areas and photographs of constructions made in the block building area will serve to round out the picture of the visitor experience. (See Appendix B for Observation Protocol; Appendix C for Interview Protocol; and Appendix D for Written Survey) The evaluator trained Speed Art Museum staff, evaluation assistants, and volunteers to collect data between February and May 2007. Researchers coded and entered data into Survey Pro software and analyzed the results as reported below.

Description of Sample: A total of 46 people were interviewed; however, only 36 people completed the demographic survey. Of those who completed the survey, 53% were males and 47% were females; ages ranged from 7 years to 79 years. Overall, visitors showed a keen interest in art. When asked to rank their interest in art on a scale of 1-8 with 8 being ‘very much interested’, 96% of visitors ranked themselves at

a 5 or above. Half of the visitors (50%) ranked themselves at an 8. Visitors were slightly less confident about their knowledge of art and how art objects are made. When asked to rank their familiarity with how art is made, using a similar eight-point scale (with 8 being 'very familiar'), 72% of visitors ranked themselves at a 5 or above. Only 19% ranked themselves at an 8.

In the observation sample, a total of 119 people were observed. 58% were male; 42% were female. Almost 2/3rds of the observation sample were adults (61%) with 29% children; and 10% teens.

Context of Visit, Museum Visit History, & Prior Knowledge: For each observation, data collectors were instructed to note the crowd conditions in the exhibition, as well as the social configuration of the group observed. Over half of the observations (56%) were conducted when attendance in the exhibition was low, while the rest of the observations (44%) were conducted when attendance was rated moderate. The majority of visitors (81%) came as part of a larger social group as opposed to visiting alone. Of those who came in a group, a high percentage (62%) came as part of an intergenerational group while 34% came in an all-adult group. A large majority (75%) of those interviewed had visited the Speed Art Museum before, making 25% of the sample first-time visitors to the museum.

Visitors were asked to talk about their prior knowledge of David Macaulay and his books. Almost half of the responses (45%) indicated that they had no prior knowledge of the author/artist. Of those who knew of Macaulay and/or his work, 25% said they knew he wrote books; 18% claimed to be great fans of his work; and 10% were familiar with the books but knew nothing about the author. A few people indicated that they had recently learned of the exhibition and the author/artist from a newspaper article or another person.

How do visitors engage with and use the interactive experiences in the exhibition?

In the beginning of the interview, visitors were asked to indicate which interactive areas they used. Chart 1 illustrates the distribution of use. Because the sample size was relatively small, the differences shown in Chart 1 are not statistically significant, meaning that roughly half of the visitors used all five areas.

Chart 1: Percent of visitors who reported using interactive areas

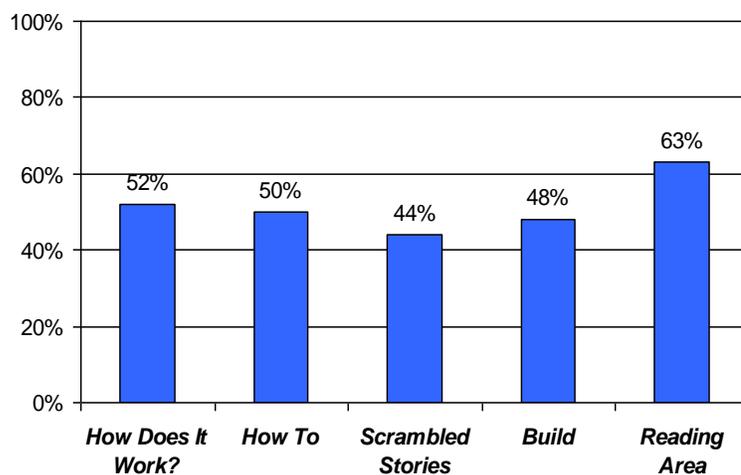
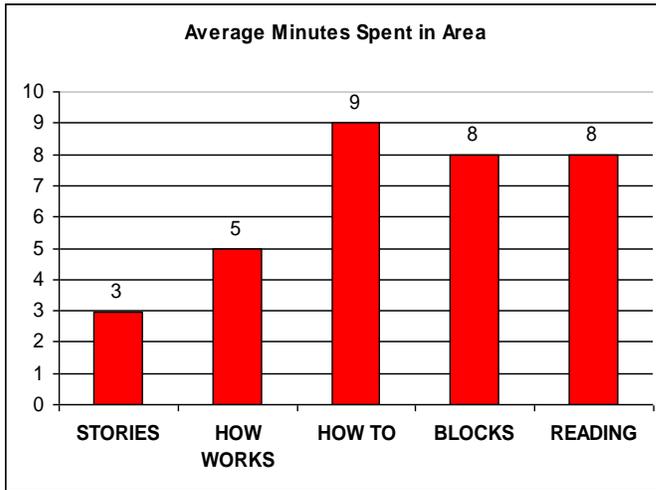


Chart 2: Average minutes spent in interactive areas



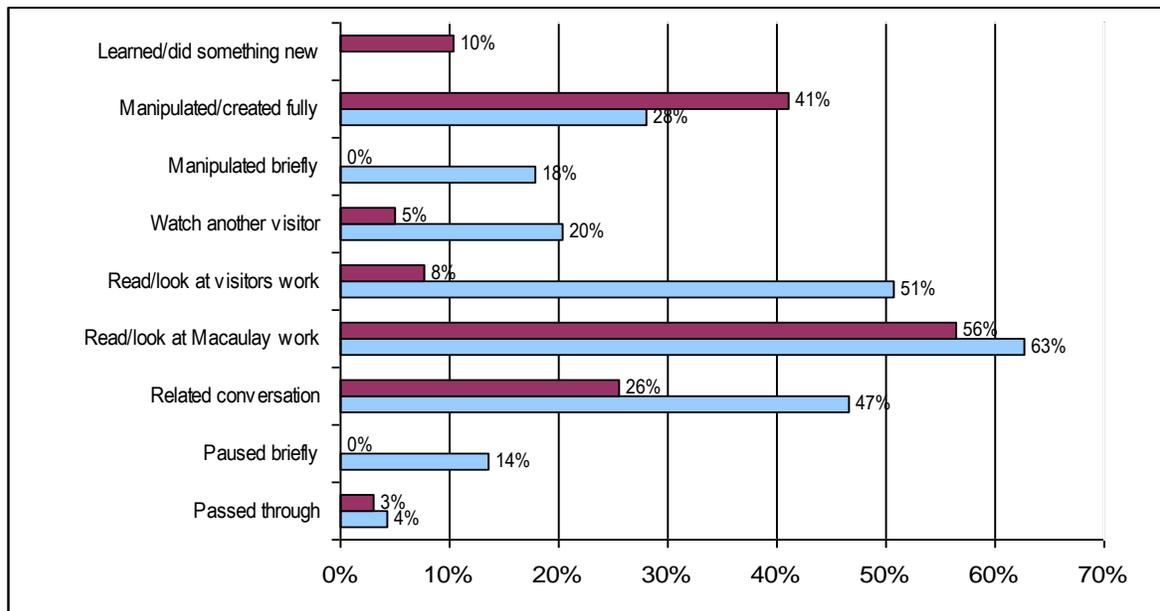
The most common reason visitors gave for not using a specific activity was that it did not appeal to them. The next most frequently-cited reasons were that they either did not have enough time, or were at the end of their visit. Some visitors reported that they did not use *How To...* or *Scrambled Stories*, specifically, because they did not realize the activities were there.

In the observation sample, visitors were timed at each interactive

area. Chart 2 illustrates the average number of minutes spent in each area. On average, visitors spent less time at *Scrambled Stories* (three minutes) and *How does it work?* (five minutes) than in the other three interactive areas.

During the interview, if visitors indicated having used a particular area, they were then asked to briefly describe what they did there. Chart 3 illustrates what visitors did in the interactive areas. Note that the item “Learned something new” was only

Chart 3: What visitors did in interactive areas



■ = Observation data ■ = Interview data

collected in the interview sample. Clearly, the interactive experiences encouraged visitors to look at the art work in the area, to look at the drawings or block

constructions visitors left behind, and to engage in social interaction related to the art work. In addition, when visitors chose to stop at an interactive station, they tended to engage fully in the experience. Although the scope of this study did not look at the relationship between *Building Books* and the Art Sparks interactive gallery, museum staff felt that, based on their informal observations, there was more traffic between the two experiences.

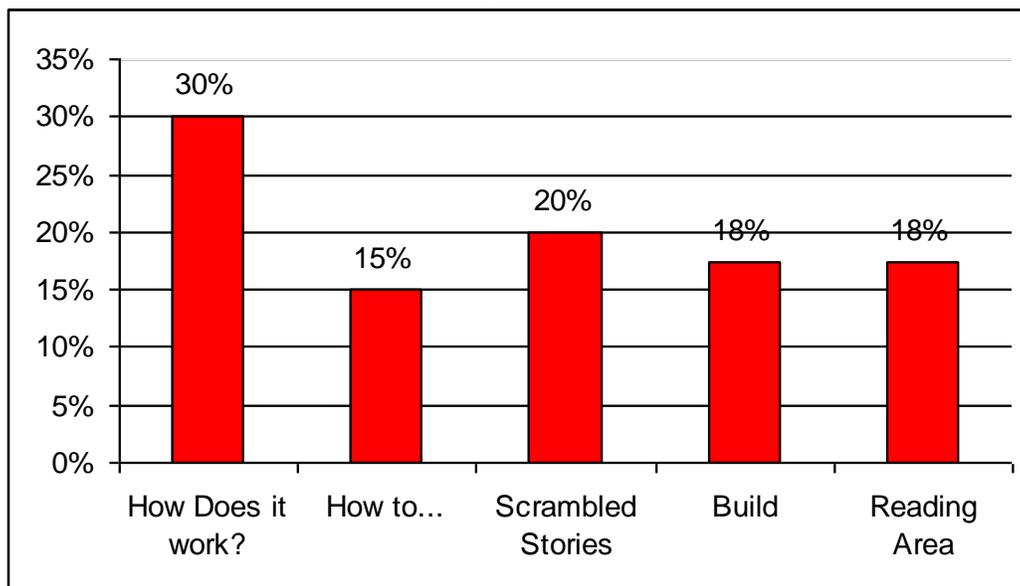
To what degree do the interactive experiences enhance visitor learning and social interaction?

Data that addressed this evaluation question were analyzed from two perspectives. First, the quantitative data are presented for all of the interactive areas together in order to give a broad view of the ways that the interactive areas influence learning and social interaction. Next is a qualitative analysis of data for each specific interactive area, such as reasons visitors gave for their ratings, drawings left by visitors, and general quotes. These two perspectives provide a rich and complex view of how meaningful the interactive areas were for visitors.

Overall Effectiveness

During the interview, visitors were asked to choose one of the interactive areas as the focus for a deeper conversation about learning and social interaction. The chart below (#4) illustrates the interactive areas that visitors chose to discuss further.

Chart 4: Percent of visitors who selected specific interactive area for focused interview

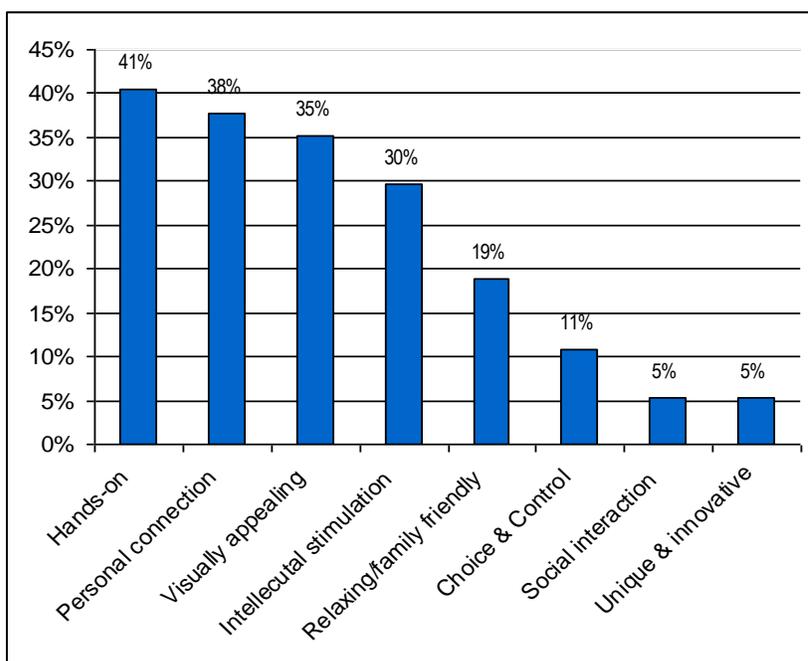


Although the “How Does it Work?” area was chosen by the largest percentage of visitors as the focus of the interview, this distribution does not reflect the actual

distribution of use and time spent in the areas. As explained in the first section on what visitors did, the distribution of use (Chart 1) was more evenly distributed. In addition, when calculating the average time visitors spent (Chart 2), “How Does it Work?” was an area with one of the lower average times spent.

Visitors were asked to explain what attracted them to the particular interactive area they chose as the focus of the interview. The four most commonly-cited reasons visitors gave for being attracted to an interactive area involved the ability to touch things, get personally involved, because the area was visually attractive to them, and the tasks they could do there were intellectually stimulating. (See Chart 5 below.)

Chart 5: Reasons why visitors chose a specific area for the focused interview



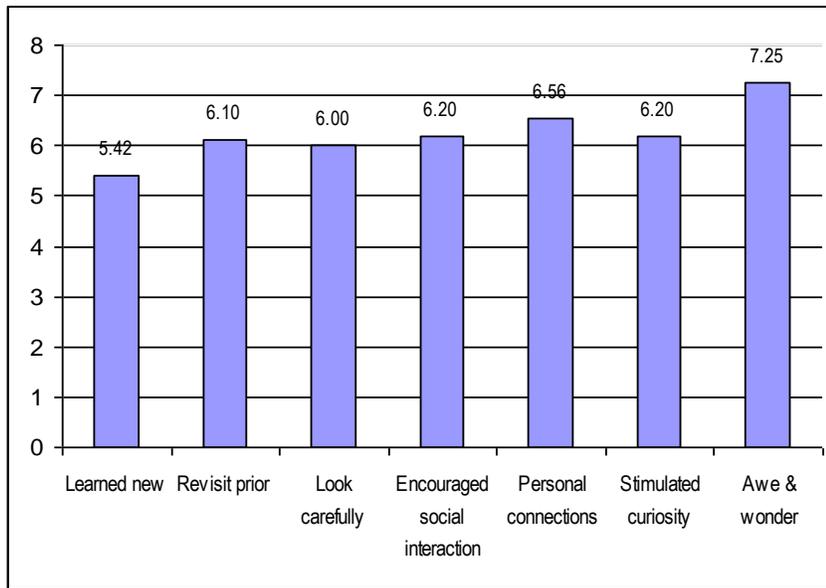
Overall Learning:

Visitors were asked to rate how their experience with the interactive areas in the Macaulay exhibition stimulated their learning and social interaction. Using the Learning Dimensions rating scale² visitors rated the degree to which each dimension occurred for them. Interviewers then asked visitors to explain the reasons for their ratings. The following chart (#6) reports the mean

score for each of the seven learning dimensions. We did not analyze this data separately across each interactive area for several reasons. First, the sample size was too small to cross-tabulate the data by area. Secondly, although interviewers encouraged visitors to rate the learning dimensions for the one interactive area they chose, visitors found it difficult to separate out a single part from the whole exhibition and interactive experience.

² The seven learning dimensions were developed in a comprehensive research study by Dr. Marianna Adams and the Museum of Fine Arts, Houston, with a sample of over 3,500 visitors across several years. The instrument has proven robust and reliable with repeated use in various museums and program settings.

Chart 6: Average/Mean score on each learning dimension



Although the sample size does not allow for a statistical analysis of learning dimension ratings by each interactive area, Table 1 below illustrates a relative Hot-Warm-Cool distribution of how often a certain outcome happened for them in the area that they selected.

Table 1: Distribution of learning dimension ratings by interactive area

Reading Area	How To...	Scrambled Stories	How Does it Work?	Build
Hot	Hot	Hot	Hot	Warm
Personal Connections (interests, experience, & background)	Awe & Wonder	Focus & Concentration	New Perspective	Focus & Concentration
Social	Social	Awe & Wonder	Warm	Awe & Wonder
Awe & Wonder	Curiosity	Social	Learn	Curiosity
Learn	Learn	Personal Connections (interests, experience, & background)	Social	Personal Connections (interests, experience, & background)
Focus & Concentration	Warm	Warm	Curiosity	New Perspective
Warm	New Perspective	Curiosity	Awe & Wonder	Cool
Curiosity	Personal Connections (interests, experience, & background)	New Perspective	Focus & Concentration	Learn
New Perspective	Focus & Concentration	Learn	Personal Connections (interests, experience, & background)	Social

Hot: Mean = 6.0 – 8.0
 Warm: Mean = 4.0 – 5.9
 Cool: Mean = 0.0 - 3.9

Effectiveness by Area



How Does it Work?

How Does it Work was effective in encouraging visitors to take a closer look at the artwork on display. During focused observations, many visitors stopped at this activity to read or look at both Macaulay's and other visitors' artwork. These findings are also supported by data recorded during the interviews. The observation data indicated that visitors spent an average of five minutes

on this activity. The most time someone spent on the activity was ten minutes; the minimum time was less than one minute.

This interactive was equally effective in encouraging social interaction among visitors, as researchers observed over two-thirds of visitors either talking with others about the activity or stopping to watch other visitors interact. When asked why they were attracted to this area, over half of the visitors commented on how the activity stimulated their minds, either by gaining a new perspective or learning something new. Some representative visitor quotes are as follows:

I enjoyed finding out about how everyday objects worked.

I liked seeing the insides of mechanical things.

I was drawn in by being able to look at objects as Macaulay did.

Visitors were also asked to describe what they enjoyed most about this interactive. Their answers indicate a variety of ways that the interactive area delighted them.

It gave a clear explanation of how things work, like the two-way light switch.

I enjoyed Macaulay's artwork and sense of humor.

I liked the Woolly Mammoth with the coconut tree - it made me wonder if it was actually done that way or if he just made it up.

The interaction with art felt like part of exhibit as well.

I like the ideas the other children had and what the things were.

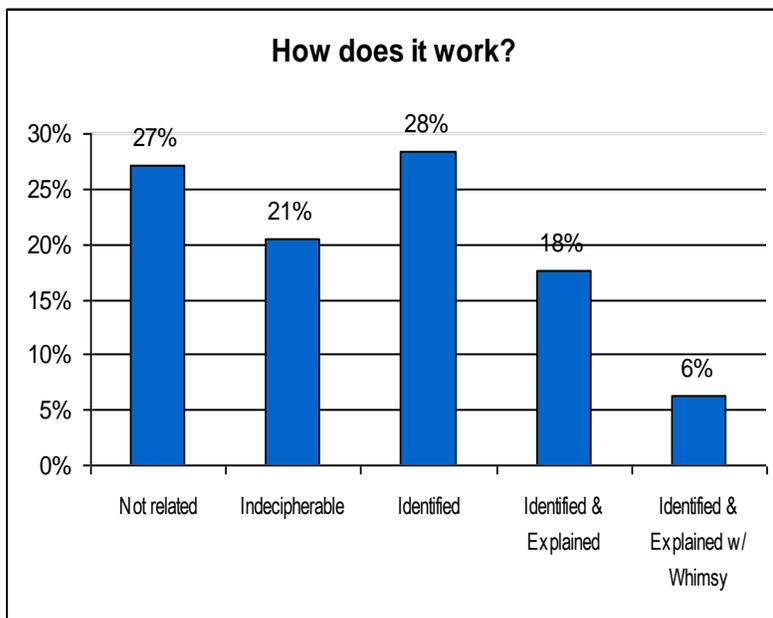
I loved seeing others' artwork.

Visitors seemed to enjoy drawing their solutions to the question of how the strange object might work. Many visitors also elected to leave their drawings at the station, perhaps because the method of displaying those drawings (clipped to the ends monofilament lines suspended from the ceiling). So many drawings were left that they represented a rich source of data. The evaluator, Speed staff, and data collectors developed the following rubric by which the drawings were coded and analyzed.

- 1 = Not related to the task
- 2 = Indecipherable
- 3 = Identified (visually and/or verbally) what the object is
- 4 = Identified (visually and/or verbally) what the object is and explained (visually and/or verbally) how it works
- 5 = Identified and explained (visually and/or verbally) how it works with a sense of whimsy or “whackiness”

A total of 545 drawings were collected and coded. Chart 7 illustrates the distribution of the drawings across the rubric codes. It is encouraging that over half of the drawings (52%) addressed the question directly (Codes 3, 4, & 5). Typically when museums provide opportunities for visitors to leave written or drawn responses it is common to have 30% or less responses that relate to the prompt or question, unless the visitor is sufficient visually attracted to the space and the prompt is rich, fun, and

Chart 7: Coded distributions of drawings for How does it work? interactive



challenging (Adams & Stein 2004; Hayes, 2003). Clearly, the interactive areas in the David Macaulay exhibition met those criteria. For those drawings that were not related or indecipherable or incomplete, it appeared that many of these drawings were done by very young children who might not have understood the question central to this interactive.

Examples of drawings for coding categories 3, 4, and 5 are included in Illustration 1. In the first

drawing (Code 3 – Identified) the visitor drew the object but did not indicate the function of the object. The visitor in the second drawing (Code 4 – Identified and explained or showed how it worked) illustrated the object and showed and wrote the function of the golf ball returner. The last drawing (Code 5 – Identified the object,

explained how it worked, and added a bit of humor) chose not to identify the actual function of the object but creatively explored witty ways it might be used.

Illustration 1: Examples of codes 3, 4, & 5 for How Does it Work? interactive

<p>a golf ball shooter</p>	<p>returns golf ball</p>	<p>"Hug-a-matic"</p> <p>CRANKS CHILD TO BEST HUGGING LEVEL TO SAVE MOM'S TIRED OLD BACK AT BED TIME</p> <p>WAAA I'M TIRED OLD MOM</p>
<p>3 = Identified (visually and/or verbally) what the object is</p>	<p>4 = Identified (visually and/or verbally) what the object is and explained (visually and/or verbally) how it works</p>	<p>5 = Identified and explained (visually and/or verbally) how it works with a sense of whimsy or "whackiness"</p>

Reading Area



Similar to *How Does it Work?*, the *Reading Area* was effective in encouraging visitors to take a closer look at Macaulay's artwork. Over half of the visitors observed in this area stopped to read or look at Macaulay's books and artwork. This finding is supported by data recorded during the interviews; all of the visitors who were interviewed reported spending time looking at or reading Macaulay's books and artwork. Visitors spent an average of eight minutes on this activity. Some

visitors spent over 30 minutes in the area. The minimum time someone spent in this area was around 30 seconds.

When asked why they were attracted to this area, visitors provided a breadth of responses. These ranged from simply having a personal interest in reading to discovering something new as indicated in the quotes below:

We are readers and book people. We have lots of books at home.

Like to read and saw an unfamiliar Macaulay story, Angelo. Looked for Rome after seeing artworks from that book on the wall.

Love reading! I love to read anytime I see books.

A reading area in a museum is a relatively familiar experience for visitors as more museums offer them for visitors and it is similar to a library experience. The following representative quotes suggest that the reading area provided visitors with an enjoyable opportunity to browse and learn more about the art and artist:

I liked the color. I had only seen Macaulay's black & white illustrations and books before.

Just reading the books was enjoyable. Having gone through the exhibition piqued my interest.

He writes interesting books about buildings and the people in them.

I liked just being able to browse.

Reading made me want to maybe own some of his books.



Build

The *Build* area was effective in encouraging visitors to actively engage and explore. Observation data showed that almost two-thirds of the visitors in this area manipulated the interactive fully. During the interviews, over two-thirds of the visitors reported that they created something in this area. Visitors spent an average of 8 minutes on this activity. Some visitors spent over 30 minutes in the area. The minimum time someone spent in this area was less than 1 minute. It is interesting to note that five of the seven people who chose to report on *Build* were under the age of fifteen. Also, sixteen of the twenty-six people who were observed in this area

were children and an additional two people were teens. Not surprisingly, this activity seems to be more attractive for children.

This area was also effective in encouraging visitors to interact socially and to have conversations about the structures they made as over half of the visitors here talked with someone about a topic related to the interactive. When asked why they were attracted to this area, all but one of the visitors talked about the hands-on aspect of the activity. These visitors were most attracted to the *Build* activity because it allowed them the opportunity to create something. Many visitors also talked about how building is fun, as illustrated in the following quotes:

It was fun to play with the blocks. I built a fort with an arch. There were so many blocks! More than I have at home!

Building is fun, nice to have stuff to do. I like to be active.

I've always been interested in constructing things. I like "hands-on." I always liked Lego's as a kid.

Block building appeared to be a pleasurable experience for visitors of all ages; but it is clearly more than just fun. It is encouraging that visitors recognized the connection between the blocks and Macaulay's architectural themes in his books. The following quotes are representative of the ways visitors described what they enjoyed about *Build*:

I liked the small block thing on the table [mirrored corner] - if you put your hand in it, you'd have 16 fingers.

I could build anything! There were so many to choose from!

I liked the accessibility and how it tied in with the art.

The blocks were very conducive to architectural buildings. I liked the area - it allowed for both reflection and activity - each inspired the other.

I liked watching [my child] smile. You could tell she was really enjoying it.

Illustration 2: Examples of block building creations



Many photographs of block building creations were taken by museum staff throughout the exhibition. The block constructions were not submitted to a rubric coding system. Rather, the breadth and variety of creations seem to speak for themselves. Clearly visitors enjoyed this activity and spent a lot of time creating elaborate structures. (See Illustration 2)

How To...



The *How To...* activity was very effective in encouraging visitors to stop and closely examine Macaulay's artwork. Researchers noted that three-fourths of the visitors they observed in the area stopped to read or look at Macaulay's artwork. Even more impressive is that almost the same percent of visitors stopped to read or look at other visitors' creations. During the interview, responses were more diverse, with visitors reporting that they not only stopped to look at

Macaulay's work, but also spent time interacting with others and creating a *How To...* story. Visitors spent an average of nine minutes [highest average] on this activity. Some visitors spent over 30 minutes in the area. The minimum time someone spent in this area was less than one minute

When asked why they were attracted to this area, visitors provided a breadth of responses. For many visitors, *How To* fulfilled a personal interest. For others, the activity was attractive because of its hands-on quality. Still others talked about how it looked enjoyable and fun and seemed to be child/family friendly. The following quotes illustrate ways visitors explained their attraction to this area:

I was attracted to the 'How To' area because I like the way you can draw your own 'How To.' I am creative and I like being creative.

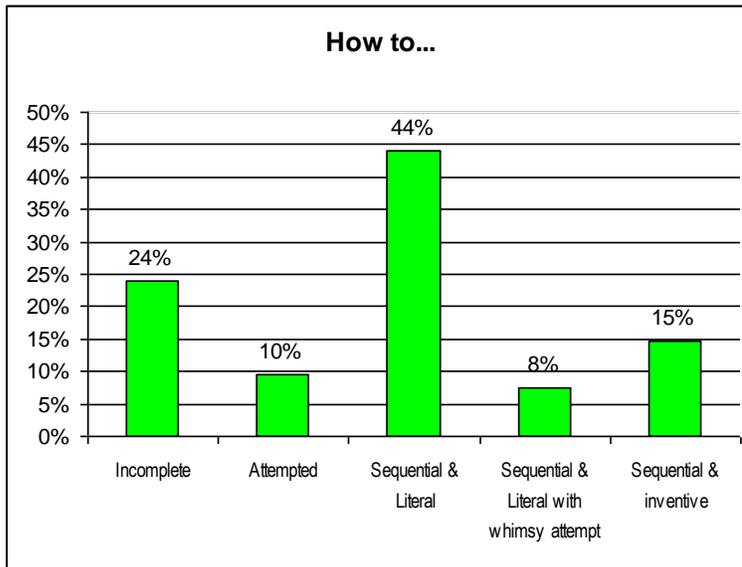
I used to be a graphic designer where I prepared and designed for books and other things. My daughter is also a commercial artist and I wanted to share this with her and my grandson.

I thought it was a neat idea to let people make their own stories. I love to draw and it was cool to be able to show how to do something in steps.

Visitors of all ages enjoyed creating their "How to..." sequence drawing. Many also seemed to enjoy weaving their strip of paper on the wall, leaving it at the museum. The woven drawing wall proved to be quite interesting to visitors, whether or not they participated in the activity. So many drawings were left that they represented a rich source of data. The evaluator, Speed staff, and data collectors developed the following rubric by which the drawings were coded and analyzed.

- 1 = Incomplete, scribbles
- 2 = Attempted description, not sequential
- 3 = Sequential, literal instructions (visual and/or verbal)
- 4 = Sequential, literal instructions (visual and/or verbal) with attempt at visual/verbal wit or whimsy
- 5 = Sequential, not literal, reflects artist's approach (visual and/or verbal), inventive, unusual, whimsical approach to the instructions

Chart 8: Coded distributions of drawings for How too... interactive

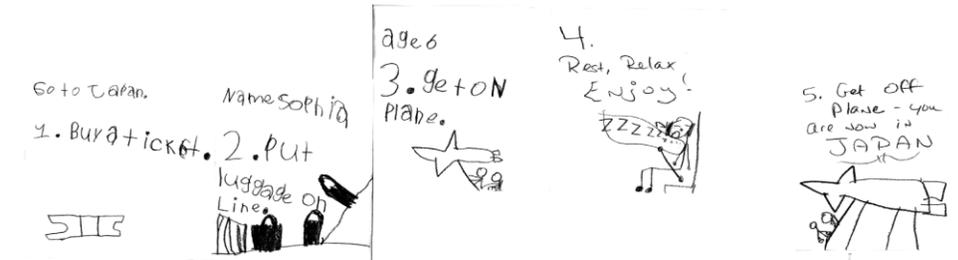


A total of 436 sequence-drawings were collected and coded. The distribution across codes is shown in Chart 8. Examples of drawings for coding categories 3, 4, and 5 are included in Illustration 3. Most of the drawings at least attempted to address the task of illustrating how to do something. Of the few drawings that were either indecipherable or not sequential, most appeared to be done by very young children who might not have been able

to understand the sequencing task. The largest category of drawings (Code 3 - 44%) illustrated how to do something in a very literal and direct sense. In the first drawing in illustration 3 below, the visitor articulated the actual steps of how to go to Japan.

It was gratifying to see that 23% of the drawings were coded as a 4 or a 5 as visitors attempted to or fully infused a sense of whimsy or creative thinking in the sequenced drawings. The second and third drawings in illustration 3 below are typical examples of these two codes.

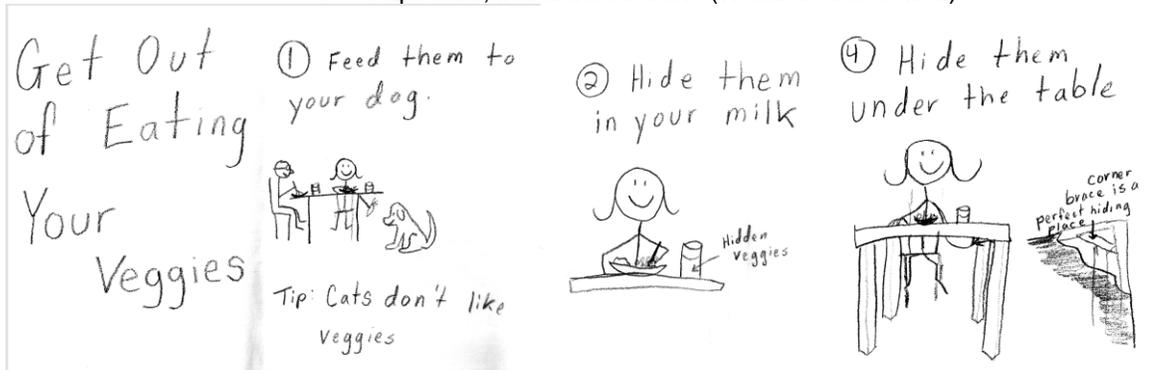
Illustration 3: Examples of codes 3, 4, & 5 for How to... interactive



3 = Sequential, literal instructions (visual and/or verbal)



3 = Sequential, literal instructions (visual and/or verbal)



5 = Sequential, not literal, reflects artist's approach (visual and/or verbal), inventive, unusual, whimsical approach to the instructions

Visitors reported liking many aspects of the *How to...* interactive area. Many adults enjoyed watching children puzzle out the sequences on paper, while other visitors liked to weave their drawings on the wall so others could see their work. The following quotes are representative of ways visitors described what they enjoyed most about this area:

I enjoyed watching my grandson make a complete (sequenced) drawing of his Ninja turtle - [he] shared and explained his drawings to me.

I enjoyed the idea web [the wall where drawings were woven between the ropes]. I would do it again. I liked doing it.

Sometimes you are just looking at someone else's artwork on the wall and you're like, "Oh wow!" Here you were part of it.

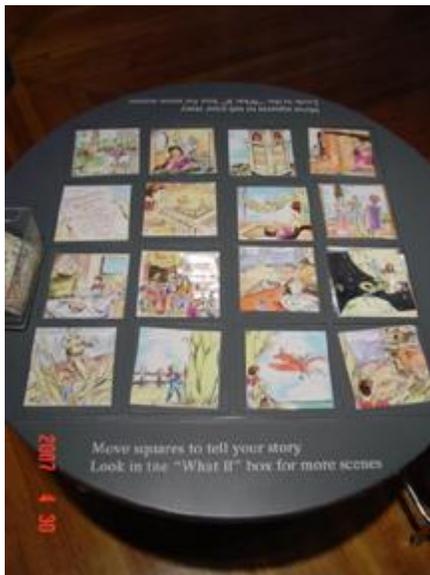
I liked the fact that it was something challenging to do and liked that my granddaughter got to write.

Just seeing how kids think and how funny and clever they can be.

My favorite part was drawing the dragon's steps because I love to draw.

Scrambled Stories

Like *How To... and How Does it Work*, *Scrambled Stories* was very effective in encouraging visitors to stop and examine Macaulay's artwork more closely. Data collectors noted that almost three-fourths of the visitors they observed in the area stopped to read or look at Macaulay's artwork. Not surprisingly, we also observed visitors stopping to read or look at other visitors' creations. Visitors spent an average of three minutes on this activity, the lowest average of all the interactive areas. The maximum time visitors spent in the area was twelve minutes. The minimum time someone spent in this area was less than one minute.



Only two of the 340 people observed, were observed manipulating this activity fully. However, because we asked people to choose one of the interactive activities for the interview, it is not surprising that the people who chose this activity to talk about in the interview reported that they or someone in their group created something. Informally, the museum staff observed that there was always a wide variety of "story mixes" on the table grid, suggesting that visitors did the activity but may not have made their own drawings or lingered very long.

When asked why they were attracted to this area, many visitors said that the activity looked enjoyable and fun and that it provided opportunities to create something new. Visitors also liked this area because it allowed for personal choice, or was self-guided. Examples of the ways visitors talked about this area are as follows:

I always think it's easier to start with something that you can manipulate, like the pictures, to create a story of your choice.

I like putting together my own stories.

[She] did it by herself. [She] wanted to look at stories and do her own.

When visitors talked specifically about this area they seemed to like the open-ended quality of the task. The following quotes are examples of ways visitors described what they enjoyed about the area:

I think it's a great way of writing and creating your own story. I liked that the story cards were colorful and that there was no wrong answer.

I liked that it encourages you to think because as I was looking at it, I wondered what was [Macaulay] thinking and if it was the same thing as I was thinking.

I like to draw. The pieces of paper were already cut and the pencils were there. It was easy to sit at the table and do it.

Less drawings were left at the *Scrambled Stories* area (a total of 208) than were left in the other areas. This might be explained by the fact that visitors tended to spend the shortest amount of time in this area compared to the other interactive stations. In addition, the drawings that were left were much less intricate and involved than those of the “How to...” and “How does it work?” areas. Consequently the coding rubric is a very simple two-part code:

- 1 = Just drawing, not related to a story
- 2 = Developed scenes as part of a story

Chart 9 reflects the distribution of drawings across this coding rubric. In addition, an example of a drawing coded as a 2 is in Illustration 4.

Chart 9: Coded distributions of drawings for Scrambled Stories interactive

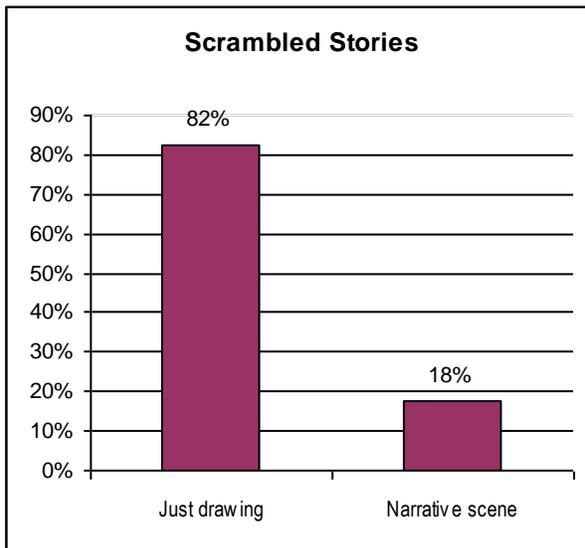


Illustration 4: Examples of code 2 Scrambled Stories interactive



2 = Developed scenes as part of a story

Conclusion

Clearly, the interactive experiences enhanced visitors' overall experience in the David Macaulay exhibition. People were drawn to the interactive areas because they were visually appealing and, once there, immediately realized they could touch, manipulate, and participate in a variety of ways. Through these sensory experiences, visitors made personal connections, engaged socially with those around them, and enjoyed challenging their intellect with meaningful and unique tasks. The relaxing, family-friendly atmosphere put people at ease and encouraged visitors to remain in the areas a bit longer than they normally do in a traditional exhibition.

Although all of the stations were effective for visitors on some level, they each had their own strengths. The *How Does it Work*, *Reading, How to...*, and *Scrambled Stories* areas were effective in encouraging visitors to take a closer look at the artwork on display, as well as the displayed work other visitors left behind on display. Unsurprisingly, the *Build* area was effective in encouraging visitors to actively engage and explore, creating a variety of unusual constructions. The *How to...* area was also particularly successful at enticing visitors to engage fully in the task of creating a sequenced drawing and was the station with the highest average time spent. Visitors spent the shortest time, on average, at *Scrambled Stories*. Many visitors chose to display their drawings at the three stations that provided drawing tasks and materials. Consequently, the drawings were a rich source of data, and the variety, thoughtfulness, and inventiveness of their creations was remarkable.

When asked to rate their learning across seven dimensions³, visitors tended to give all the dimensions above-average marks, suggesting that the presence of the interactive areas heightens visitor learning in the broadest sense. To summarize, the interactive areas:

- stimulated visitors to feel a sense of awe and wonder for the art and artist on exhibition;
- stimulated visitors' sense of curiosity and their desire to know more about the art and artist;
- enhanced and expanded upon visitors' prior knowledge of the artist and his themes;
- encouraged social interaction and dialogue about the art and artist;
- facilitated visitors as they made connections between their own experience and the work of the artist;
- stimulated visitors to look more carefully and thoughtfully at the art in the exhibition; and
- communicated to visitors something new about the art and artist.

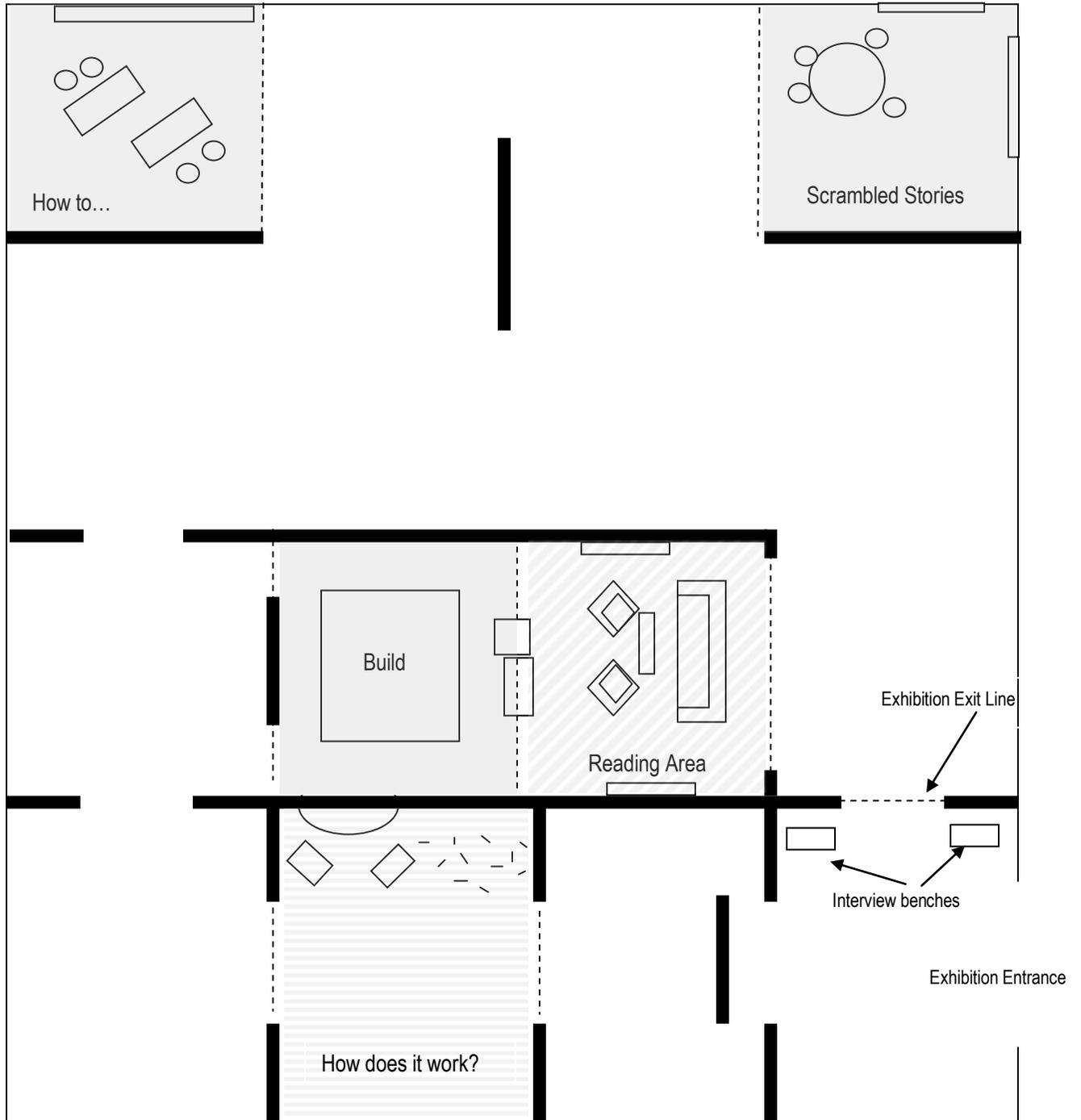
³ These seven learning dimensions were developed from research by Dr. Adams in collaboration with the Museum of Fine Arts, Houston, in an extensive study of museum education programs over several years.

References

Adams, M & J. Stein. (September 2004) LACMA Labs Formative Evaluation Report for the LACMA Lab nano Exhibition at the Los Angeles County Museum of Art Los Angeles, CA. Annapolis, MD: Institute for Learning Innovation.

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APPENDIX A: Description of Interactive Stations



**Building Books: The Art of David Macaulay
Speed Art Museum**

APPENDIX B: Observation Protocol



Speed Art Museum Macaulay Exhibition Observation Protocol

Time of Observation Session: Plan to observe an interactive zone in the Macaulay exhibition for at least 30 minutes at a time. Your observation session can be longer than 30 minutes. Indicate the zone you are observing, the start and stop time of your observation session at the top of the observation form, and calculate the number of minutes you spent observing visitors.

Subjects: You want to randomly select visitors as they enter the interactive zone. We will agree upon an imaginary entry “line” around this zone. At the beginning of the observation session you will observe every 3rd visitor who crosses the imaginary line. When attendance is slow, this might literally be every 3rd visitor that enters the space. If attendance is high, many visitors will cross the line when you are observing your visitor. Once you have finished with your observation – when the visitor crosses the imaginary exit “line,” you turn again to count visitors and select the 3rd visitor who crosses the line.

Conducting the Observation: Use the Observation collection form. Write your name at the top and indicate when you conducted the observation – weekend or weekday. Indicate the general attendance level during your observation session. If you observe more than seven visitors (the number of data entry rows on the observation form), use another form but cross out the time start and stop at the top of the form and staple all your forms together for that one session. If less than seven visitors enter your zone during the observation session, just leave the remaining rows blank.

When a visitor crosses the imaginary line into the interactive zone, check off gender, and the general age category. Use your best guess. Then enter the time the visitor crossed the zone line and the time he/she crossed the exit line and calculate the total number of minutes.

While the visitor is in the observation zone, check off all the behaviors that apply to that visitor. A visitor might first pass through the zone only to return later during your observation session and engage fully in the interactive areas. Do not try to find where you entered data on this visitor. Unfortunately you will have to let that data go as it will be too complicated to try to track visitors in this way.

ZONES for OBSERVATION

1. **How Does It Work?** (Blue) What are these “mystery “objects? Visitors can draw or write their idea about the objects and how each is used and post it for others to think about. Mystery objects change regularly and the answers are available in the reading area
2. **How to... (Illustrating an Idea)** (Bright Green Area) Be an explainer like David Macaulay. Visitors asked to create a draw a “how to idea” in 5 steps and then put their ideas on display for others to see.
3. **Scrambled Stories** (Purple area) Macaulay mixes stories together in surprising ways. Visitors can remix their own versions of Jack and the Beanstalk and Rapunzel tales and draw their own scenes and add them to the game or post them.
4. **Build** (White -- Atrium) An open area filled with blocks for construction activities.
5. **Reading Area** (White -- Atrium) A selection of David Macaulay’s books and other reference books are available for visitors to browse. The books are color keyed to the area of the exhibition, where the artwork is shown.

Speed Art Museum Macaulay Exhibition Observation Protocol

Observer name: _____ Attendance level Low Moderate High

Zone Observed: Building Reading Area How to.. Scrambled Stories How does it work?

When observed: Weekend Weekday

Time begun observation session _____ Time ended observation _____ **Total minutes** _____

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at left VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at left VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Child <input type="checkbox"/> Teen <input type="checkbox"/> Adult Time in: _____ out: _____ Total minutes _____		<input type="checkbox"/> Passed through-no stop	<input type="checkbox"/> Paused briefly, continued on	<input type="checkbox"/> Talked with someone else related to the interactive and/or work in the zone
<input type="checkbox"/> Stopped to read/look at MACAULAY WORK	<input type="checkbox"/> Stopped to read/look at VISITORS' WORK	<input type="checkbox"/> Stopped to WATCH someone do something	<input type="checkbox"/> Touched-manipulated something BRIEFLY	<input type="checkbox"/> Touched-manipulated something FULLY

APPENDIX C: Interview Protocol



INTERVIEW PROTOCOL
Speed Art Museum Interactive Interpretation Study
Summative Evaluation - 2007

The purpose of interviewing Speed Art Museum visitors as they exit the museum is threefold: 1) to document the extent to which visitors use the five specified interpretive activities in the David Macaulay exhibition (see below); 2) to understand more about the nature of their learning experience relative to those specific interpretive activities; and 3) to gauge visitors' response to the exhibition enhancements created by the Speed team (such as the bright colors and humorous graphics). The interviews will be based on the following interpretive activities:

6. **How Does It Work?** (Blue) What are these "mystery" objects? Visitors can draw or write their idea about the objects and how each is used and post it for others to think about. Mystery objects change regularly and the answers are available in the reading area
7. **How to... (Illustrating an Idea)** (Bright Green Area) Be an explainer like David Macaulay. Visitors asked to create a draw a "how to idea" in 5 steps and then put their ideas on display for others to see.
8. **Scrambled Stories** (Purple area) Macaulay mixes stories together in surprising ways. Visitors can remix their own versions of Jack and the Beanstalk and Rapunzel tales and draw their own scenes and add them to the game or post them.
9. **Build** (White -- Atrium) An open area filled with blocks for construction activities.
10. **Reading Area** (White -- Atrium) A selection of David Macaulay's books and other reference books are available for visitors to browse. The books are color keyed to the area of the exhibition, where the artwork is shown.

The following interview protocol provides detailed descriptions of how and where to approach visitors, how to initiate and conduct the interview, and interviewing techniques that will facilitate an open conversation with visitors for a mutually rich, meaningful and enjoyable experience.

Interview Intercept:

As visitors exit the Macaulay exhibition, randomly select and approach the **4th** visitor to cross an imaginary line at the entrance/exit to the exhibition. You want to approach a variety of ages. Before talking to children you must introduce yourself to the adult caregiver and ask if it is OK to talk with the child and request that an adult be with you during the interview with the child. In some cases a child may be shy and hesitant to talk to you. In that case you can ask the adult if he/she could answer for the child. Sometimes just this request will stimulate the child to answer or will correct the adult if necessary. You want to avoid talking with children who are part of an organized group (i.e., a school group or some other kind of group), in which case do not include them in your sample and recruit another visitor. Although, we will target **individuals** to interview, keep in mind that the individual will likely be visiting in a **group** (family, friends, etc.) and you will need to suggest how the others might spend their time during the interview (looking around the galleries, gift shop, etc.). If other members of the group do participate in the interview, you will want to make them feel comfortable and engaged, but pay primary attention to recording information from the target individual. For example, the 4th visitor across the imaginary line may be a father, but he may only talk to you with his whole family present. In that case, you will want to make eye contact with everyone in the family, and give everyone the opportunity to respond to your questions, while ensuring that the father has provided information about each question you have asked.

Initiating the interview

Once you have selected a visitor, approach him/her, introduce yourself, explain what you are doing, and ask if he/she would mind answering a few questions. Try to be casual, friendly, and genuine in your tone, so that visitors feel comfortable. You can say something like this:

Hi! My name is ___ and I work with the Speed Art Museum. We are interested in finding out about your experiences in this exhibition today. Would you be willing to help us? It will take about 10 minutes – depending on how much you want to talk, and your feedback will help the museum to improve the visitor experience for others. We will sit here on the bench to talk. We also have a small gift to thank you for your time.

If the visitor says no, do not take it personally. Thank him/her and record the refusal on a list titled “Refusal Log,” as well as your impression of why the visitor refused. For example, maybe they were really in a hurry or had a screaming child to attend to.

If visitors appear uncertain or reluctant to agree to talk with you, try to gauge their hesitation. There are myriad reasons why visitors would initially not want to stop to talk. Some of those reasons we can anticipate and proactively acknowledge and try to make the visitor feel more comfortable. Try to give the visitor every reason to participate. Most likely, once they get started and are having an enjoyable experience talking with you and giving their opinion, they will lose track of time.

If the visitor you targeted defers the interview to someone else in the group, that’s fine too. For instance, the 4th person across your imaginary line may be a father, and when asked if he will participate, he defers to his wife, who agrees to talk while the others continue on their visit.

Conducting the interview

If the person agrees to participate in an entry interview, bring him/her to the data collection station. Invite the visitor to sit if he/she wishes or to stand during the interview.

1. Review purpose of study.

Remind visitors of the purpose of this exercise, so that they are very clear about what we want from them. You can use the script below, or just paraphrase. Even though we provide you with scripts throughout the guide, feel free to use your own words as long as you convey the same information. You can say something like:

Thanks again for agreeing to help us. Now that we’re settled, let me tell you again why we’re here. We are interested in learning if and how visitors use our interactive and interpretive activities, and what they think of them. So, I’ll show you some pictures of these areas, talk with you about them, then have you fill out a ½ page of information about you. We are really interested in getting your honest feedback—good or bad—so you cannot possibly offend me by anything you say. Do you have any questions so far? Great, let’s begin...

2. Determine which activities the visitor has used.

One at a time, show the visitor each of the five image pages that represent the five interpretive areas. To make it easier on yourself, show the images in the order listed on the interview response form. For each image page, give visitors a brief verbal description of what it is, orient them to the photographs, and ask them whether or not they spent any time and looked and/or did things in that area during their visit today. Make sure they understand exactly which area you are talking about. (For example, if the visitor says, “Yeah,

I think I did something like that,” ask them for more information to ensure they are talking about the same thing).

→ If visitors say **YES**, circle the yes on the interview form and set the image page aside. Then show visitors the next image page and repeat the process.

→ If the visitor says **NO** to having done that activity, say something like: *We’re also trying to understand why visitors don’t use certain areas. Can you give me some idea of why you didn’t use that activity today?* You will also want to probe them on a few issues:

- (1) **Awareness** (Did they know it was there? Or maybe they knew it was there but didn’t realize something about the area.)
- (2) **Appeal** (Did it not appeal to them? Why not?)
- (3) **Accessibility** (Did they not know how to use the activity? Was there something that prevented them from being able to use it? – e.g., unclear what to do, too crowded).

After you have finished asking the visitor about all five interpretive experiences, take the ones marked “YES” and lay out on the table, removing the “NO” activities. Ask the visitor to select one of the “YES” activities to talk more about.

If the visitor says “NO” to all five activities, then tell them you’d like to get a little bit of information about them, ask them to complete the 1-page information form, thank them kindly for their time, and let them choose a postcard.

For visitors who answered “YES” to at least one of the areas, begin the in-depth section by saying something like:

Thanks so much for the feedback you’ve given us so far. All of the questions from here on will relate to (NAME OF AREA) that you have chosen to talk about.

Place the image page of that activity on the table and remove all the others. Then ask the three questions about that one activity and record visitor responses on the **Interpretive Activity Sheet**.

Next, lay out the number scale (from 1-8) on the bench. You can either use an object (e.g., button, small toy, coin) that visitors place on the number line indicating their response to each of the 8 statements or tell them that this number line will remind you of the scale you are using. Say something like this:

Now here is the first statement. [Read the statement, then place it on the bench near the number line] Select a number that best reflects what you feel this activity did for you. As you see here, 1 = not at all, and up to 8 which = very much. (Option: you can offer the visitor an object/stone and ask her to place it on the number line for each statement. Children might enjoy this strategy more than adults.)

After visitors select a number rating, ask them why they gave it that rating. Record responses on the **Learning Dimensions Response Sheet**. Pick up the Learning Dimension statement card and place the next one on the bench near the number line, reading it to the visitor as you do so.

Ending the interview

After you have asked all the questions, end the interview by asking:

Do you have any additional thoughts or comments that you weren't able to share?

After they answer this question say:

*Thank you so much for helping us. Now, please complete this short **information form** and indicate if you are willing to participate in the web-survey next month. We will send you an email with a link to a website where you can complete one more survey for us. Be assured that your email address will not be used for anything other than this web-survey. As you complete this short form I'll get your thank-you gift.*

Thank the visitor again after completing the information form.

Tips of the Trade

- It is often best to begin the interview with some casual, conversational questions, such as “Is this your first time to the Speed Art Museum?” and “Are you from the Louisville area?”
- The goal of the conversation is to get feedback from the visitor on these five interpretive activities only – not on the rest of the museum visit.
- We are interested in their experience with these activities today, not during a prior visit.
- Remind visitors of which activity you are talking about, and keep the image or example of it next to the Statement Cards. This will ensure that we will be able to understand the effectiveness of each activity on its own, and will help us get the most accurate, valuable information for the study.
- In addition to the probes provided on the Interview Guide, you should ask follow-up questions that will provide deeper, meaningful, and relevant information. Some useful probes to use are:
 - Tell me more about that
 - What do you mean by that?
 - Can you explain that a little more?
- Give visitors time to answer. Let there be silence for at least 5-10 seconds before prompting them again, asking if they need the question repeated, etc. It is easy to get nervous if visitors don't answer immediately, and to compensate by asking another question right away or giving them possible answers before they have time to think it through.
- Always be friendly and accommodating to visitors, try to be aware of their needs, expectations, and agendas. Try to minimize any reasons for them to change their minds and leave the interview.
- Make the interview as relaxed and comfortable as possible. It's okay to be conversational, even though you are asking them very specific questions. You don't want to sound like you're reading off a script.

It is likely that much of the visitors' general background information will be disclosed during the interview. However, by the end of the interview, you will need to ask visitors about their previous Speed Art Museum visitation history, residence, and age, and record their information on the Demographics Sheet provided.

Recording the data from the interview

Use the attached Interview Guide to record visitors' responses. When first learning how to conduct interviews it can feel intimidating to lead a conversational interview, maintain eye contact, listen thoughtfully to visitors in order to ask appropriate follow-up questions and probes, and write down what visitors say. There are several techniques you can use.

1. Interview in pairs: You can team up with another data collector and one of you conducts the interview and the other writes down what the visitor says (a transcriber). The advantage to this technique is that the interviewer can concentrate on the visitor and listen carefully, asking good follow-up questions. The transcriber can then concentrate on writing down what the visitor says, can ask the visitor for clarification if necessary, and can assist the interviewer by being sure that all the

questions are being asked. This technique will take data collectors more time to collect the required number of interviews but it is quite enjoyable and results in high quality data.

2. Use a digital recorder: If you have access to a digital recorder, you can ask the visitor's permission to record the interview and indicate that you will erase the audio recording after you transcribe it on the paper. You will need to be very familiar and at ease with operating the recorder so that you don't make visitors feel uneasy if you struggle with how to operate it. Also, always test that it works before every interview and have extra batteries on hand. We suggest that you take some notes during the interview, capturing the key ideas and as a safeguard for possible technical failure. After a recorded interview it is strongly recommended that you immediately transcribe the interview on the data collection form, then erase the recording. The sound quality is sometimes less than optimal and transcribing immediately after the interview allows you to fill in garbled sections from your notes and memory.
3. Take notes as you go: This does take some practice but is the most efficient technique. You do not have to capture every word visitors say, but be careful to note down key words, phrases, and ideas as the visitor speaks. Be sure to use the visitor's words and avoid the temptation to summarize and editorialize visitors' ideas. Try to maintain eye contact and a conversational tone while you take notes. This can be tricky! Depending on your style and skill level, you may want to make a comment at the outset that you need to write down what they are saying, so it may take a second before you can respond, or you may ask them to repeat something - they are usually very understanding. After the interview, make sure to take a few minutes to go back over the interview and fill in the gaps. No matter how good your memory is, you will likely lose the detailed information if you wait too long.

Whatever technique you use the data collection form must be legible and the thoughts must be complete. Try to fill in as much detailed richness as possible, capturing their actual words, phraseology, and expressions whenever possible. Also, note in parentheses any prompts/questions that you asked as a follow-up to their initial responses. Try to note with quotation marks what are **actual statements** made and exact language used by people.

Remember to record the necessary demographic information, as well as the date and time of day you conducted the interview. Also, there is a small space on the bottom of the interview guide to record any relevant notes about the visitor. For instance, was it difficult to get the visitor to talk? Was the visitor distracted by his/her children, and not paying full attention to the interview questions? Did the visitor have to leave partway through the interview? These notes will provide important contextual information for understanding the visitors' responses to the interview questions.

INTERVIEW GUIDE

Speed Art Museum – Macaulay Exhibition Interactive Evaluation

Date: _____ Interviewer: _____

Weekday Weekend

What did you know about David Macaulay before you came to this exhibition?

Nothing Knew he wrote books Knew books, not artist Big fan of his books
 Other: _____

Name of Activity	Used today? (circle "YES" or "NO")	Why didn't they use the activity?
How Does It Work? (Blue Area)	YES NO	<input type="checkbox"/> Awareness (Did they know it was there?) <input type="checkbox"/> Appeal (Why didn't it appeal to them?) <input type="checkbox"/> Accessibility (Didn't know how to use it; something prevented use, etc.) Notes:
How to... (Illustrating an Idea) (Bright Green Area)	YES NO	<input type="checkbox"/> Awareness (Did they know it was there?) <input type="checkbox"/> Appeal (Why didn't it appeal to them?) <input type="checkbox"/> Accessibility (Didn't know how to use it; something prevented use, etc.) Notes
Scrambled Stories (Purple area)	YES NO	<input type="checkbox"/> Awareness (Did they know it was there?) <input type="checkbox"/> Appeal (Why didn't it appeal to them?) <input type="checkbox"/> Accessibility (Didn't know how to use it; something prevented use, etc.) Notes
Build (White -- Atrium)	YES NO	<input type="checkbox"/> Awareness (Did they know it was there?) <input type="checkbox"/> Appeal (Why didn't it appeal to them?) <input type="checkbox"/> Accessibility (Didn't know how to use it; something prevented use, etc.) Notes
Reading Area (White – Atrium)	YES NO	<input type="checkbox"/> Awareness (Did they know it was there?) <input type="checkbox"/> Appeal (Why didn't it appeal to them?) <input type="checkbox"/> Accessibility (Didn't know how to use it; something prevented use, etc.) Notes

Interpretive Activity Sheet

Interpretive activity (circle one only):

How Does it Work?

How to...

Scrambled Stories

Build

Reading Area

1. Why were you attracted to this area?

- If they say something general about the activity (e.g., “it looked interesting” or “I was curious”) ask: *What about it looked interesting? What in particular made you curious about it?*
- If they say something specific about the activity (e.g., “I wanted to learn more about ...”), ask: *Why did that interest you in particular? Can you tell me more about that?*

2. Tell me what you did in this area:

- Based on the specific responses of the visitor, probe for as much detail as possible about how they used the activity. (e.g. If they say that they used *How to...*, ask what they chose to explain how to do and if they used the suggestions provided or used their own idea, did they leave their how-to drawing in the zone or take it with them. If they used the Reading Area, did they read books, or look browse, were they looking for something specific.)

3. What did you enjoy most about (NAME OF ACTIVITY) and why?

- If they say “I don’t know” or something vague, ask: *Was there anything you liked about this activity? Would you use it again or recommend it to others?*
- If they say something general (e.g., “I just thought it was neat”), ask: *What about it was neat? Can you give me an example?*

LEARNING DIMENSIONS RESPONSE SHEET

<i>Circle the number for each statement that best applies to (NAME the ACTIVITY):</i>	<div style="display: flex; justify-content: space-between;"> 1 = Not at all 8 = Very Much </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> - + </div>
1. This activity taught me something new.	1 2 3 4 5 6 7 8
Why did you give it that rating?	
2. This activity helped me think about art in new ways.	1 2 3 4 5 6 7 8
Why did you give it that rating?	
3. This activity helped me look more carefully and more thoughtfully at the art.	1 2 3 4 5 6 7 8
Why did you give it that rating?	
4. This activity encouraged me to talk with others about a work of art or about issues related to a work of art.	1 2 3 4 5 6 7 8
Why did you give it that rating?	
5. This activity helped me make connections between my personal interests, life experience, or background and the art in the exhibition.	1 2 3 4 5 6 7 8
Why did you give it that rating?	
6. This activity made me curious about a work of art and made me want to learn more.	1 2 3 4 5 6 7 8
Why did you give it that rating?	
7. This activity made me feel a sense of awe or wonder about Macaulay's art.	1 2 3 4 5 6 7 8
Why did you give it that rating?	

Interview notes & good stories:

APPENDIX D: Written Survey



Speed Art Museum ArtSparks Visitor Study

<i>Circle</i> the number for each statement that best applies to your experience at ArtSparks today:	1 = Not at all -				8 = Very Much +			
1. This activity taught me something new.	1	2	3	4	5	6	7	8
2. This activity helped me think about art in new ways.	1	2	3	4	5	6	7	8
3. This activity helped me look more carefully and more thoughtfully at the art.	1	2	3	4	5	6	7	8
4. This activity encouraged me to talk with others about a work of art or about issues related to a work of art.	1	2	3	4	5	6	7	8
5. This activity helped me make connections between my personal interests, life experience, or background and the art in the exhibition.	1	2	3	4	5	6	7	8
6. This activity made me curious about a work of art and made me want to learn more.	1	2	3	4	5	6	7	8
7. This activity made me feel a sense of awe or wonder about Macaulay's art.	1	2	3	4	5	6	7	8
8. How would you rate your interest in art?	1	2	3	4	5	6	7	8
9. How familiar are you with HOW art is made?	1	2	3	4	5	6	7	8

10. Gender: (Check one) Male Female

11. Age of the person completing survey: (Check one)

Age 10-15 Age 16-19 Age 20-39 Age 40-59 Age 60-79 Age 80+

12a. Did you come to the museum with other people today? YES NO

12b. If YES, check the box that best describes your group:

Adults & children under 18 Adults only

13a. Is this your FIRST VISIT to the Speed Art Museum? YES NO

13b. If NO, How many times have you visited the Speed in the last 12 months? (Check one)

0/None Once 2-3 times 4+ times

14. Check all of the statements that describe your prior experience & background in art:

<input type="checkbox"/> Took art courses in school	<input type="checkbox"/> Art was a major focus of formal education	<input type="checkbox"/> Study art on my own	<input type="checkbox"/> Create art for own enjoyment	<input type="checkbox"/> Create art professionally	<input type="checkbox"/> Art teacher or professor	<input type="checkbox"/> Work in an art-related field	<input type="checkbox"/> Visit art museums frequently (3+ visits/yr)
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Please provide any additional comments or suggestions