

Storyland: A Trip Through Childhood Favorites Summative Evaluation Report of Findings, March 2012

Prepared for Minnesota Children's Museum by *Blue Scarf Consulting*



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Storyland: A Trip Through Childhood Favorites Summative Evaluation Report of Findings, March 2012

EXECUTIVE SUMMARY



Storyland: A Trip Through Childhood Favorites (Storyland) brings seven beloved picture books to life in a 1,500 square foot exhibition at the Minnesota Children's Museum (MCM) from September 2011 through early February 2012. Designed and developed by MCM through an IMLS grant, *Storyland* is aimed at children newborn through 8 years old and the adults in their lives. The books featured in the exhibit include: *The Tale of Peter Rabbit* (Potter), *If You Give A Mouse A Cookie* (Numeroff), *ChickaChicka Boom Boom* (Martin and Archambault), *The Snowy Day* (Keats), *Tuesday* (Wiesner), and *Where's Spot?* (Hill). The summative evaluation, conducted by Blue Scarf Consulting, LLC (BSC), a Minnetonka, MN based evaluation service, centered on answering the following questions:

- How and to what extent does *Storyland* promote, expand, and/or support children's perceptions of reading?
- How and to what extent does *Storyland* promote and support children's desire to read?
- How and to what extent does *Storyland* change adults' perception of the critical role they play in children's early literacy?
- To what extent do adults receive and intend to pursue the suggested literacy building practices presented in *Storyland*?

Key findings from Personal Meaning Mapping (PMM) with 29 five through eight year olds found evidence of shifts in vocabulary, breadth, and depth of concepts from when children entered the exhibit to when they exited, on average 15-16 minutes. More striking were findings from children's maps when looking at from the child's perspective, i.e., children's growing awareness of themselves as readers. Learning to read and becoming a reader are major accomplishments in children's lives and evidence of this awareness shows up in the PMM's of children around 6-7 years and points to an age-related development. Reflecting a developmental progression, data from more of the 7-8 year old children suggested a growing awareness of the experience of reading and the benefits of reading.

A pre and post card sort of 10 reading readiness messages within the exhibit with 25 adults showed that adults considered all of the *Storyland* messages about early literacy as important, with specific messages made a distinct impression on them. For example, at spending on average 17-18 minutes in the exhibit, there was a clear shift from a single “most important” message on the minds of adults entering the exhibit—“Parents and caregivers play a critical role in children’s early literacy through everyday interactions at home and in the community”—three messages—“Children’s literacy develops through everyday activities,” “The most important thing adults can do to support children’s literacy development is read to them,” and “Parents and caregivers play a critical role in children’s early literacy through everyday interactions at home and in the community.”

Exit interview data suggests that most adults were already familiar with the literacy building practices offered in the exhibit. Still, half of adults indicated that something they saw or heard in *Storyland* changed their thinking about the way they currently supported their children’s literacy development.

The summative evaluation report of findings provides detailed descriptions and analysis of all data gathered to provide evidence for the ability of *Storyland* to support children’s reading awareness and development as well as reinforce and/or change adults’ approach and practice for helping their children be ready to read.

INTRODUCTION

Storyland: A Trip Through Childhood Favorites (Storyland) brings seven beloved picture books to life in a 1,500 square foot exhibition at the Minnesota Children's Museum (MCM) from September 2011 through early February 2012. Designed and developed by MCM through an IMLS grant, *Storyland* is aimed at children newborn through 8 years old and the adults in their lives. The books featured in the exhibit include: *The Tale of Peter Rabbit* (Potter), *If You Give A Mouse A Cookie* (Numeroff), *ChickaChicka Boom Boom* (Martin and Archambault), *The Snowy Day* (Keats), *Tuesday* (Wiesner), and *Where's Spot?* (Hill). The exhibit also contains components and messages related to each story, which are designed to:

- Encourage a deep love and enjoyment of reading in children.
- Emphasize to adults that literacy development begins in infancy and continues through childhood.
- Highlight the critical role adults play in cultivating literacy.

The stated goals and messages for *Storyland* provide an excellent opportunity to investigate: 1) how children perceive and connect to literacy and reading through interactive, book-based experiences and 2) adults' intention to implement the messages embedded throughout the exhibit. The focus of the summative evaluation centers on answering the following questions:

- How and to what extent does *Storyland* promote, expand, and/or support children's perceptions of reading?
- How and to what extent does *Storyland* promote and support children's desire to read?
- How and to what extent does *Storyland* change adults' perception of the critical role they play in children's early literacy?
- To what extent do adults receive and intend to pursue the suggested literacy building practices presented in *Storyland*?

Blue Scarf Consulting, LLC (BSC), a Minnetonka, MN based evaluation service, was engaged by MCM to conduct the summative evaluation. To assist in developing the early childhood context for situating summative findings, BSC engaged Jeanne Vergeront, a well-known and trusted museum professional with expertise in early childhood development and education.

METHOD AND SAMPLE

Based on the evaluation questions to be answered as well as the target audience, two methodologies were used in assessing *Storyland's* potential impact: Personal Meaning Mapping (PMM) with children and a card sort with a follow up online survey with adults. A brief description of each methodology and related sample information is provided below; specific protocols can be found in the Appendices section.

Personal Meaning Mapping–Children

Research in both the cognitive and neurosciences increasingly support the view that learning is a relative and constructive process (Pope and Gilbert, 1983; Roschelle, 1995; Sylvester, 1995). Specifically, it is presumed that individuals bring varied prior experiences and knowledge into a learning situation and that these shape how individuals perceive and process experiences. The combination of prior experience and the new experience results in learning, but the resulting learning is unique for each individual, situated within the context in which it was learned (Falk, Mousourri & Coulson, 1998). PMM does not assume that all learners enter a learning situation with comparable knowledge and experience, nor does it require that an individual produce a 'right' answer in order to demonstrate learning. Instead, PMM is designed to quantifiably measure how an experience, such as visiting the *Storyland* exhibition, uniquely affects each individual's conceptual and attitudinal understanding. The power of PMM as a methodology is three-fold:

- 1) PMM yields reliable quantitative results from a qualitative method of data collection, which takes into account unique, personal constructions of knowledge and experiences.
- 2) PMM facilitates the identification of individuals' prior knowledge, concepts, attitudes and vocabulary (baseline) about a particular subject, such as literacy and reading.
- 3) PMM provides a mechanism for meaningfully assessing and comparing the relative and unique impact of a single exhibition experience across many different people.

PMM is a useful and appropriate method for gathering data from children because it encourages the sharing of thoughts through a common form of expression for children, drawing, as well as words. PMM also provides an opportunity to "do over," initial thoughts and ideas, another concept familiar to and often desired by children.

A total of 29 children ages 5 to 8 years old (3 five-year-olds, 9 six-year-olds, 10 seven-year-olds, and 7 eight-year-olds) completed PMMs. The children were recruited as they and their accompanying adult approached the entrance to *Storyland*. Roughly half the sample was selected by approaching any group with children who looked to be in the target age range. The initial data collection was done on weekday mornings, when museum visitors were more likely to be 5-years-olds who were either not able or not interested in participating. When data collection occurred on to weekends, data collectors' recruited participants by holding a sign that asked, "Are you 6, 7, or 8 years old?" which resulted in a fairly random group of children and adults inquiring about the sign and helped to ensure that data was gathered from a range of ages. With the accompanying adult's verbal permission, the child was invited to do a drawing activity before and after they spent time in the exhibit (see Appendix A).

A scoring rubric (see Appendix B) was developed to assess shifts in children's learning focused on:

- Extent of vocabulary—the number of vocabulary and ideas used to represent reading.

- Breadth of understanding—the range of concepts used in describing their reading-related thoughts.
- Depth of understanding—how deeply and richly children understand a particular concept.

Card Sort and Interview—Adults

Card sorting is a way to elicit visitors’ perceptions and intentions by asking them to prioritize specific themes, topics, concepts, or behaviors. On several weekday mornings and mid-day on weekends throughout October and December 2011, a total of 25 adults completed a pre and post card sort with ten exhibit messages aimed at adults. Adults were intercepted at the exhibit entrance and invited to participate in a short before and after card sort activity. At the conclusion of the post card sort, a short interview was conducted to determine where they spent the most time in the exhibit and whether they had seen or heard anything in the exhibit that 1) changed their understanding of reading readiness; 2) reinforced what they already knew; or 3) made them want to change the way they currently supported their child’s readiness. Additionally, participants were asked to look at a list of six possible activities they might do to follow up their visit to *Storyland* and indicate three they might try or do. Participants were also asked to provide an email address if they were interested in participating in a follow-up online survey (see Appendix C).

Online Survey - Adults

To get a sense of the impact of *Storyland* beyond the immediate experience, a short online survey consisting of checkbox, multiple choice, and/or short answer questions related to what they saw and did in each exhibit component, familiarity with specific messaging, and follow-up activities they might have tried or done to extend the exhibit visit (see Appendix D). Participants were invited to enter a drawing for a \$50 gift certificate to BetterWorldBooks.com as a “thank you” for completing the survey. Blue Scarf posted the survey on SurveyGizmo, an online survey provider to which Blue Scarf’s subscribes. Eighteen of the 25 respondents provided their email address and, in effort to increase the pool of participants, email addresses were collected from 12 additional adults exiting the exhibit without having completed the card sort. An email with the online survey link was sent to all 37 email addresses within 24 to 48 hours after their visit netting a dismal seven responses.

FINDINGS

HOW AND TO WHAT EXTENT DOES STORYLAND 1) PROMOTE, EXPAND AND/OR SUPPORT CHILDREN’S PERCEPTIONS OF READING AND 2) PROMOTE AND SUPPORT CHILDREN’S DESIRE TO READ?

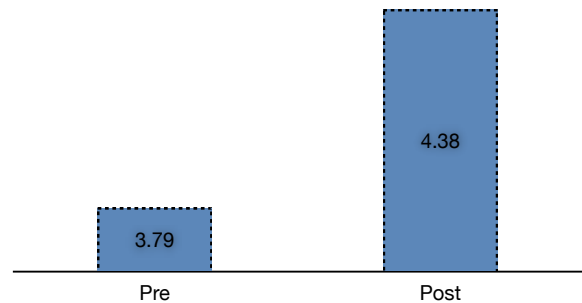
The 29 children who participated in the summative evaluation spent an average of 15.72 minutes in the *Storyland* exhibit. Regardless of the actual time spent in the exhibit, children’s vocabulary, breadth of concepts, and depth of understanding related to reading increased, if only slightly.

PERSONAL MEANING MAPS (PMMs)

Vocabulary

The shift in the number of words and pictures used by children to express what reading brought to mind increased slightly from pre to post. Figure 1 shows the average number vocabulary used before and after they spent time in the *Storyland* exhibit.

Figure 1: Pre and post average vocabulary.

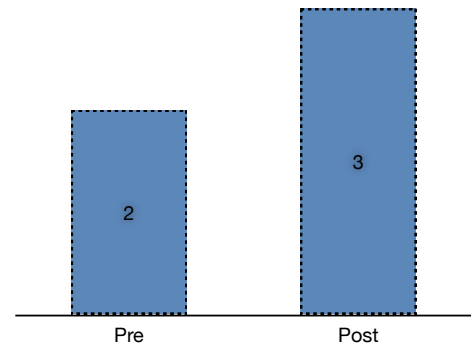


While the .59, or half a word, increase may not appear to be much of a gain it supports the notion that the exhibit experience added rather than left the same or took away from their perceptions of and interest in reading. Pre vocabulary often included single words, such as, “book” or “story,” or pictures of a books, the child reading books or being read to.” Post vocabulary contained book names, including those featured in the exhibit, types of books (fiction, fairytales, chapter book), and picture depicting exhibit features, such as the coconut tree in the *Chicka Chicka Boom Boom* component.

Breadth

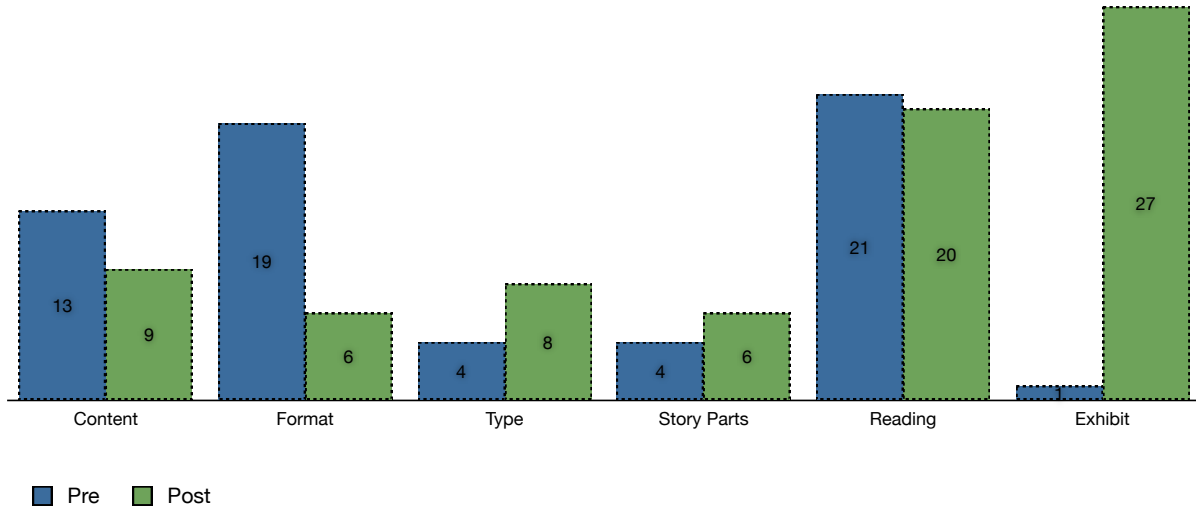
The number of concepts that children touched on in sharing their thoughts about reading also increased. Figure 2 provides the overall average number of concepts found on children’s pre and post PMMs.

Figure 2: Pre and post overall breadth of concepts.



Again, this seemingly small increase supports the idea of broadening reading concepts due to time spent in the exhibit. This is further supported when looking at actual number of “hits” per concept, as seen in Figure 3. The concepts most prevalent in pre PMMs were format (book layout, design, or parts), reading (the act of), and content (a particular story, title, or author). Two of those concepts, reading and content, continue to appear at or near the same rate in the post PMMs suggesting that these specific concepts were well represented in the exhibit and supported what children were already familiar with. Further, and not surprising, the books and activities featured in the exhibit, coded as “Exhibit Connection,” received the most post experience “hits,” suggesting a strong familiarity with the featured books as well as an indication of the level of engagement these children had during the time they spent in *Storyland*, given the likelihood of children thinking of the feature books prior to entering the exhibit or by the exhibit name or entry panel.

Figure 3: Individual concepts by frequency (n=29).

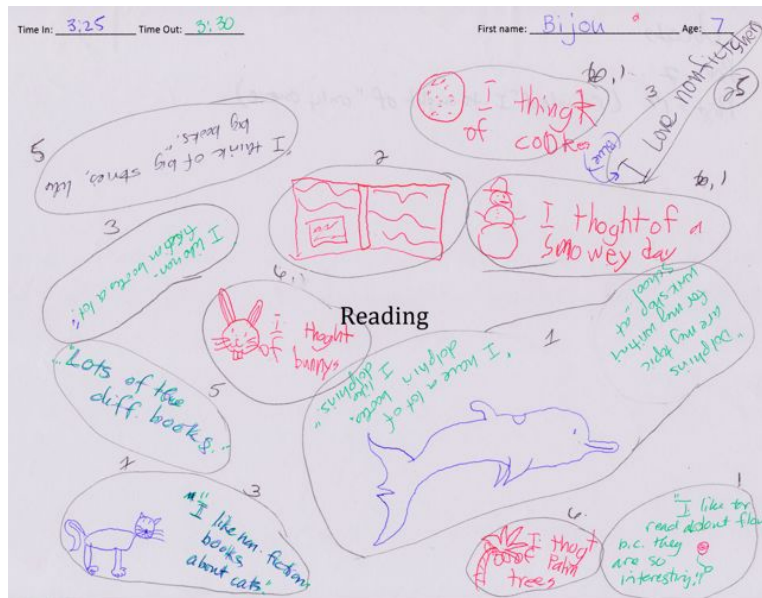


Note: Multiple concepts per map account for the total number of hits exceeding the number of maps.

The two PMMs that show the highest concept increase from pre to post can be seen in Figure 4. Both PMMs show that the number of concepts identified doubled from pre to post. It is interesting to note that this increase occurred during a short visit, 5 minutes for Bijou, and a longer visit, 18 minutes for Diego. Both also have their largest increase in the Exhibit Connections category, further supporting the idea of familiarity and engagement.

Figure 4: Examples of highest Breadth of Concept scores.

Bijou, Age 7 BREADTH SCORES		
Time spent in exhibit: 5 minutes		
Concepts	Pre	Post
Content	2	3
Format	0	1
Type	2	1
Story parts	0	0
Reading	1	1
Exhibit connection	0	4
Total	5	10

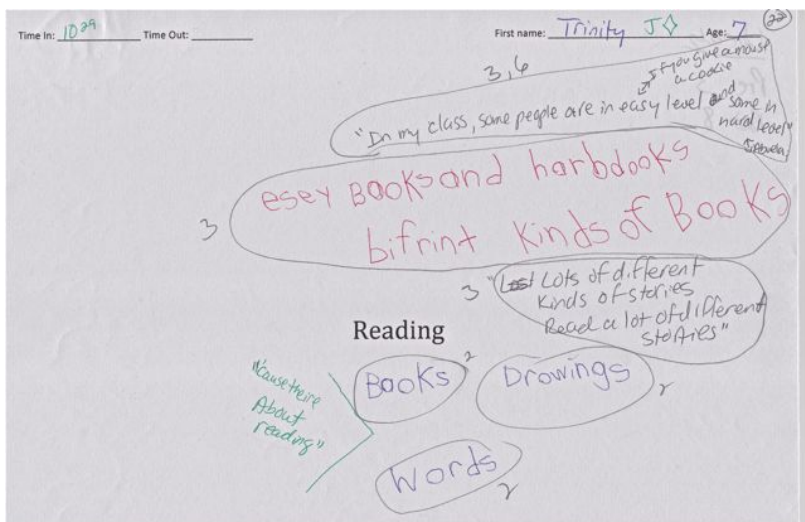


Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

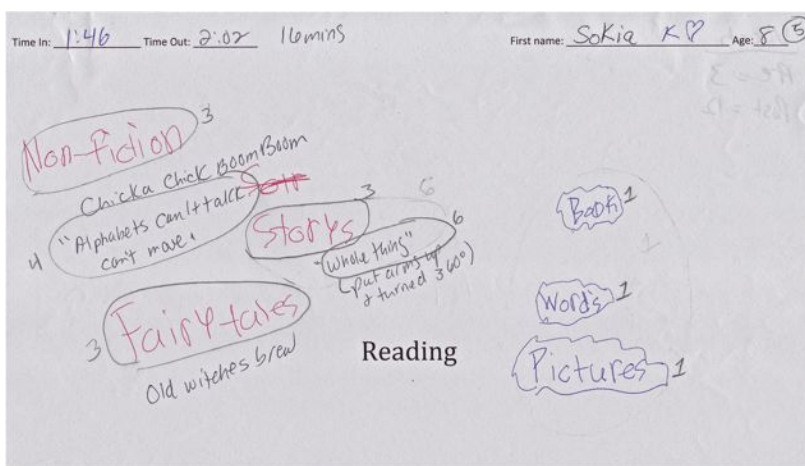
The biggest increase, in Exhibit Connections, likely reflects the vividness and immediacy of the feature books as well as the overall time they spent in the exhibit. This notion may also support the decrease in the Format and Reading categories, as these are elements of reading that might be associated with reading in general on entry but later replaced by other experiences in the exhibit. Looking at specific examples gives a better idea of increases that occurred. Figure 6 shows examples that provide a closer look at increases for specific Depth categories.

Figure 6: Examples of high Depth of Concept scores.

Trinity, Age 7 DEPTH SCORES		
Time spent in exhibit: unknown		
Concepts	Pre	Post
Content	0	0
Format	1	0
Type	0	2
Story parts	0	0
Reading	0	0
Exhibit connection	0	3
Total	1	5
Average score	1	



Sokia, Age 8 DEPTH SCORES		
Time spent in exhibit: 16 minutes		
Concepts	Pre	Post
Content	1	0
Format	0	0
Type	0	2
Story parts	0	2
Reading	0	0
Exhibit connection	0	2
Total	1	6
Average score	1.17	



Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

Children's Perspective

Taking children's perspective into account is necessary to consider what meaning they are making from their experience. Simply applying an adult framework (i.e. 6 pre-literacy skills) to looking at children's experiences fails to address and capture what is significant and meaningful for children. This reflects the constructivist learning process highlighted earlier in this report (Pope and Gilbert; Roschelle etc.)

The PMM data provided some insight into the impact of the *Storyland* exhibit on children. Looking at the data from the child's perspective, however, points to some interesting clues about children and reading. For example, children's growing awareness of themselves as readers and of reading comes through in their comments, drawings, and writing. Learning to read and becoming a reader are major accomplishments in children's lives. This awareness shows up in the PMM's of children around 6-7 years and points to an age-related development. Reflecting a developmental progression, data from more of the 7-8 year old children suggest a growing awareness of the experience of reading and the benefits of reading.

The PMM data also reflects how children see things from the lens of their personal experience and how it broadens with age. Younger children note: I like dolphins, or fairies; I have that book at home. For somewhat older children in the sample, prompts of "reading" connect personal experiences with reading and with the exhibit: from *reading to my dog* to *reading to Spot* (a featured book); from books in the exhibit to other books read; from *a girl reading* to *reading to use your imagination*. Figures 7-10 provide examples of children's perspective, by age, expressed in the PMMs.

Figure 7: Examples of children's perspective, age 5

Julia, Age 5 PERSPECTIVE	
Time spent in exhibit: 30 minutes	
<p>PRE:</p> <ul style="list-style-type: none"> • Clear reading association • Subject: animal • Simple drawing • Didn't write words 	<p>POST</p> <ul style="list-style-type: none"> • Reading association relates to Storyland • Exhibit reference: multiple -1 book: Peter Rabbit • Subject: animal • Simple drawing relates to Peter Rabbit • Didn't write words
OTHER CHANGES FROM PRE TO POST:	
<ul style="list-style-type: none"> • Reading and exhibit connection • Drawing detail refers to Peter Rabbit components 	

Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

Taylor, Age 5 PERSPECTIVE

Time spent in exhibit: 16 minutes

<p>PRE:</p> <ul style="list-style-type: none"> • Strong reading association • Personal • No drawing • Didn't write words 	<p>POST:</p> <ul style="list-style-type: none"> • Reading association relates to Storyland • Exhibit reference: multiple <ul style="list-style-type: none"> -3 books: Chicka Chicka Boom Boom, Mouse, Snowy -To several things she did • Simple drawing • Didn't write words
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OTHER CHANGES FROM PRE TO POST:

- Multiple references and relationships with reading: letter, stories,
- **Places herself in the exhibit**
- Each reference to a book is different: reading, play with letters, be a snow angel

Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

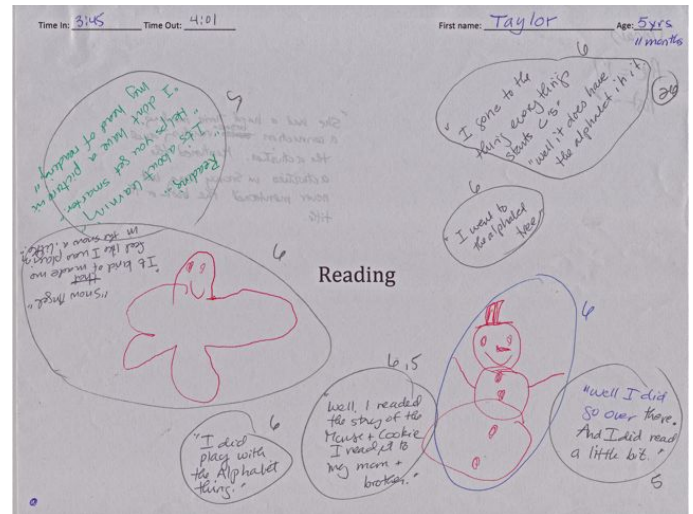


Figure 8: Examples of children's perspective, age 6

Sabina, Age 6 PERSPECTIVE

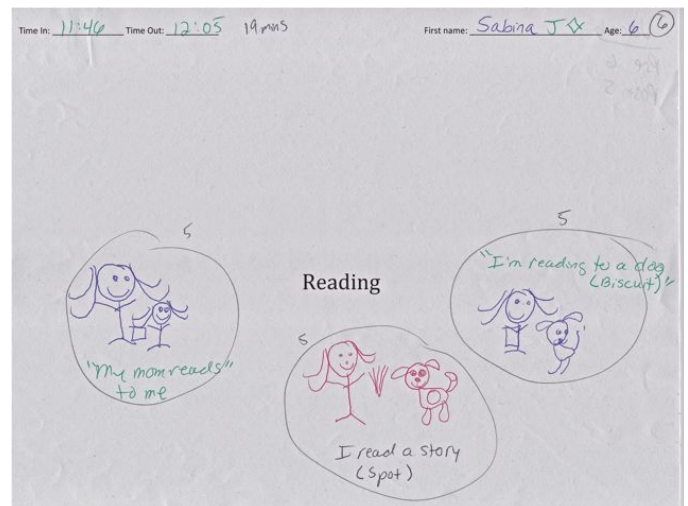
Time spent in exhibit: 19 minutes

<p>PRE:</p> <ul style="list-style-type: none"> • Reading association • Personal (mom, dog) • Simple drawing • Subject: reading 	<p>POST:</p> <ul style="list-style-type: none"> • Reading association relates to Storyland • Exhibit reference: <ul style="list-style-type: none"> -To 1 book: Spot • Personal (my sister) • Simple drawing • Subject: reading
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OTHER CHANGES FROM PRE TO POST:

- Repeats of pre drawing in post with a specific exhibit reference
- **Places herself in exhibit**

Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

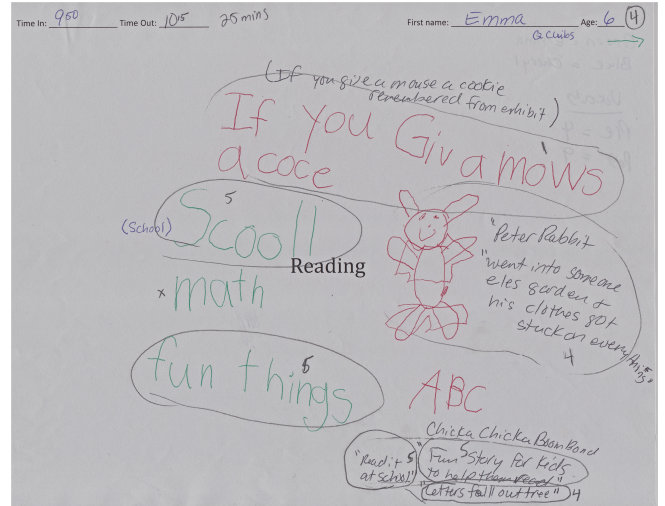


Emma, Age 6 PERSPECTIVE

Time spent in exhibit: 25 minutes

<p>PRE:</p> <ul style="list-style-type: none"> • Reading association • No drawing • Subject: school • Wrote words 	<p>POST:</p> <ul style="list-style-type: none"> • Reading association relates to SL • Exhibit references: multiple -3 books- Mouse, Peter Rabbit, Chicka Chicka Boom Boom • Recognizable drawing • Wrote words
---	--

OTHER CHANGES FROM PRE TO POST:
 • Builds on reading association and the exhibit with story details



Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

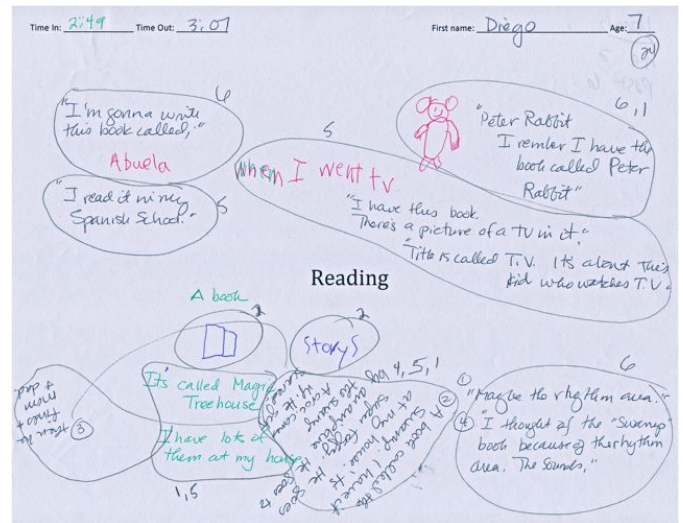
Figure 9: Examples of Children’s Perspective, Age 7

Diego, Age 7 PERSPECTIVE

Time spent in exhibit: 1 minutes

<p>PRE:</p> <ul style="list-style-type: none"> • Reading association • Writes words • Simple drawing • Shows himself as a reader 	<p>POST:</p> <ul style="list-style-type: none"> • Reading association relates to Storyland • Exhibit reference -2-3 book: Peter Rabbit, Abuela, Tuesday? -Experience: relates Storyland components to his experience • Simple drawing
--	--

OTHER CHANGES FROM PRE TO POST:
 • Associates Storyland books with other books he’s read, with other places
 • Shows himself as a reader



Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

Alaska, Age 7 PERSPECTIVE

Time spent in exhibit: 15 minutes

<p>PRE:</p> <ul style="list-style-type: none"> • Reading association • Writes words • Drawings • Associates herself with reading 	<p>POST:</p> <ul style="list-style-type: none"> • Reading association relates to Storyland • Exhibit reference <ul style="list-style-type: none"> -All books: spec. Peter Rabbit, Abuela -Experience: relates Storyland components to her experience • Simple drawings
--	--

- OTHER CHANGES FROM PRE TO POST:
- Broad familiarity with aspects of reading, parts of books, the library
 - Shows herself as a reader

Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

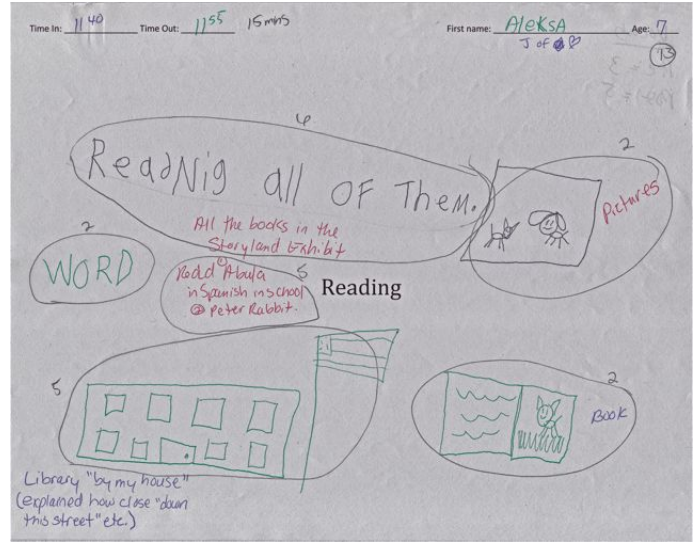


Figure 10: Examples of Children’s Perspective, Age 8

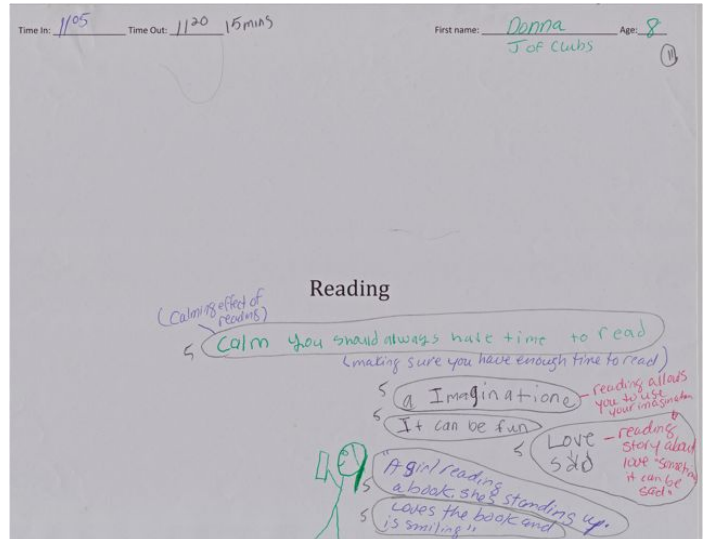
Donna, Age 8 PERSPECTIVE

Time spent in exhibit: 15 minutes

<p>PRE:</p> <ul style="list-style-type: none"> • Reading association • Writes words • Simple drawing • Shows herself as reader 	<p>POST:</p> <ul style="list-style-type: none"> • Reading association • No exhibit reference • Multiple drawings with detail • Writes words • Shows herself as reader
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- OTHER CHANGES FROM PRE TO POST:
- Expresses insights into reading and its benefits

Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.



Morgan, Age 8 PERSPECTIVE

Time spent in exhibit: 18 minutes

PRE:

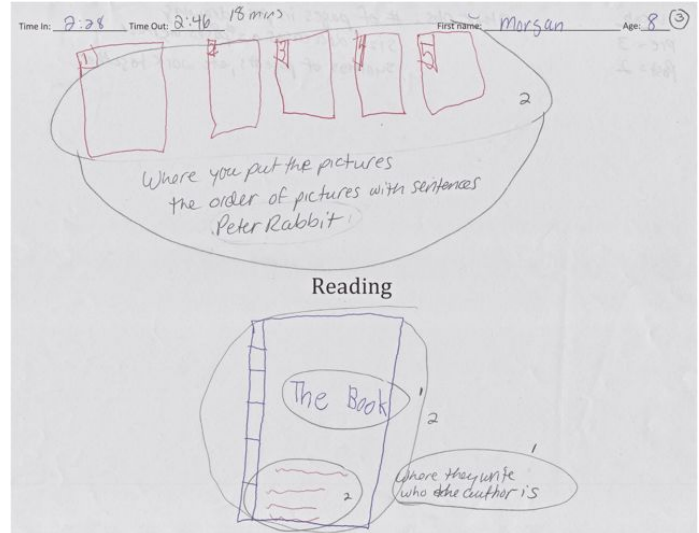
- Reading association
- Writes words
- Recognizable drawing

POST:

- Reading association relates to Storyland
- Exhibit reference
- 1 book: Peter Rabbit
- Drawing reveals knowledge of books
- Write words

OTHER CHANGES FROM PRE TO POST:

- Relates book form to experience of reading



Notes: Blue/Green = Pre; Red/Black = Post. The circled text and/or drawings and the numbers written nearby are part of the scoring process, not the pre/post scores.

HOW AND TO WHAT EXTENT DOES STORYLAND CHANGE ADULTS' PERCEPTION OF THE CRITICAL ROLE THEY PLAY IN CHILDREN'S EARLY LITERACY?

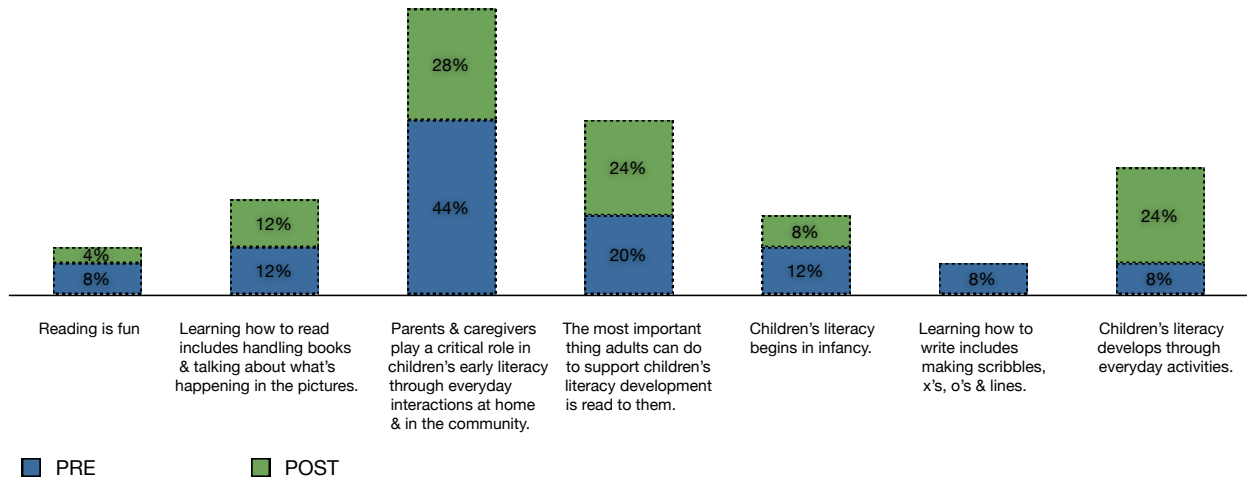
ADULT CARD SORT AND INTERVIEW

Adults ordering of literacy-supporting messages before and after spending time in the *Storyland* exhibit provide some evidence for the impact on adults thinking about how they can help their children to build the skills they need to be ready to read and write. Specifically, shifts in message order from the “top three” positions (first, second, and third) provide an undeniable picture of the effect of *Storyland* messaging on adults.

Position 1–“Most Important”

Prior to entering the *Storyland* exhibit, nearly half (44%, n=11) adults selected the message “Parents and caregivers play a critical role in children’s early literacy through everyday interactions at home and in the community” as the “most important” (first position) thing for supporting children’s literacy. After spending time (on average, 17 minutes) in the exhibit, the messages selected as “most important” shifted almost evenly over three messages: “Children’s literacy develops through everyday activities” (24%, n=6), “The most important thing adults can do to support children’s literacy development is read to them” (24%, n=6), and “Parents and caregivers play a critical role in children’s early literacy through everyday interactions at home and in the community” (28%, n=7). Figure 11 provides a breakdown of the frequency with which literacy messaging was selected as “most important.”

Figure 11 : Adult card sort messages selected “most important” (n=25).

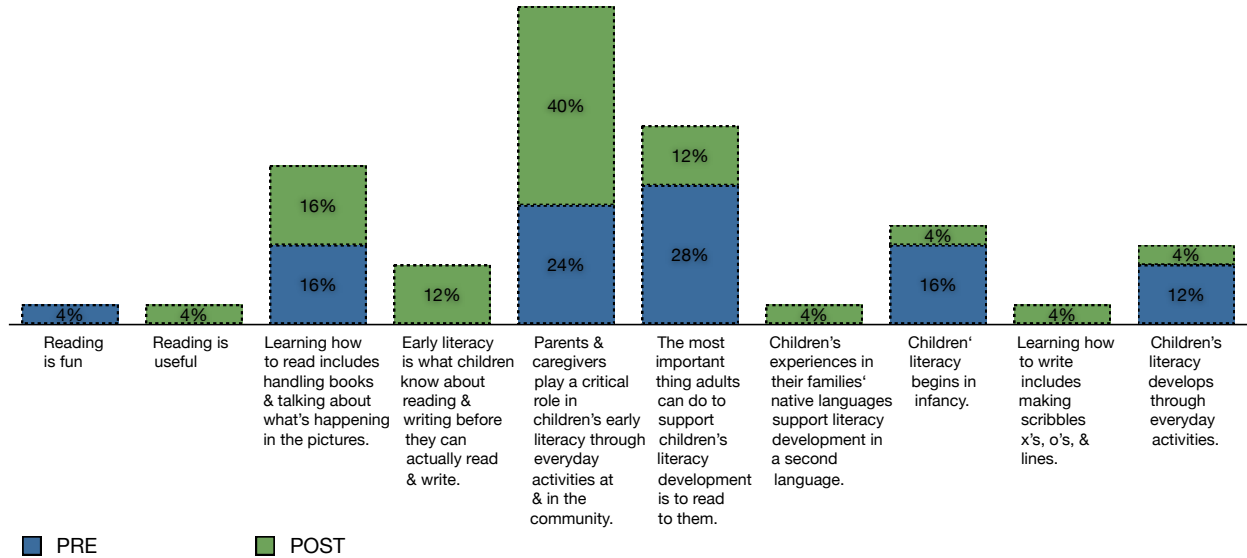


This shift suggests that the *Storyland* experience provided adults with a range of ideas such that they, as a group, expanded their idea of “most important” from primarily one idea to three. Two of the post top three “most important” messages have something in common: they underscore the importance of supporting literacy through ordinary, everyday actions.

Position Two—“Second Most Important”

Prior to entering the exhibit, roughly half of adults favored, as the second most important messages for supporting children’s literacy, “The most important thing adults can do to support children’s literacy development is read to them,” (28%, n=7) and “Parents and caregivers play a critical role in children’s early literacy through everyday interactions at home and in the community” (24%, n=6). Two other messages, handling books and talking about the pictures and children’s literacy beginning in infancy, were both selected by one-fifth (16%, n=4) of adults. Following time spent in the exhibit, the second most important message shifts to nearly half of adults (40%, n=10), with handling and talking about books holding steady (16%, n=4) and the definition of early literacy and reading to children evenly selected (12%, n=3). Figure 12 provides a breakdown of all “second most important” selections.

Figure 12: Adult card sort messages selected “second most important” (n=25).

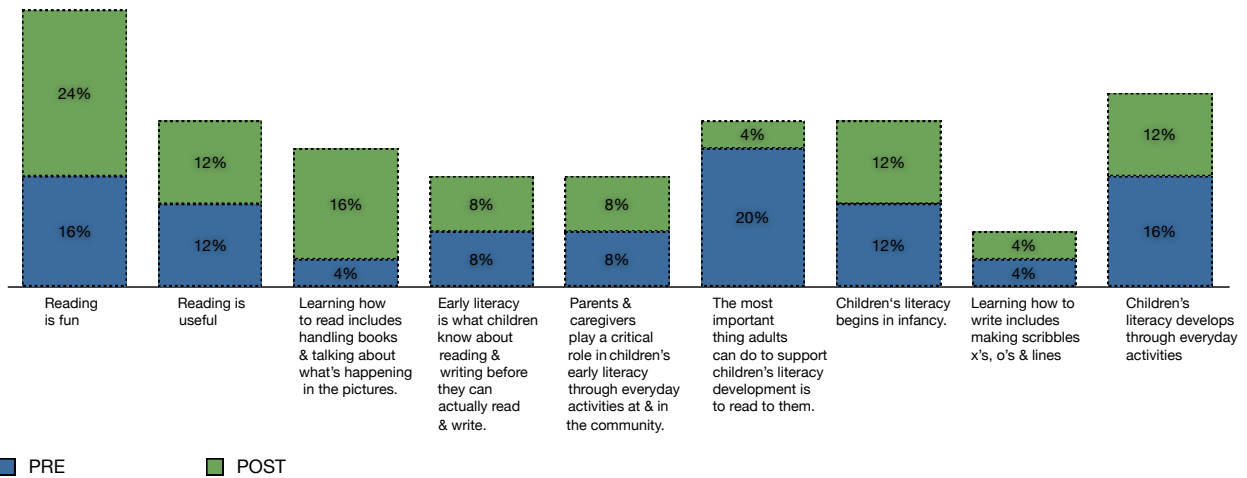


These findings are interpreted as very positive for three reasons. First, the increased selection of the message that parent and caregivers play a critical role in children’s literacy as the second most important statement underscores its strength throughout the exhibit. Second, the stability of the frequency of selection of the statement about handling books and discussing what’s happening in pictures also suggests reinforcement of prior knowledge for adults. Finally, and more generally, two messages that weren’t selected at all prior to spending time in the exhibit appear as “second most important” after exploring the exhibit: “Reading is useful” and “Children’s experiences in their families native languages support literacy development in a second language.” The latter message, while selected by only one person, reflects messages and the bilingual nature of a featured book, *Abuela*.

Position Three – “Third Most Important”

Going into the exhibit, roughly one-fifth of adults most often selected the message that reading to children (20%, n=5), was their third most important thing they could do to support literacy development. “Literacy development through everyday activities” and “Reading is fun” messages followed at an equal rate (16%, n=4). After spending time in the exhibit, the third most important message shifted to “Reading is fun” (24%, n=6), followed by “Learning how to read includes handling and talking about what’s happening in the pictures” (16%, n=4).

Figure 13: Adult card sort messages selected "third most important" (n=25).



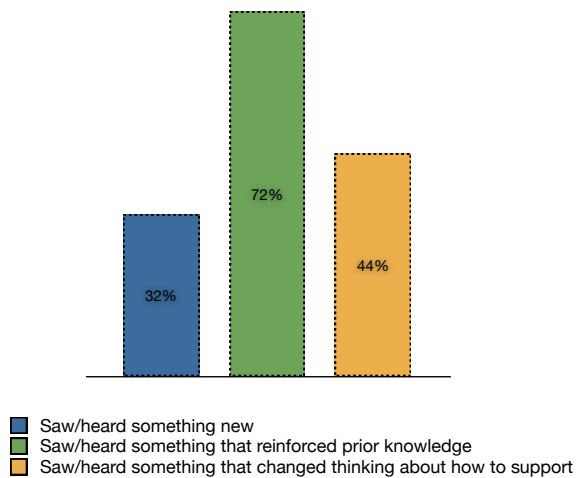
Both shifts, while small, reflect the playful nature of the exhibit and reflect specific exhibit components where adults said they spent time, *Chicka Chicka Boom Boom* (n=11) and *Peter Rabbit* (n=5), which were highly interactive activity areas.

TO WHAT EXTENT DO ADULTS RECEIVE AND INTEND TO PURSUE THE SUGGESTED LITERACY BUILDING PRACTICES PRESENTED IN STORYLAND?

ADULT POST CARD SORT INTERVIEW

Nearly three-quarters of adults (72%, n=18) said they saw or heard something in the *Storyland* exhibit that reinforced the prior knowledge about supporting their children's literacy development and almost half (44%, n=11) said something in the exhibit changed their thinking about how to support their children's literacy learning (see Figure 14). This finding suggests that the adults in this sample have a good understanding of and strategies for literacy development and are

Figure 14: Exhibit impact on adult support of literacy learning



open and receptive to adding new tools to their established routine. It also bodes well for *Storyland* as a resource for both seasoned parents and those with less experience or knowledge about reading readiness. Comments related to what adults saw or heard that reinforced their prior knowledge about supporting reading readiness included general ideas such as reading is important and the value of reading on a daily basis. Most comments, however, directly reflected messages within the exhibit. Table 1 shows adults' comments and corresponding exhibit messages.

Table 1: Adults' comments related to messages that reinforced their prior knowledge.

EXHIBIT MESSAGING	ADULT COMMENTS
Know Letters; Identify letters by shape, name, and sound.	<i>Chicka Chicka Boom Boom tree, upper and lower case letters really important.</i> <i>Visual experience with the letters.</i>
Point out print and symbols everywhere and children will learn the usefulness of reading.	<i>Using signs along with symbols for recognition.</i>
Understand, tell, and retell stories.	<i>Peter Rabbit, finding clothing items and bringing them back.</i> <i>[Son] read the story-or pretended-to Peter in bed, kissed Peter.</i>
Talk with children about what you do and see throughout the day.	<i>Using things you run into that you can talk about.</i>
Have fun reading!	<i>Repetition and pictures; colors are all important and kids have more fun with things that are bright.</i> <i>That making it fun makes kids want to read.</i> <i>That playing and learning go hand-in-hand.</i> <i>Reading is fun; stories should be engaging and relevant to children.</i>
Talking about books helps children make strong connections to reading.	<i>Talking about books, talking about pictures.</i> <i>The connection between the world (reality) and the book (code).</i> <i>Talking about pictures, not just reading the story.</i>

Comments related to things adults saw or heard in the exhibit that changed their ideas about how to support literacy development tended toward being more interactive or creative, for example by creating fun learning environments or using common objects. For example:

It is very important to more interactive, hands-on.

The environment we read to them. Make it fun, interactive.

The whole thing was put up really well and showed the importance of interaction.

Be more creative. Find different ways, like using sounds when you're reading a book.

For toddlers using more interaction with objects, everyday things like spoons.

Use pictures to go with story, order of events help to summarize the story.

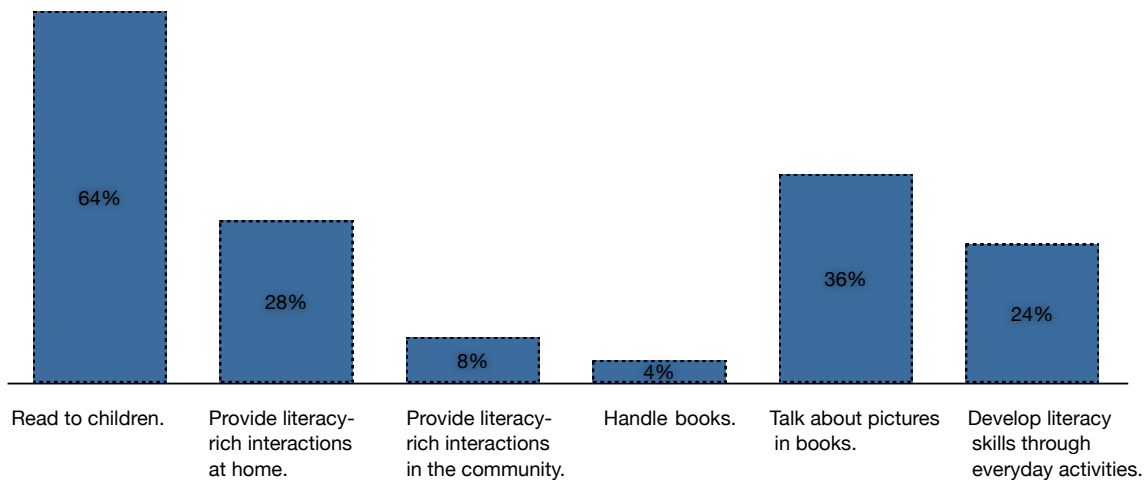
Seek out more experiences that are interactive; bring stories to life.

Make it fun for them when you read a book. Make it interesting.

One adult said she was “Reminded that there are still things to teach kids: comprehension, reading and critical thinking skills,” while another noted that they would be “Buying a couple of books we don't have, like *The Snowy Day* and *Tuesday*.”

Adults were asked during the post card sort interview to select three activities from a list of six that support children’s literacy development. “Read to children,” Talk about picture books,” and “Provide literacy rich interactions at home” were most-often selected as actions they intended to do within three weeks of their visit to *Storyland*.

Figure 15: Follow up activities for supporting children’s literacy development.



ONLINE FOLLOW-UP SURVEY

In an effort to better understand the staying power of the *Storyland* experience, where adult visitors connected with exhibit messages, which messages were familiar and which were new, and what, if anything, adults did to extend the exhibit experience, an online survey was sent to every adult who consented to participate and provided an email address (n=37). The dismal response (n=7) cannot be seen as representative of the sample and is shared here as slender support rather than concrete evidence.

The majority of online survey respondents (n=5) had visited the *Storyland* previously. Among the seven total respondents there were 13 children, eight who were 3 years and under, and five who were 4–6 years old. Respondents described the exhibit as:

It's like being the main character of your favorite childhood story.

Well-known stories presented in large format alongside fun activities that coincide with each story.

The Storyland exhibit takes scenes or concepts from well-loved children's books and presents them in a child-friendly hands-on way.

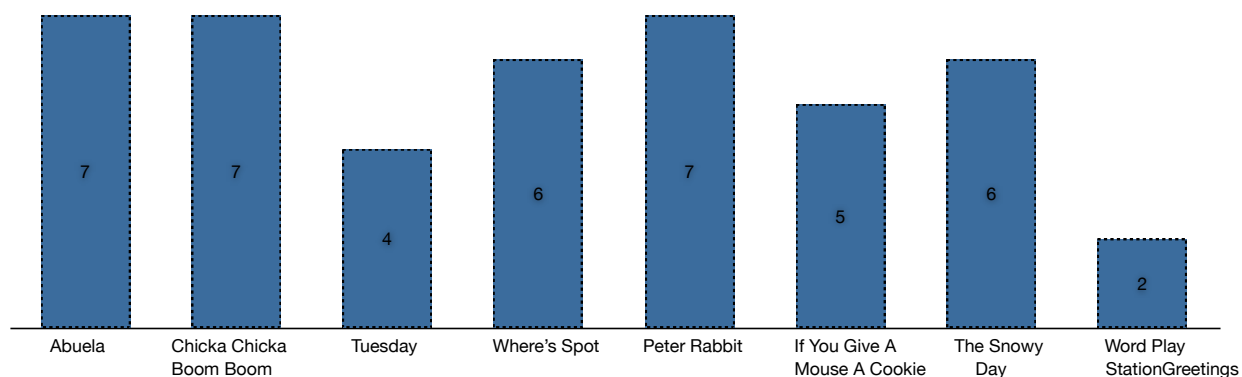
All our favorite childhood storybooks came to life.

Storyland gives kids the opportunity to step into some well-known kid's books. It takes some of the recognizable features of the books and makes them hands-on. Very, very fun!

The kids really enjoyed being a part of the stories.

Nearly every respondent reported that they and their children spent time in every exhibit component,¹ with one exception, Word Play Station/Greetings from *Storyland*. Figure 16 provides a breakdown of exhibit components visited by frequency.

Figure 16: Online survey Storyland components visited by frequency.



¹ The amount of time respondents actually spent in the exhibit was not recorded or requested.

For each exhibit, respondents were asked to indicate whether they saw the literacy messages, which messages were familiar, and which were new. At least one message was familiar in each component and at least one respondent reported seeing a new message in all but two components. Table 2 provides a breakdown of their responses.

Table 2: Number of exhibit messages seen, familiar, or new as reported by online survey respondents (n=7).

COMPONENT/MESSAGES	RECALL SEEING?	FAMILIAR MESSAGES	NEW MESSAGES
	YES		
Abuela ■ Learn Words: Recognize, understand, and use words ■ Speak to children in the language that is most comfortable for you, and they will learn how language works. ■ Talk with children about what you do and see throughout the day.	n=3	Learn words (n=1) Speak to children (n=1)	None
Chicka Chicka Boom Boom ■ Know Letters: Identify letters by shape, name, and sound. ■ Point out the shapes, names, and sounds of letters.	n=6	Know letters (n=2) Point out shapes (n=2)	Know letters (n=1)
Tuesday ■ Tell Stories: Understand, tell, and retell stories. ■ Start a conversation by asking children questions that encourage more than a "yes" or "no" answer.	n=2	Start a conversation (n=2)	Start a conversation (n=1)
Peter Rabbit ■ Read Everything: Notice print and symbols in the world. ■ Point out print and symbols everywhere.	n=4	Read everything (n=2) Point out print (n=1)	Read everything (n=1) Point out print (n=1)
If you Give A Mouse A Cookie ■ Read, talk, and sing with children. ■ Hear Sounds: Listen to and play with the smaller rhythms and sounds in words.	n=5	Read, talk, and sing (n=4)	None
The Snowy Day ■ Love Books: Enjoy and take interest in books. ■ Have fun reading! Add sound effects; Use an expressive voice; Take turns; Let children decide what and when to read.	n=7	Love Books (n=1) Have fun (n=5)	Love Books (n=1)

Table 2: Number of exhibit messages seen, familiar, or new as reported by online survey respondents continued.

COMPONENT/MESSAGES	RECALL SEEING?	FAMILIAR MESSAGES	NEW MESSAGES
<p>Where's Spot?</p> <ul style="list-style-type: none"> ▪Help children build these six skills for reading. Starting at birth! ▪Love Books: Enjoy and take interest in books; Have fun reading books aloud with children, and they will want to learn how to read. ▪Read Everything: Notice print and symbols in the world; Point out print and symbols everywhere and children will learn the usefulness of reading. ▪Know Letters: Identify letters by shape, name, and sound: Point out the shapes, names, and sounds of letters, and children will learn how to use them to speak and read words. ▪Tell Stories: Understand, tell, and retell stories; Ask questions that encourage children to describe what they are doing and reading, and they will learn how to understand and tell stories. ▪Learn Words: Recognize, understand, and use words; Read, talk, and sing with children, and they will learn how to understand and use new words. ▪Hear Sounds: Listen to and play with the smaller rhythms and sounds in words; Rhyme, clap rhythms, and sing with children, and they will learn how to speak and read language. 	n=4	Love Books (n=2) Tell Stories, (n=1) Hear Sounds (n=1)	Help children build six skills (n=1)

The two respondents indicated they spent time in the Word Play Station/Greetings from *Storyland* component said they “used the light to trace Spot” and “read sentences briefly.”

Six of the seven respondents said that the exhibit sparked conversation on the way home. In addition to talking about how much they enjoyed the exhibit, conversations consisted of:

My daughter talked about snow and asked why it was going away. We discussed how snow is made when it's cold outside and then melts as it warms up.

My son (who is three) really enjoyed building the snowmen in the Snowy Day section. He liked the accessories provided.

My 2-year-old son singing/mimicking that "bannana, bannana" song from "If you give a mouse a cookie" exhibit. Talked about making snowmen.

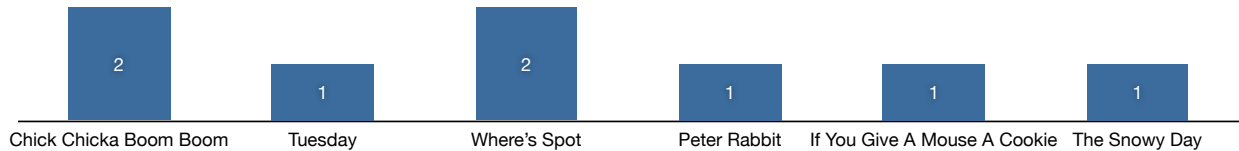
Four respondents added that the exhibit continued to be discussed by their children later in the day of the visit or in the days following. Two of the four respondents shared the gist of those continuing conversations:

My son continued to have fond memories of the snowman building area.

My son loved that song, where he repeatedly pressed that red button to start that "bannana, bannana" tune/song.

Insights into how respondents extended the visit, if at all, can be seen responses to questions about what exhibit books they read or reread and specific activities they did with their children after visiting *Storyland*. Three respondents indicated that they hadn't yet had a chance to read or reread any of the featured books. Figure 17 provides a breakdown of the remaining responses.

Figure 17: Storyland featured books read or re-read after spending time in the exhibit.



Three respondents also shared specific activities they did to extend or follow up on the exhibit experience, including:

We started practicing our printing and letter recognition w/ Brainquest write & erase sets.

We traced some pictures from our favorite books using our large picture window.

Asking my son to point out/identify letters. Reading to my son more, actually reading to him more because he requests me to.

The online survey data, while small in quantity, provides some positive insight into adults' familiarity with exhibit messages and how they are put into practice; how the exhibit experience influenced conversation immediately following and shortly after spending time in the exhibit; and whether and to what extent the featured books are visited again at home.

CONCLUSIONS

HOW AND TO WHAT EXTENT DOES STORYLAND 1) PROMOTE, EXPAND AND/OR SUPPORT CHILDREN'S PERCEPTIONS OF READING AND 2) PROMOTE AND SUPPORT CHILDREN'S DESIRE TO READ?

PMM data suggests that spending time in the *Storyland* exhibit increased children's vocabulary, breadth of ideas, and depth of ideas related to reading, regardless of how long they spent in the exhibit. While the increases seen were relatively small, they suggest that the experience of playing "in" favorite childhood books supports cognitive activity. Specifically, concepts identified as format (book layout, design, or parts) and reading (the act of) appeared at or near the same rate in the post PMMs as in those done before entering the exhibit. This suggests that these specific concepts were well represented in the exhibit and supported what was already familiar to children.

The strong increase seen in post PMMs related to the books and activities featured in the exhibit, underscores a familiarity with the featured books that was easy for children to establish by exploring the exhibit. It also indicated the level of engagement these children enjoyed during their time in *Storyland*. This notion is supported by depth of concept scores, where the largest increase occurred in the Exhibit Connection category, a likely reflection of the vividness and immediacy of the feature books as well as the overall time they spent in the exhibit.

A review of the PMM data from the child's perspective did not find evidence directly supporting children's desire to read. Embedded within the data, however, are some interesting clues about age-related developments that are connected to reading. The data from children around 6-7 years points to how they see themselves as readers, a major accomplishment in their lives. Among 7-8 year old children a growing awareness of the experience of reading and the benefits of reading becomes apparent. Consistent with a constructivist view of learning, it appears that the *Storyland* exhibit experiences support children in making meaning of the story-based exhibit experiences by relating the activities and books to what is important and happening in their lives. Becoming a reader or appreciating the benefits of reading is a positive age-related expression of reading appropriate for the target age-range of the *Storyland* exhibit.

HOW AND TO WHAT EXTENT DOES STORYLAND CHANGE ADULTS' PERCEPTION OF THE CRITICAL ROLE THEY PLAY IN CHILDREN'S EARLY LITERACY?

The data also shows that adults consider all of the *Storyland* messages about early literacy as important though specific messages made a distinct impression on them. Results from the card sort shows that the top three "most important" messages provide evidence that *Storyland* changed adults perception of their role in children's early literacy learning. For example, there was a clear shift from a single "most important" message on the minds of adults entering the exhibit to three "most important" messages when they exited. The two added messages, read to children to support their literacy development and children's literacy develops through everyday activities, are basic ideas that parents can easily integrate or emphasize in their day-to-

day lives. Selection of the message about the inclusion of community for supporting early literacy nearly doubled as the “second most important” message on exit; the message that “Children’s experiences in their families native languages support literacy development in a second language” also appeared in this position. Messages rated “third most important” reflect the playful nature of the exhibit and specific exhibit components where adults indicated they spent time.

Online survey respondents also indicated familiarity with exhibit messages. At least one message was familiar in each component as was a new message in all but two components.

TO WHAT EXTENT DO ADULTS RECEIVE AND INTEND TO PURSUE THE SUGGESTED LITERACY BUILDING PRACTICES PRESENTED IN STORYLAND?

Exit interview data suggests that most adults were already familiar with the literacy building practices offered in the exhibit. Still, half of adults indicated that something they saw or heard in *Storyland* changed their thinking about the way they currently supported their children’s literacy development. In addition to basic ideas about supporting reading readiness, many adults shared reinforcing ideas that directly reflected messages within the exhibit, such as knowing letters, pointing out print and symbols, and understand, tell, and retell stories. Exhibit messages that adults noted changed their thinking included being more interactive or creative by creating fun learning environments and using common objects, an overarching concept of *Storyland*.

These ideas are again reflected in the kinds of supportive activities adults said they would do or try to do in the weeks following their visit to *Storyland*: “Read to children,” “Talk about picture books,” and “Provide literacy rich interactions at home.” Data from the online survey shows that about half of the respondents had read or reread one or more of the featured books after visiting the exhibit and had, in fact, practiced printing and letter recognition, tracing pictures, and reading more to their children.

In addition, online survey data, while limited, indicate that the *Storyland* exhibit has some staying power. Nearly all respondents said that the exhibit sparked conversation on the way home and roughly half said those conversations continued throughout the days immediately following their visit.

APPENDICES

APPENDIX A PMM PROTOCOL AND DATA COLLECTION SHEET

APPENDIX B PMM SCORING RUBRIC

APPENDIX C CARD SORT PROTOCOL

APPENDIX D ONLINE FOLLOW-UP SURVEY

**Minnesota Children's Museum
Storyland Exhibit Evaluation**

Personal Meaning Mapping Protocol

Target visitor: Children 5-8 years old

Goal: 20 completed PMM sheets

Materials

PMM sheets with cue in center

Playing cards and clothes pins

Blue, Green, Red, Black pens or "all in one" pen

Some sheets of blank paper

Instructions

To ensure consistent data collection, please adhere as closely as possible to the following data collection instructions.

Approach parent of child (5-8 years old). Explain that we are evaluating the Storyland exhibit and have a 3-5 minute activity for children to do.

"Would it be okay if your child participates?"

If yes, explain that the activity has two parts, one part before going through the exhibit and one afterward. Then move to an appropriate space and say:

"I'm so glad you're going to do this activity. My name is _____. What's your name?
We're going to do one part now, before you go into the exhibit (point to exhibit if appropriate) and the second part when you come out. Okay, let's get started!"

Write child's name in upper left corner of PMM sheet. Show the child the PMM sheet and say:

"Do you recognize this word?" (Point to "Reading").

If no, say the word out loud and ask again. If they still don't know the word, as the parent to assist. If the child truly doesn't know the word, thank them for their time and point them to the exhibit.

If yes, hand them a **BLUE** pen and say:

"Great! I'd like you to use this **BLUE** pen to write or draw, anywhere on this paper, any thing that comes to mind when you think about this word."

If they hesitate, ask:

"When you recognized this word, what popped into your mind? Did you see a picture or a word? Did you remember something? Write or draw what you thought of."

When they finish writing or drawing, ask the child:

“Does anything else come to mind about this word? What else does this word make you think of?”

Try to have children write or draw at least three things the cue makes them think of.

When the child says nothing else comes to mind, take a **GREEN** pen and for each drawing or word (concept) ask them:

“Tell me about this drawing/word.” (Prompts: What is it? What does it have to do with “reading”? Why did you think of this? – *we’re looking for prior knowledge/experience*)

Record what the child says, verbatim if possible, in **GREEN** pen. You can say:

“I’m going to write this down to be sure I understand what you’re saying.”

Once you’ve asked the child about **three** things they wrote or drew, hand them a playing card and say:

“Okay, now I’d like you to hold on to this card for me while you go through the Storyland exhibit. When you’re ready to go, bring this card back to me (indicate where you will be) and we’ll finish the activity. Have a good time!”

Note the playing card you gave the child on their PMM sheet and the time they entered the exhibit. When they return with the card, note the time on the PMM, hand them the PMM and a **RED** pen and say:

“To finish this activity, I’d like you to use this **RED** pen to write or draw anything that comes to mind about the word “reading” now that you have spent some time in the Storyland exhibit. You can also change something that you already wrote or drew.”

Encourage child to write, draw, or change at least three things. When the child says nothing else comes to mind, take a **BLACK** pen and for each drawing or word (concept) ask them:

“Tell me about this drawing/word.”
(Prompts: What is it? What does it have to do with “reading”? What made you think of this? Why did you change this? – *looking for connection to exhibit*)

Record what the child says, verbatim if possible, in **BLACK** pen. You can again say:

“I’m going to write this down to be sure I understand what you’re saying.”

Once you’ve asked the child about three things they wrote or drew, say:

“Okay, we’re all done! Thank you so much for doing this activity.”

Wrap Up

- Review the PMM and make sure your notes are legible. Make any additional notes on the back if necessary.
- Keep completed and any incomplete (see below) PMMs together in a folder or envelope.
- When data collection is complete, place completed PMMs and pens in mailer provided and send to Blue Scarf Consulting.

What if...

Approach:

- Parent says no to request. Encourage them by saying, “It’s a drawing activity and will only take a few minutes before and after you go through the exhibit.” If they still say no, thank them and tell them to enjoy the exhibit.
- Parent says yes, child resistant. Get to child’s level, show them the green pen and say, “It’s a drawing activity. I think you’ll like it. Would you like to try?” If they still say no, thank them and tell them to enjoy the exhibit.

Activity:

- Child doesn’t recognize the cue but wants to draw or siblings want to do activity, too. Have some blank paper and extra pens on hand and allow child/sibling to draw for a few minutes.
- Parent instructs child on what to write or draw. Have the card sort on hand and politely emphasize that the aim of the activity is to understand what the child’s perceptions of reading and that there is a adult activity – a card sort– that they can do if they’re interested.
- Child gets bored, doesn’t want to finish, or runs off. Enlist parent to have child complete PMM but don’t push it. If the child loses interest, let him/her go. Mark the PMM incomplete.
- Parent in a hurry to leave, rushing child to finish. Complete as much of the PMM as possible, thank them for their time, and let them go. Mark the PMM incomplete if you were unable to review with the child his/her post drawing/writing.

Time In: _____ Time Out: _____

First name: _____ Age: _____

Reading

Minnesota Children’s Museum *Storyland* Summative Evaluation

SCORING RUBRIC FOR PERSONAL MEANING MAPS

SCALE 1: VOCABULARY AND FLUENCY

This scale measures the change in the number of words/ideas that visitors write on their maps. *Because we are interested in what is at the forefront of visitors’ minds relative to Reading, this fluency/vocabulary scale will only include what the visitors actually write down on their pre/post visit maps and not what is elicited through prompts by the interviewer.* Similarly, when the visitors’ initial responses were only verbal, only include the appropriate initial verbal response, as dictated, for this measure and not responses elicited through discussion.

Scoring specifics:

- Count each seemingly related word to the prompt on both pre and post map, including any prepositions, articles, nouns pronouns or verbs, i.e. *I, they, he, she, their, it, we, in, and, of, the, a, from, that, is, to, was, will.*
- **Count as 0** words that are seemingly unrelated to “Reading,” i.e. *I like butterflies.*
- **Count only once** words that appear twice in a phrase, statement, or sentence, i.e., *I like to read other books; I like to read at Storyland,* the word *I like to read* would only be counted once.
- Count words on the post map that are repeated from the pre map.
- Drawings: if it is obvious to the researcher what the drawing is, it is given a score of one point. If it is not obvious, count only the relevant word(s) of the verbal response, as dictated, to identify the drawing.

Examples of General vocabulary: books, pictures, words, story

SCALE 2: CONTENT/CONCEPT CATEGORIES OR DIMENSIONS OF THINKING

A set of five categories was established based on the responses of visitors (See concept chart below). This scale represents the change in the **number** of conceptual categories the visitor used in describing their thoughts about reading.

Circle each concept on the PMM and write the number of the concept above the circled phrase. Make a mark on the score sheet each time the visitor referenced one of the categories.

Concepts that do not easily relate to the prompt, i.e., *good and nice*, should not be included in Scale 2 scoring. Tally how many separate categories the visitor referenced. Enter those marks and number on the score sheet for Scale 2.

Conceptual Categories for MCM *Storyland* Personal Meaning Map coding

<i>Category</i>	Description
(1) Content	References to a particular story, story title, or author name, illustrator, <i>whether or not the story referenced is one the those featured in Storyland.</i>
(2) Format	References to the layout/design of books or pages, position, including <i>open or closed book, text, pictures, page numbers.</i>
(3) Type	References to specific genre including <i>fiction or non-fiction, chapter, picture, school,</i>
(4) Story parts	References to the pieces that make up a story, including <i>characters, plot, dialog, setting, scene.</i>
(5) Reading	References to the act of reading including <i>reading alone, being read to, reading to someone, reading places (library, bedroom, on the sofa). rereading, sounding out words, recognizing words; enjoyment.</i>
(6) Exhibit	References to the exhibit books, components, areas, or activities in general terms including <i>"I made music," drawing of exhibit component unlabeled, "the rhyme area."</i>

SCALE 3: DEPTH OF UNDERSTANDING/ELABORATION (DEVELOPMENT OF CONCEPTS)

This scale scores how detailed and complex visitor understanding is within a conceptual category. Each conceptual category the visitor volunteered or was asked to expand upon in the interview should be given a score on a scale of 1-3. *Because this scale measures the depth of people's understanding, we will only score those concepts that people provided further information about – either on their own or at the prompt of the interviewer.*

- 0 Unrelated response - essentially an unscorable response that doesn't relate to the exhibit goals, e.g., *when probed about drawing of butterfly, responds "See them a lot flying around."*
- 1 Minimal response, typically superficial or stereotypical in nature; relies almost solely on personal experience without relating it to the goals of the exhibition; demonstrates shallow or no understanding of the concepts/goals of the exhibition, e.g., *book, words, story.*
- 2 More expanded response reflecting some general or limited knowledge of the exhibition concepts/goals; demonstrates some experience with the six pre-literacy skills, e.g. *love books, read everything, hear sounds, learn words, know letters, tell stories.*
- 3 Detailed response reflecting a good understanding of the exhibition concepts/goals; demonstrates a deep connection with reading, e.g. *love books, read everything, hear sounds, learn words, know letters, tell stories,* and/or a clear familiarity with and understanding of reading and books; shows a synthesis of concepts.

**Minnesota Children's Museum
Storyland Exhibit Evaluation**

Card Sort and Interview

Target visitor: Adults with children 5-8 years old

Goal: 30 completed card sorts/interviews

Materials

- 4 card sort folders (2 English/2 Spanish)
- 4 sets of 10 statement cards
- Blank recording/interview forms
- Playing cards
- Pen
- Data envelope
- Thank you gift
- Table & 2 chairs

Instructions

Pre Intercept

- Approach adult with children entering exhibit. Smile and say:

"Hello. I'm conducting an adult evaluation activity for this exhibit. The activity takes just a few minutes before and after you go through the Storyland exhibit. Would you like to participate?"

If hesitates, "It's a card sort and there are no right or wrong answers. It takes about 3-5 minutes."

If no, "Okay, enjoy the exhibit."

If yes, "Great, let's get started."

Card Sort:

- Move with visitor out of exhibit entry way
- Take blank recording/interview form and playing card. **Note what the playing card is on the pre recording form. This card links the pre and post data.**
- Open the folder, which should have the statement cards in random order. Hand the folder to the visitor and say:

"Each of these cards has a statement related to reading readiness and are shown here in random order. Read each statement and place them in the folder in order of importance to you based on your knowledge and experience."

If they say they're all equally important, say:

"Yes, they are. What we're really interested in knowing is which are priorities for you."

- When the visitor finishes, hand them the playing card and say:

"Thanks. As you leave the exhibit, bring this playing card to me and we'll finish up the activity."

- Complete the first line of the form (playing card, ID#), record the order in which they placed the statement cards, shuffle, arrange in random order in the folder, and set aside until they return.

Post Intercept:

- Watch for visitor at exit.
- As visitors present their playing card, find their pre recording/interview form, present the folder to them again and say:

“Here are those cards again with statements in random order related to reading readiness. Now that you’ve been through the Storyland exhibit, please put them in order of importance to you. When you finish, I have a couple of questions for you and then your done.”

- When the visitor is done, close the folder and set it aside. Conduct the short interview on the recording sheet.
 - **Be sure to ask for email contact info**
- When visitor has gone, record the order in which they placed the statement cards for the post intercept. Review/clean-up interview if necessary.
- Reset the folder for the next visitor.

Storyland Follow-Up Survey, October 2011

Thank you for participating in this survey! It is a follow up to the card sort activity you did before and after your recent visit to the *Storyland* exhibit at Minnesota Children's Museum. The Museum is very interested in learning about your experience in the exhibit and how those experiences have influenced how you support reading readiness with your children.

Your candid and thoughtful responses to the questions in this survey will be shared with the Institute for Museum and Library Services, which provided funding for the exhibit and will be used by Museum staff when considering or developing future exhibits related to reading and literacy. Your responses will be reported anonymously and will not affect any existing or future relationship you have with the Museum.

The survey should take roughly 10-12 minutes to complete. Every question requires an answer, so please be sure to respond to each one. If you are interested in the chance to win a \$50 gift card from BetterWorldBooks.com, provide your email address at the end of the survey and submit your completed survey by midnight on Tuesday, December 13. To begin the survey, click "Next."

How would you describe the Storyland exhibit to a friend or family member?*

Was your visit to the Storyland exhibit this October the first time you had seen it?*

- Yes
- No

Have you been back to the Minnesota Children's Museum since your October visit?

- Yes
 - No
-

Have you been back to visit Storyland again?*

- Yes
 - No
-

Abuela

The next set of questions are related to the exhibit components you visited and specific messages found in those components.

Did you and your child/children spend time in the Abuela exhibit?*

- Yes
 - No
 - Don't remember
-

Abuela

While in the Abuela exhibit, do you recall seeing the following label text:

Learn Words: Recognize, understand, and use words.

Speak to children in the language that is most comfortable for you, and they will learn how language works.

Talk with children about what you do and see throughout the day.*

- Yes
 - No
 - Not sure
-

Abuela

Of these messages, which one was MOST familiar to you?*

- Learn Words: Recognize, understand, and use words.
- Speak to children in the language that is most comfortable for you, and they will learn how language works.
- Talk with children about what you do and see throughout the day.

Were any of these messages new to you?*

- Yes
 - No
-

Abuela

Which of the messages were new to you? (Check all that apply)*

- Learn Words: Recognize, understand, and use words.
 - Speak to children in the language that is most comfortable for you, and they will learn how language works.
 - Talk with children about what you do and see throughout the day.
-

Chicka Chicka Boom Boom

Did you and your child/children spend time in the Chicka Chicka Boom Boom exhibit?*

- Yes
 - No
 - Don't remember
-

Chicka Chicka Boom Boom

While in the Chicka Chicka Boom Boom exhibit, do you recall seeing the following label text:

Know Letters: Identify letters by shape, name, and sound.

Point out the shapes, names, and sounds of letters.

- Yes
 - No
 - Not sure
-

Chicka Chicka Boom Boom

Of these messages, which one was MOST familiar to you?*

- Know Letters: Identify letters by shape, name, and sound.
- Point out the shapes, names, and sounds of letters.

Were any of these messages new to you?*

- Yes
 - No
-

Chicka Chicka Boom Boom

Which of the messages were new to you? Check all that apply.*

- Know Letters: Identify letters by shape, name, and sound.
 - Point out the shapes, names, and sounds of letters.
-

Tuesday

Did you and your child/children spend time in the Tuesday exhibit?*

- Yes
- No
- Don't remember

Tuesday

While in the Tuesday exhibit, do you recall seeing the following label text?

Tell Stories: Understand, tell, and retell stories.

Start a conversation by asking children questions that encourage more than a "yes" or "no" answer.*

- Yes
- No
- Not sure

Tuesday

Of these messages, which one was MOST familiar to you?*

- Tell Stories: Understand, tell, and retell stories.
- Start a conversation by asking children questions that encourage more than a "yes" or "no" answer.

Were any of these messages new to you?*

- Yes
- No

Tuesday

Which of the messages were new to you? Check all that apply.*

- Tell Stories: Understand, tell, and retell stories.
- Start a conversation by asking children questions that encourage more than a "yes" or "no" answer.

Where's Spot?

Did you and your child/children spend time in the Where's Spot exhibit?*

- Yes
- No
- Don't remember

Where's Spot?

While in the Where's Spot? exhibit, do you recall seeing the following label text?

Help children build these six skills for reading. Starting at birth!

Love Books: Enjoy and take interest in books; Have fun reading books aloud with children, and they will want to learn how to read.

Read Everything: Notice print and symbols in the world; Point out print and symbols everywhere, and children will learn the usefulness of reading.

Know Letters: Identify letters by shape, name, and sound: Point out the shapes, names, and sounds of letters, and children will learn how to use them to speak and read words.

Tell Stories: Understand, tell, and retell stories; Ask questions that encourage children to describe what they are doing and reading, and they will learn how to understand and tell stories.

Learn Words: Recognize, understand, and use words; Read, talk, and sing with children, and they will learn how to understand and use new words.

Hear Sounds: Listen to and play with the smaller rhythms and sounds in words; Rhyme, clap rhythms, and sing with children, and they will learn how to speak and read language.*

Yes

No

Not sure

Where's Spot?

Of the these messages, which one was MOST familiar to you?*

Help children build these six skills for reading. Starting at birth!

Love Books: Enjoy and take interest in books; Have fun reading books aloud with children, and they will want to learn how to read.

Read Everything: Notice print and symbols in the world; Point out print and symbols everywhere, and children will learn the usefulness of reading.

Know Letters: Identify letters by shape, name, and sound: Point out the shapes, names, and sounds of letters, and children will learn how to use them to speak and read words.

Tell Stories: Understand, tell, and retell stories; Ask questions that encourage children to describe what they are doing and reading, and they will learn how to understand and tell stories.

Learn Words: Recognize, understand, and use words; Read, talk, and sing with children, and they will learn how to understand and use new words.

Hear Sounds: Listen to and play with the smaller rhythms and sounds in words; Rhyme, clap rhythms, and sing with children, and they will learn how to speak and read language.

Were any of these messages new to you?*

- Yes
 - No
-

Where's Spot?

Which of the messages were new to you? Check all that apply.*

- Help children build these six skills for reading. Starting at birth!
 - Love Books: Enjoy and take interest in books; Have fun reading books aloud with children, and they will want to learn how to read.
 - Read Everything: Notice print and symbols in the world; Point out print and symbols everywhere, and children will learn the usefulness of reading.
 - Know Letters: Identify letters by shape, name, and sound: Point out the shapes, names, and sounds of letters, and children will learn how to use them to speak and read words.
 - Tell Stories: Understand, tell, and retell stories; Ask questions that encourage children to describe what they are doing and reading, and they will learn how to understand and tell stories.
 - Learn Words: Recognize, understand, and use words; Read, talk, and sing with children, and they will learn how to understand and use new words.
 - Hear Sounds: Listen to and play with the smaller rhythms and sounds in words; Rhyme, clap rhythms, and sing with children, and they will learn how to speak and read language.
-

Peter Rabbit

Did you and your child/children spend time in the Peter Rabbit exhibit?*

- Yes
 - No
 - Don't remember
-

Peter Rabbit

While in the Peter Rabbit exhibit, do you recall seeing the following label text?

Read Everything: Notice print and symbols in the world.

Point out print and symbols everywhere.*

- Yes
 - No
 - Not sure
-

Peter Rabbit

Of these messages, which one was MOST familiar to you?*

- Read Everything: Notice print and symbols in the world.

Point out print and symbols everywhere.

Were any of these messages new to you?*

Yes

No

Peter Rabbit

Which of the messages were new to you? Check all that apply.*

Read Everything: Notice print and symbols in the world.

Point out print and symbols everywhere.

If You Give a Mouse a Cookie

Did you and your child/children spend time in the If You Give a Mouse a Cookie exhibit?*

Yes

No

Don't remember

If You Give a Mouse a Cookie

While in the If You Give a Mouse a Cookie exhibit, do you recall seeing the following label text?

Hear Sounds: Listen to and play with the smaller rhythms and sounds in words.

Read, talk, and sing with children.

Yes

No

Not sure

If You Give a Mouse a Cookie

Of these messages, which one was MOST familiar to you?*

Hear Sounds: Listen to and play with the smaller rhythms and sounds in words.

Read, talk, and sing with children.

Were any of these messages new to you?*

Yes

No

If You Give a Mouse a Cookie

Which of the messages were new to you? Check all that apply.*

- Hear Sounds: Listen to and play with the smaller rhythms and sounds in words.
 Read, talk, and sing with children.
-

The Snowy Day

Did you and your child/children spend time in The Snowy Day exhibit?*

- Yes
 No
 Don't remember
-

The Snowy Day

While you were in The Snowy Day exhibit, do you recall seeing the following label text?

Love Books: Enjoy and take interest in books.

Have fun reading! Add sound effects; Use an expressive voice; Take turns; Let children decide what and when to read.*

- Yes
 No
 Not sure
-

The Snowy Day

Of these messages, which one was MOST familiar to you?*

- Love Books: Enjoy and take interest in books.
 Have fun reading! Add sound effects; Use an expressive voice; Take turns; Let children decide what and when to read.

Were any of these messages new to you?*

- Yes
 No
-

The Snowy Day

Which of the messages were new to you? Check all that apply.*

- Love Books: Enjoy and take interest in books.
 Have fun reading! Add sound effects; Use an expressive voice; Take turns; Let children decide what and when to read.

Word Play Station and Greetings from Storyland

Did you and your child/children spend time at the Word Play Station and Greetings from Storyland?*

- Yes
- No
- Don't remember

Word Play Station and Greetings from Storyland

What did you and/or your children do while in the Word Play Station and Greetings from Storyland area?*

You're nearly done! The next few questions focus on after you left the Storyland exhibit.

Did the Storyland exhibit spark any conversations on the way home?*

- Yes
- No
- Don't recall

What do you recall about the conversation?*

Did the exhibit spark any conversation later in the day or in the days immediately following your visit?*

- Yes
- No
- Don't recall

What do you recall about the conversation?*

Which of the books featured in the exhibit have you read or re-read since visiting Storyland? (Check all that apply)*

- Abuela
- Tuesday
- Where's Spot?
- Chicka Chicka Boom Boom
- The Snowy Day
- Peter Rabbit

If You Give A Mouse A Cookie

Haven't yet had a chance to read or re-read any of the books.

The Storyland exhibit encourages adults to support children's literacy development through everyday activities and interactions. Have you done anything new to support children's literacy because of something you saw, read, heard, or did in the Storyland exhibit?*

Yes

No

Please share what new thing you did.*

Last questions!

What are the ages of the children you brought with you to see Storyland?*

Are you a native English speaker?*

Yes

No

New Page

If you are interested in entering a raffle for a \$50 gift card from BetterWorldBooks.com, please enter your email address below. The winner of the raffle will be contacted by December 15, 2011.

Thank You!

Thank you for taking our survey. Your response is very important to us.
