

PEEP and the Big Wide World Web site

Final Evaluation Report

Prepared by Jennifer Beck, Ph.D. Jennie Murack, B.A.

Submitted to Marisa Wolsky WGBH-TV Boston

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PEEP and the Big Wide World Web Site

Executive Summary

INTRODUCTION

The PEEP and the Big Wide World Web site is an interactive Web site designed for preschool-aged children and their parents. The Web site consists of five Interactive Games for children, 52 Anywhere Science Activities for parents and children to try as they explore the science in everyday life, and 12 printable pages for coloring. The overall goal of the PEEP Web site is to give parents and children ideas on how to explore the science of everyday life in ways that are engaging and visually appealing.

The goals of this evaluation were to examine:

- Parent's opinions about the educational value of the Web site,
- Parent's opinions about the Anywhere Science Activities,
- Children's ability to navigate the games on their own,
- Children's understanding of the concepts presented in the games, and
- Children's overall engagement and enjoyment of the games.

Goodman Research Group, Inc. (GRG), a research firm specializing in the evaluation of educational programs, services, and materials, conducted the external evaluation of the PEEP Web site as part of a comprehensive evaluation of the first season of PEEP and the Big Wide World (PEEP). The primary focus of the comprehensive evaluation was to assess the extent to which the various components of PEEP (e.g., television series, Web site, and Educators' Guide) contribute to encouraging young children to engage in hands-on science explorations.

Following a description of the evaluation method, this Executive Summary presents the key findings from the evaluation as they relate to the evaluation goals. The full report provides additional findings and recommendations.

METHOD

GRG recruited 38 parents of 3 to 5 year old children from across the country to explore the PEEP Web site with their child, and to observe their child play the five Interactive Games. Parents completed a short survey after observing their child play each of the five games. The game surveys were designed to measure how engaged the child was with each game, how well the child understood each game, and how easy the child navigated each game. After the child had played all five games, parents completed a Parent Opinion Survey. This survey was designed to measure parents' opinions of the Interactive Games and Anywhere

Science Activities, and the educational value of the PEEP Web site compared to other Web sites for children.

KEY FINDINGS

According to parents, the PEEP Web site is more educational than other children's Web sites, and the PEEP Web site supports children's enjoyment and learning by allowing the child to navigate the site on his/her own.

Most parents (87%) indicated that their child is an active and frequent user of the Internet, and that their child visits a variety of Web sites designed for young children. When asked about the educational value of the PEEP Web site, close to half (46%) of the parents said that the PEEP Web site is more educational than other Web sites that their child visits. An additional 46% of parents said that the PEEP Web site was equally educational compared to other children's Web sites.

Nearly half (43%) the parents also said that the PEEP Web site was easier for their child to navigate on their own compared to other children's Web sites, and an additional 41% of parents said that the PEEP Web site was equally easy to navigate compared to other children's Web sites.

Parents were very satisfied with the Anywhere Science Activities, with the strengths of the activities being that they effectively reinforced the idea that science is everywhere and encouraged children's natural curiosity.

Although parents were not explicitly instructed to try the Anywhere Science Activities, almost half (46%) of the parents voluntarily tried 20 different activities. Of the parents who did not try any of the activities, most reported that they did not have time to do so during the evaluation period, but planned to try the activities in the future.

Eighty-five percent of parents completely agreed with the statement, "The Anywhere Science Activities gave you ideas for how to turn everyday situations into science explorations with your children," and 89% of parents rated the quality of the activities as Excellent or Very Good. When asked to explain their rating of quality, parents expressed that they liked the educational value, simplicity and variety of the activities.

Parents rated the Anywhere Science Activities very positively, with 84% of parents saying that the activities effectively reinforced the idea that science is everywhere, 88% said that the activities effectively encouraged kids' natural curiosity, and 82% reported that the activities effectively encouraged kids to explore their natural environments.

More than two-thirds of parents said their child thought the games were great, and parents observed that their children were very engaged when interacting with the Web site.

After observing their child play all five games, 68% of parents reported that their child thought the games were great, and children were very or completely engaged by all five games. Children especially like the characters, how fun and humorous the games were, the colorful graphics and sound effects, and that the children were able to play the games on their own. On a 1-5 scale, with 1 equal to not at all engaged and 5 equal to completely engaged, the average engagement ratings for the five games ranged from 3.6 to 4.1. Of the five games, children were most engaged by Paint Splat (78% of children very or completely engaged) and Hop to it (69% of children very or completely engaged).

Nearly 90% of parents thought there was just the right amount of variety in the games and that the games were different enough to hold children's interest.

Children demonstrated mastery and comprehension of the games and were easily able to navigate the games on their own.

Most children played each game one to three times during the week, and one-half to three-quarters of parents indicated that their child played each game from 3 to 10 minutes each time. The majority of children understood how to play each game right away or after a period of trial and error. Hide and Peep and Where's Quack were the easiest games to understand, with over two-thirds of parents indicating that their child understood the game on their own right away. Bunny Balance was more difficult to understand, with 19% of children never fully understanding how to play the game.

Nearly three-quarters of the parents indicated that their child had no difficulty navigating four of the five games. The exception was Bunny Balance, with several parents commenting that their child had difficulty with the "click and drag" procedure.

In summary, the findings from this evaluation indicate that compared to the typical children's Web site, parents consider the PEEP Web site to be more educational and easier for children to navigate on their own. Children were very engaged by the Interactive Games, and demonstrated proficiency with regard to comprehension and site navigation. Further, parents rated the Anywhere Science Activities very positively, particularly noting that the activities gave parents excellent ideas for how to turn everyday situations into science explorations with their children.

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INTRODUCTION

PEEP and the Big Wide World (PEEP) is a multi-media project created and produced by WGBH in Boston. The project aims to innovatively introduce preschoolers to science through a children's television program, web-based interactive games, and educational resources for parents and educators.

Goodman Research Group, Inc. (GRG), an evaluation research firm specializing in the evaluation of educational programs, services, and materials, contracted with WGBH to conduct a summative evaluation of PEEP. The primary focus of the evaluation was to assess PEEP's appeal, and the extent to which the various components of PEEP (e.g., television series, Web site, and Explorer's Guide) contributed to encouraging children ages 3-5 years and their educators to engage in hands-on science explorations of their everyday environments.

This report describes the evaluation of the Interactive Games and Anywhere Science Activities on the PEEP Web site. The PEEP Web site is an interactive Web site designed for preschool-aged children and their parents. The Web site consists of five Interactive Games for children, 52 Anywhere Science Activities, and 12 printable pages for coloring. The overall goal of the PEEP Web site is to give parents and children ideas on how to explore the science of everyday life in ways that are engaging and visually appealing.

The goals of this evaluation were to examine:

- Parent's opinions about the educational value of the Web site,
- Parent's opinions about the Anywhere Science Activities,
- Children's ability to navigate the games on their own,
- Children's understanding of the concepts presented in the games, and
- Children's overall engagement and enjoyment of the games.

Following a description of the evaluation method, this report presents the findings, conclusions and recommendations, as they relate to the evaluation goals.

METHODS AND MEASURES

OVERVIEW OF DESIGN

GRG recruited parents of 3 to 5 year old children from across the country to explore the PEEP Web site with their child, and to observe their child play the five Interactive Games. Participants were recruited by posting information about the study on Web sites for parents of preschool age children. The posting contained a description of the study and asked interested parents to contact GRG. Upon being contacted, GRG mailed the parent a packet containing instructions, five individual game surveys, a final survey, a stipend form and a pre-paid return envelope to GRG.

If a parent indicated that s/he had more than one child between the ages of 3 and 5 years old, GRG instructed the parent to participate in the study with the child who would be most interested in playing online games.

Parents were asked to visit the PEEP Web site with their child, explore the site, and ask their child to play all five games within five days of receiving their packets. Parents completed a short survey after observing their child play each of the five games. The game surveys were designed to measure engagement, navigation, and comprehension. After the child had played all five games, parents completed a Parent Opinion Survey. This survey was designed to measure parents' opinions of the Interactive Games and Anywhere Science Activities, and the educational value of the PEEP Web site compared to other Web sites for children. After GRG received the completed surveys, parents were mailed a \$25 stipend as a thank you for participating in the study.

INSTRUMENTS

Individual Game Surveys

Parents completed a short survey after observing their child play each of the five games. The game surveys were designed to measure how engaged the child was by each game, how well the child understood each game, how easy the child navigated each game, and how long the child played each game. Parents were also asked to share their opinions of each game by responding to an open-ended question.

Parent Opinion Survey

Parents completed the Parent Opinion Survey after their child had played all five games. This survey was designed to measure:

- Parents' overall opinions of the PEEP Web site and games
- Parents' opinions about the Anywhere Science Activities
- Parents' opinions of the PEEP Web site compared to other children's Web sites
- Children's prior experiences with PEEP
- Children's previous experiences with computers and the Internet
- Demographic information

SAMPLE DEMOGRAPHICS

GRG recruited 38 participants from across the country (parents and their children ages 3 to 5 years old).

Child Demographics

The sample included slightly more boys (54%) than girls (46%) who were between three and five years old. Most of the participants were three (30%) and four (43%) years old. The majority of the three year olds (9 of 11) were girls,

while the majority of the five year olds (9 of 10) were boys. The four year olds were more evenly split with seven girls and nine boys.

The composition of the sample was 92% White, 11% African-American, 5% Asian, 5% Hispanic, and 3% Native Hawaiian or other Pacific Islander. These percentages total more than 100% because some parents indicated more than one ethnicity for their children.

Approximately three-quarters (74%) of the children attended preschool or kindergarten, 14% attended daycare, and 6% attended an after-school program.

Childrens' prior experiences with technology

Parents (n = 36) reported that that their child typically used the computer and Internet anywhere from one to seven days per week:

- 42% used the computer between 1-3 days per week,
- 33% used the computer 4-5 days per week, and
- 25% of children used the computer 6-7 days per week.

The length of time that children used the computer varied widely from less than 10 minutes at a time to 31-45 minutes at a time, with most parents responding that their child usually used the computer for 16-20 minutes (30%), 21-30 minutes (32%), or 31-45 minutes (27%).

Nearly all parents indicated that their child manipulated the computer mouse on his/her own (92%), and the majority of children chose which Web sites and programs to use (60%). Fewer children turned on the computer by themselves (49%) and connected to the Internet by themselves (30%).

Children were typically assisted on the computer by their parent (92%) or sibling (26%). Less than 8% of children were assisted by a caregiver, educator, friend or other relative. Most parents (83%) indicated that their child used a computer mouse when playing on the computer, while the remaining children used both a mouse and touch-pad. Three-quarters of the participating children had access to a high speed connection to the Internet, while one-quarter had access to a 56K modem.

Children's prior experiences with PEEP

Most parents and children (90%) had not visited the PEEP Web site prior to participating in the study. Of the four participants who had visited the Web site, one participant had visited once before, one had previously visited 2-3 times, one had visited 4-6 times before, and one had previously visited 7-9 times. Two of these four participants learned of the Web site by watching PEEP on TLC, one participant found the Web site by surfing the Internet, and one participant learned about the Web site from a teacher.

Close to half of the children (45%) had watched PEEP on TV. Of those, 24% had watched PEEP 1-5 times, 35% had watched PEEP 6-10 times, 24% had watched PEEP 11-15 times, and 18% had watched the program 16-20 times.

Parent Demographics

All but one participating parent was female. Ninety-two percent reported their race/ethnicity as White, 5% identified as African-American, 5% as Hispanic, and 3% as Asian. These percentages total more than 100% because some parents identified with multiple ethnicities.

The participating parents ranged in age from 18 to 54 years old, with 58% between the ages of 25 and 34, and 35% between the ages of 35 and 44. For the majority of parents (55%), the highest level of education completed was college. Eight percent of parents indicated their highest degree was a high school diploma or GED, 21% had completed some college courses, 3% had completed some graduate courses, 11% had a master's degree, and 3% had a law degree.

EVALUATION FINDINGS

PARENTS' OVERALL OPINIONS OF THE PEEP WEB SITE

We asked parents to compare the quality and educational value of the PEEP Web site with other children's Web sites using a scale of more than other sites, equal to other sites, less than other sites, and I don't know.

Close to half (46%) of the parents said that the PEEP Web site is more educational than other Web sites that their child visits, and an additional 46% of parents said that the PEEP Web site was equally educational compared to other children's Web sites.

Further, 43% of the parents reported that the PEEP Web site was easier for their child to navigate on their own compared to other children's Web sites, and an additional 41% of parents said that the PEEP Web site was equally easy to navigate compared to other children's Web sites.

More than three-quarters of parents indicated that the PEEP Web site was either more entertaining (24%) or equally entertaining (54%) compared to other children's Web sites.

Table 1 shows the distribution of responses across the five comparison dimensions.

Table 1 Comparisons to other children's Web sites

How does the PEEP Web site compare to other children's Web sites?	More so than other Web sites	Equal to other Web sites	Less so than other Web sites	I don't know
The PEEP Web site is educational for my child.	46%	46%	5%	3%
The PEEP Web site is <u>easy to navigate</u> .	43	41	14	3
The PEEP Web site is interactive.	35	51	11	3
The PEEP Web site is <u>age</u> appropriate.	35	49	14	3
The PEEP Web site is entertaining to my child.	24	54	19	3

N = 37

In addition to the site's educational value, entertaining qualities, and the ease of navigating the site, 84% of parents indicated that the PEEP Web site was either more interactive (35%) or equally interactive (51%) compared to other sites. Approximately half of the parents (49%) thought the PEEP Web site was equally age appropriate when compared to other sites, and 35% thought the PEEP Web site was more age appropriate than other sites. With regard to the variety of games on the Web site, almost all parents (89%) said there was just the right amount of variety and the remaining 11% said there was not enough variety.

PARENTS' OPINIONS OF THE ANYWHERE SCIENCE **ACTIVITIES**

Although parents were not explicitly instructed to try the Anywhere Science Activities, just under half of the parents (46%) reported that they had tried some of the Anywhere Science Activities. Of the parents who did not try any of the activities (54%), most reported that they did not have time to try the activities during the evaluation period, but planned to in the future.

The parents who did try the Activities tried a total of 20 different activities. Going on a Bug Walk (n=4), Mixing Colors (n=3) and Painting with Water (n=3) were the most frequently tried activities.

Parents were very satisfied with the Anywhere Science Activities, with the strengths of the activities being that they effectively reinforced the idea that science is everywhere and encouraged children's natural curiosity.

Eighty-five percent of parents completely agreed with the statement, "The Anywhere Science Activities gave me ideas for how to turn everyday situations into science explorations with my children," and 89% of parents rated the quality of the activities as Excellent (56%) or Very Good (33%). The remaining 11% rated the quality as either *Good* (7%) or *Fair* (4%). No one rated the quality as *Poor*.

When asked to explain their rating, 22 parents expressed that they liked the educational value (39% of responses), simplicity (26% of responses), and variety of the activities (13% of responses). The following are representative quotes:

The activities are full of opportunities to explore and expand knowledge hands-on. I'm not very creative so to have a source like this is great!

I thought the ideas were simple enough to incorporate easily into an everyday activity yet engaging enough to stimulate curiosity about learning.

This site will be a valuable resource because it helps me to focus on the learning opportunity in just about every situation!

Parents rated their opinions of the Anywhere Science Activities using a 5-point scale from 1 equal to *not at all effective* to 5 equal to *completely effective*. Over four-fifths of parents rated the Activities either *very effective* or *completely effective* across three dimensions.

As shown in Table 2.

- 88% said that the activities were *very* or *completely* effective at encouraging kids' natural curiosity.
- 84% of parents indicated that the activities were *very* or *completely* effective at reinforcing the idea that science is everywhere.
- 82% reported that the activities were *very* or *completely* effective at encouraging kids to explore their natural environments.

When asked to rate their satisfaction with the amount of directions given for the Anywhere Science Activities, 96% of parents felt that there was just the right amount of direction, while 4% (n=1) felt that there was not enough direction. Parents explained their ratings with the following representative comments:

I think the instructions were clear enough and any more direction may cause hesitation in wanting to do the activity.

The directions were very clear and concise.

They contain just the right amount of direction to keep them truly "anywhere science activities." I have to say I am impressed with this section. I will definitely refer back to it often.

THE APPEAL OF THE INTERACTIVE GAMES FOR CHILDREN

After observing their child play all five games, parents described their child's opinion of the games by selecting one of three options: *my child thought the games were great, my child thought the games were okay,* or *my child didn't like the games at all.* Two-thirds (68%) of parents reported that their child thought the games were *great,* while the remaining one-third stated their child thought the game were *ok.*

Parents rated their child's engagement with each game using a 5-point scale from 1 equal to *not at all engaged* to 5 equal to *completely engaged*. The distribution of responses for each game is presented below in Table 3.

Table 3 Children's engagement

How engaged was your child while playing	Not at all engaged	A little engaged	Somewhat engaged	Very engaged	Completely engaged	Mean
Paint Splat	3%	8%	11%	32%	46%	4.1
Where's Quack	5	8	16	27	43	4.0
Hop to it	-	11	19	25	44	4.0
Hide and Peep	3	11	11	43	32	3.9
Bunny Balance	3	14	22	39	22	3.6

N = 36-37

The majority of children were either *very* or *completely engaged* by all five games, with the mean rating approximately 4.0 on the five-point scale. Across the five games:

- 78% of children were *very* or *completely* engaged by Paint Splat,
- 75% of children were *very* or *completely* engaged by Hide and Peep,
- 70% of children were *very* or *completely* engaged by Where's Quack,
- 69% of children were *very* or *completely* engaged by Hop to it, and
- 61% of children were *very* or *completely* engaged by Bunny Balance.

Parents were asked what their child liked most about the games. Thirty-two parents responded and indicated that their children liked the characters (29% of responses), how fun and humorous the games were (20% of responses), the colorful graphics and sound effects (20% of responses), and that the children were able to play the games on their own (17% of responses). Representative quotes follow:

How much fun they were to play. She enjoyed being able to play them all by herself.

She liked the characters (especially the frog). She also liked that it included counting and colors on the Web site.

The characters and how he got to interact with them.

Parents were asked if they or their child had any ideas for improving the games. Of the 19 parents who responded to this question, 37% commented that they would like the games to have more directions, 31% suggested having different levels or scenes, and 16% requested faster loading times. Representative quotes are listed below:

Write directions down so parents can explain it to children if they are having a hard time. Some games I did not know what to do so how would a child know what to do?

Have different levels of each game "easy-hard" so as the child learns the game it will be more challenging.

The games need to load faster. Even with high-speed connection, my son was impatient waiting between each game.

CHILDREN'S ABILITY TO PLAY THE GAMES

Most children played each game one to three times during the week, and one-half to three-quarters of parents indicated that their child played each game from 3 to 10 minutes each time.

Children's understanding of how to play the games

The majority of children understood how to play each game right away or after a period of trial and error. Parents selected one of four choices that best described how well their child understood how to play each game. See Table 4 for the distribution of responses.

Table 4 Understanding how to play the games

Which statement best describes your child's understanding of how to play	My child understood on his/her own right away.	My child understood on his/her own after a period of trial and error.	My child understood after being shown how to play the game by someone else.	My child never fully understood how to play the game.
Hide and Peep	70%	22%	5%	3%
Where's Quack	68	19	11	3
Hop to it	42	31	17	11
Paint Splat	42	42	11	5
Bunny Balance	27	38	16	19

N = 36-37

As seen in Table 4, Hide and Peep and Where's Quack were the easiest games to understand, with over two-thirds of parents (68-70%) indicating that their child understood the game on their own right away. Close to half the children (42%) understood how to play Hop to it and Paint Splat on their own right away. Bunny Balance was more difficult to understand, with 19% of children never fully understanding how to play the game.

Children's ability to navigate the games

Parents selected one of three statements to describe their child's ability to navigate each game. For four games (Where's Quack, Hide and Peep, Hop to it, and Paint Splat), 60% to 75% of parents indicated that their child had no difficulty with navigation. Children had more difficulty navigating Bunny Balance than other games. Forty-two percent of children had a few difficulties navigating Bunny Balance and 14% had many difficulties navigating Bunny Balance. Several parents explained that their child had difficulty with the "click and drag" procedure required to play this game. See Table 5 for distribution of responses.

Table 5 Navigating the games

Which of the following statements best describes your child's ability to navigate the game	My child had no difficulties navigating this game.	My child had a few difficulties navigating this game.	My child had many difficulties navigating the game.	
Where's Quack	75%	22%	3%	
Hide and Peep	72	19	8	
Hop to it	69	26	6	
Paint Splat	60	38	3	
Bunny Balance	44	42	14	

N = 35-36

Amount of time children spent playing each game

Children repeatedly played the games over the course of the week, suggesting that the children found the games to be entertaining and interesting. Most children played each game one to three times during the week, but more than 25% of the children played Where's Quack, Hop to it, Paint Splat and Hide and Peep more than four times during the week. Bunny Balance was played the least number of times during the week, with almost half of the parents indicating it was played one time. Children had more difficulty navigating this game which may account for this difference.

Table 6 Frequency of game playing

Approximately how many times did your child play	Didn't play	One time	2-3 times	4-6 times	7-9 times	10 or more times
Where's Quack	3%	24%	42%	13%	8%	11
Hop to it	3	35	27	16	11	8
Paint Splat	-	29	34	21	11	5
Hide and Peep	-	24	47	11	11	5
Bunny Balance	3	47	37	11	3	-

N ranged from 37-38

Approximately one-half to three-quarters of parents indicated that their child played each game for 3 to 10 minutes each time (See Table 7 for the distribution of responses). Children played Paint Splat the longest with nearly three-quarters of parents indicating their child played the game for 3 to 10 minutes.

Table 7 Amount of time spent playing the games

Each time, approximately how long did your child play	Didn't play	Less than 2 minutes	3-5 minutes	6-10 minutes	11-15 minutes	16-20 minutes	More than 20 minutes
Hop to it	3%	19%	24%	32%	14%	3%	5%
Paint Splat	-	3	37	37	16	3	5
Bunny Balance	3	16	29	37	11	3	-
Where's Quack	3	18	21	27	8	8	5
Hide and Peep	-	19	35	22	16	5	3%

N = 37-38

Gender and Age differences

Gender and age correlated with children's ability to navigate two of the five games. However, because most the 3 year olds were girls and most of the 5 year olds were boys, further analysis determined that gender contributed more to the difference than age. Therefore, only gender differences are discussed.

The greatest difference between boys and girls was in their ability to navigate Hop to it and Bunny Balance. Only 5% of boys had difficulties navigating Hop to it, while 59% of girls had difficulties navigating this game. There was a similar pattern with Bunny Balance where 10% of boys had difficulty navigating, while 76% of girls had difficulties navigating this game. See Table 8 for the frequency of responses.

Table 8 Gender Differences

Which of the following best describes your child's ability to navigate the game?		Hop to it Bunny Balance		
ability to havigate the game:	Boy	Girl	Boy	Girl
My child had no difficulties navigating this game.	95%	41%	58%	24%
My child had a few difficulties navigating this game.	5%	47%	32%	53%
My child had many difficulties navigating this game.	-	12%	10%	23%

N = 36

OPEN-ENDED OPINIONS OF THE INTERACTIVE GAMES

For each Interactive Game, parents responded to two open-ended questions: What did you and your child think of the game? and Share any other comments or observations you or your child have about the game. Themes and representative quotes are presented below.

Hop to it

When asked what their child thought of the game, 70% of the parents commented that their child liked the game. In response to the second open-ended question, parents indicated that their child became frustrated when they were unable to determine the size hop to use and the frog fell in the water (27% of responses). Some parents also mentioned that their child became less interested in the game after they learned the concept (10% of responses).

He liked it. He did struggle with it at first, but he quickly understood how to avoid jumping in the water.

I loved the math skills and problem solving involved. My child liked the graphics and noises and was really pleased with himself when he made the right number of hops.

She enjoyed this the most because it was the most challenging for her. As soon as she got it and began to completely understand distance, she became less interested.

Paint Splat

Eighty-nine percent of parents indicated that their child liked this game and found it very humorous. Twenty-three percent of parents said that their child had a hard time figuring out how to remove the paint when they were done combining colors.

He thought it was very funny when the paint got washed off. We kept trying to match the colors. Great game to learn about making colors, some colors were more difficult to match.

It is fun experimenting mixing colors. The instructions don't mention how to remove the color nor does it give further indicators once the color was made, until the paint tubes were empty.

Bunny Balance

Just over half of parents (57%) said their child liked playing Bunny Balance. Six parents (21%) further mentioned that their child had a hard time clicking and dragging.

It was cute to make the see-saw just right. We loved the bunnies.

We enjoyed putting the bunnies on the seesaw. The different sizes and colors of the bunnies really stimulated her curiosity.

Too young to understand balance. Can't drag and drop. Can only click. If she could have clicked the bunnies into place she might have played more.

Where's Quack

When asked what their child thought of this game, 73% of parents said that their child liked this game because it was challenging and the screens changed each time. Six parents (17%) also mentioned that this game took a long time to load (longer than any other game) and their child lost interest in the game because of this.

This was probably my son's favorite game – he wanted to keep playing this. I liked that there were different screens and how it engaged my son visually as well as auditory to deduce where to look.

The loading time was really long! This caused her to get frustrated and not want to play for very long.

Hide and Peep

More than three-quarters of the parents (77%) thought their child liked this game because it was fun and the animals changed their positions every game. Nine parents (28%) further mentioned that their child became bored after mastering the concept and some suggested changing the scenery to keep their child engaged.

She really enjoyed this game. It kept her attention for quite a while. She liked finding the different animals.

It was cute. We both liked how the animals were hidden in different spots and how it became progressively harder by adding animals.

If the background changed each time, she might have played longer. She loves the "hiding" concept.

CONCLUSIONS AND RECOMMENDATIONS

In summary, the findings from this evaluation indicated that compared to the typical children's Web site, parents consider the PEEP Web site to be more educational and easier for children to navigate on their own. Children were very engaged by the Interactive Games, and demonstrated proficiency with regard to comprehension and site navigation. Further, parents rated the Anywhere Science Activities very positively, particularly noting that the activities gave parents excellent ideas for how to turn everyday situations into science explorations with their children.

The following conclusions and recommendations were drawn from this evaluation:

- Parents reported that the PEEP Web site was more educational than other children's Web sites, and that the PEEP Web site supports children's enjoyment and learning by allowing the child to navigate the site on his/her own.
- Parents were very satisfied with the Anywhere Science Activities, with the strengths of the activities being that they effectively reinforced the idea that science is everywhere and encouraged children's natural curiosity.
- More than two-thirds of parents said their child thought the games were great, and parents observed that their children were very engaged when interacting with the Web site. To keep children interested after they have mastered the game, we recommend changing the scenery and background of the game.
- Parents indicated that the games took longer than usual to load, even with a high speed connection. Following up on parent's observation, we recommend a consideration of the reason why parents perceive this to be problematic.
- Children demonstrated mastery and comprehension of the games and were easily able to navigate the games on their own. In order to increase children's navigation of the games and understanding of how to play the games, we recommend the inclusion of basic and brief verbal instructions at the start of each game.