

OBSERVATIONS: DATA HIDING IN PLAIN SIGHT

RIPL Data Bootcamp
Rebecca Teasdale, Alison Clarke, Katie Fox

OVERVIEW

- Observations as a data collection method
 - Examples: Uses of observations in libraries
- Guidelines for conducting observations
 - Examples: Conducting observations in libraries
- Using observation in your library
- Next steps

WHAT ARE OBSERVATIONS?



Gather data first-hand about:

- Activities
- Events
- Behavior
- Interactions
- Physical setting



STORYTIME OBSERVATION

- Children's behaviors, words, and interactions
- Presenters' and parents' behaviors, words, and interactions
- Physical setting: How crowded the room is, noise level, where people are positioned, temperature



SELF CHECKOUT OBSERVATION

- Time spent reading instructions
- Pauses, looks of confusion
- Attempts to position materials
- Help from other patrons
- Questions asked



COMPUTER CLASS OBSERVATION

- Computer skills at the beginning, during class sessions, and at the end of the class sequence
- Comments, questions, and conversations during class sessions
- Performance tasks: Asking students to demonstrate their skills

STRENGTHS OF OBSERVATIONS

- Reveal patron behavior
 - What they do, how they do it, what they say
- Illuminate staff/presenter behavior
 - Clarity and accuracy of answers and instructions
 - Strategies used during programs and services
 - Fidelity of implementation

STRENGTHS OF OBSERVATIONS

- Capture manner and style of interaction, nonverbal expression, movement through a space
- Document physical environment
 - Seating arrangements
 - Noise level, lighting
 - Amenities
- Gather documents, products, photos

LIMITATIONS OF OBSERVATIONS

- Do not help us understand
 - Why things are happening
 - What people think about what is happening
- Cannot capture demographics (Do not guess!)
- Require data collector to be physically present

LIMITATIONS OF OBSERVATIONS

- Time consuming and expensive
- Susceptible to observer bias
- Risk of Hawthorne Effect
 - More likely when person knows what behavior is being observed and is able to adjust their behavior

OBSERVATIONS

- Systematically document what we see and hear
- Gather data through our first-hand experience
- Do not help us understand who people are
- Do not help us understand what people think or feel or why they do what they do

SMALL GROUP DISCUSSION

Crystal Springs Public Library

- Creativity Zone provides software and equipment for digital media creation, editing, design, and digital fabrication.
- Staff decide to conduct observations to learn how the Creativity Zone is being used.

In your group:

- Review the scenario and 6 questions about how Creativity Zone is being used
- Decide which questions library staff can answer using observation

CREATIVITY ZONE OBSERVATION

Which questions can library staff answer using observation?

- ✓ How noisy is the Creativity Zone during peak hours?
- ✗ How many Creativity Zone users live in Crystal Springs?
- ✓ Which pieces of Creativity Zone equipment are used most often?
- ✓ How many users collaborate with others during their Creativity Zone visit?
- ✗ What do users like best about the Creativity Zone?
- ✓ What questions do users ask staff during their Creativity Zone visit?

EXAMPLES: USING OBSERVATIONS IN LIBRARIES

Observation Studies with Colorado State Library



Summer learning with young children

- Library was transitioning to a more outcome-based model
- Focus on relationship building and social and emotional learning (SEL)
- Unique opportunity through working with school district to see the same children every day for a month
- Library was hosting general enrichment, not focused on literacy
 - art, science, LEGO play time
- We observed children on multiple days, doing different activities, to see what social and emotional behaviors were happening
 - Self-management, relationship skills, and problem solving

Observation Studies with Colorado State Library



Summer volunteering with teens

- This was about social and emotional skills too.
- Library wanted teen volunteers to gain workforce readiness
- Library met with local workforce readiness center to get ideas
- Developed online training for volunteers to do in down times
- We developed a rubric for teens to assess themselves
- Staff observed volunteers twice during the summer
- Observing for: self-management, attitude, communication and problem solving skills



Observation Studies @ Brampton Library

Canadian Urban Library Council Space Use Study

- "How are people using the spaces in the library?"
- Observation of multiple branches/systems on the same day, same time
- Particular focus on quiet vs loud activities
- Study also included a paper survey for patrons

Sample question from Patron Survey:

2) Do you feel welcome when you come to the library?

☐ Yes

☐ No

Other _____



Observation Studies @ Brampton Library

Pilot test for tracker counting wifi enabled devices

- Triangulated methodology
 - Visible observation
 - Library people counter
 - Tracker counter



YOUR LIBRARY

How have you used observations in your library?

How could you use observations in your library?

Type your examples in the chat

GUIDELINES FOR CONDUCTING OBSERVATIONS



FOCUSING AN OBSERVATION

- Identify the most important information to gather, based on:
 - Purpose of the observation
 - Research or evaluation question we seek to answer
 - Intended use of observation data



FOCUSING AN OBSERVATION

- Identify the most important information to gather, based on
 - Purpose of the observation
 - Research or evaluation question we seek to answer
 - Intended use of observation data
- Aim to yield rich, detailed information about 1 or 2 aspects

OBSERVATION GUIDES

- Provide structure to the observation
- Direct our attention to the most important information
- Can be print or digital document
- Used to focus our attention and record data



HANDOUT

IRLE Story Time Checklist

Program: _____ Date: _____ Location: _____ Researcher: _____

Expected age(s): _____ (Whichever children) _____ (Other Researcher) _____

Approved by: _____ (IRLE Researcher) _____ (IRLE Researcher) _____

No.	Researcher	Yes	No
1	1		
2	2		
3	3		
4	4		
5	5		
6	6		
7	7		
8	8		
9	9		
10	10		
11	11		
12	12		
13	13		
14	14		
15	15		
16	16		
17	17		
18	18		
19	19		
20	20		
21	21		
22	22		
23	23		
24	24		
25	25		
26	26		
27	27		
28	28		
29	29		
30	30		
31	31		
32	32		
33	33		
34	34		
35	35		
36	36		
37	37		
38	38		
39	39		
40	40		
41	41		
42	42		
43	43		
44	44		
45	45		
46	46		
47	47		
48	48		
49	49		
50	50		
51	51		
52	52		
53	53		
54	54		
55	55		
56	56		
57	57		
58	58		
59	59		
60	60		
61	61		
62	62		
63	63		
64	64		
65	65		
66	66		
67	67		
68	68		
69	69		
70	70		
71	71		
72	72		
73	73		
74	74		
75	75		
76	76		
77	77		
78	78		
79	79		
80	80		
81	81		
82	82		
83	83		
84	84		
85	85		
86	86		
87	87		
88	88		
89	89		
90	90		
91	91		
92	92		
93	93		
94	94		
95	95		
96	96		
97	97		
98	98		
99	99		
100	100		

Comments: _____

C. Early Literacy Activities and/or Type: _____ (Write down any notes. Take notes on any general observed records.)

Observation Form

Next time: _____ End time: _____

Educational Goals

Let the goals of your educational experience.

Group Characteristics

Indicate the type, development group and the number of group members in each age category.

No. of adults: _____ 18-29 _____ 30-39 _____ 40-49 _____ 50+

No. of children (months): _____ under 1 _____ 1-4 _____ 4-6 _____ 6-12 _____ 12-17

Group meets in the (circle one): _____ School or home group _____ Family or friend group

Observations

What happened during the program (description of participant and facilitator role and interaction)?



TESTING

- Check structure of observation guide, identify sections that are missing or need revision
- Familiarize yourself with the flow (and speed!) of activities
- Practice recording data



SAMPLING

- Identify subset of activities, events, or times to observe
 - Random sampling: Make a list and draw numbers to select a sample
 - Convenience sampling: Select sample based on scheduling constraints or other practical reasons
 - Purposive sampling: Select sample to include specific programs, services, times, or locations (or a variety)
- Observe multiple sessions, events, or periods of time

Using multiple observers helps to:

- Capture more detailed information
- Double check the data
- Offset limitations and blind spots



MULTIPLE OBSERVERS

- Provide training
 - Conduct practice observations
 - Debrief what observers saw, heard, and recorded
 - Examine extent to which observers agree

QUESTIONS?

- Focusing the observation
- Using an observation guide
- Sampling
- Using multiple observers

EXAMPLES: CONDUCTING OBSERVATIONS IN LIBRARIES



Observation Studies @ Brampton Library

Canadian Urban Library Council Space Use Study

- "How are people using the spaces in the library?"
- Observation of multiple branches/systems on the same day, same time
- Particular focus on quiet vs loud activities
- Study also included a paper survey for patrons

Sample question from Patron Survey:

2) Do you feel welcome when you come to the library?

___ Yes

___ No

Other: _____

Quiet Activities	
<input type="checkbox"/>	Browsing
<input type="checkbox"/>	Reading
<input type="checkbox"/>	Studying/writing - secondary
<input type="checkbox"/>	Studying/writing - post-secondary
<input type="checkbox"/>	Studying/writing - mature
<input type="checkbox"/>	Using own device/computer/tablet
<input type="checkbox"/>	Testing/using handheld device (phone)
<input type="checkbox"/>	Using library device (computer/digital)
<input type="checkbox"/>	None of these
Louder Activities	
<input type="checkbox"/>	Talking on a device
<input type="checkbox"/>	Electronic noise
<input type="checkbox"/>	Talking with staff
<input type="checkbox"/>	Talking in group/relaxing
<input type="checkbox"/>	Talking in group/studying
<input type="checkbox"/>	Tutoring session
<input type="checkbox"/>	Program Participation
<input type="checkbox"/>	Interacting with children (play/read)
<input type="checkbox"/>	None of these
Additional	
<input type="checkbox"/>	Preschool child alone
<input type="checkbox"/>	Eating/drinking
<input type="checkbox"/>	Sleeping
<input type="checkbox"/>	Just sitting (nothing else)
<input type="checkbox"/>	None of these

Portion of observation sheet



Observation Studies @ Brampton Library

Observation Challenges:

- Multiple observers means multiple points of view!
- Paper vs tablet?
- Single observer means missing things sometimes
- New technology comes with unexpected issues



Sensor with tinfoil hat...

Observation Studies with Colorado State Library



- With the younger children we thought our observers could evaluate using a rubric while they were observing.
- We threw that out immediately. Way too hard to synthesize!
- For teens, observers wrote everything down in the moment and then filled out the rubric right away.
- Some areas of the rubric were not observable.
- Attitude, communication skills when they had no interactions, problem-solving when they didn't encounter problems.

Observation Studies with Colorado State Library



- Embrace the mess. Taking the mess out takes out what is great too.
- Prep yourself and your team to adapt in the moment.
- Until you try it out, it's really hard to know what's going to work in practice.
- Be open to noticing and discovering information you didn't anticipate.
- The SEL behaviors we saw varied a lot depending on how activity was structured.
- Realizing how many teen volunteers had no interactions during their shift.
- Sometimes you might need to "break character:"
- Use your best judgement.



Observation Studies @ Brampton Library

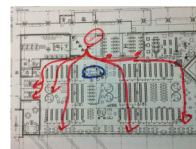
Next time:

- More extensive hands on training
- Group walk-throughs
- More testing of data flow for eventual analysis

Patron responses to question "How do you feel about the general atmosphere of the Library?"

Both of these responses were from the same branch at the same time:

- "Sometimes **too noisy** but good vibe"
- "great study atmosphere. Study areas are to the side and **somewhat quiet** and private"



Students heading from entrance to favourite study spots as soon as the library opens.

QUESTIONS?

- Process of conducting observations
- Challenges, adjustments, and lessons learned

SMALL GROUP DISCUSSION

- How would you like to use observations in your library?
- What do you hope to learn?
- What challenges might you face? How might you address them?

NEXT STEPS

NEXT STEPS



OBSERVATIONS: DATA HIDING IN PLAIN SIGHT

Part of RPL Data Bootcamp
Observations: Data Hiding in Plain Sight

1. Conduct a (virtual) observation and record data

2. Tune in to the recorded follow-up lesson

OBSERVATION CHALLENGE

RPL Data Bootcamp
Observations: Data Hiding in Plain Sight

Instructions: Observation Challenge

Apply what you have learned during the webinar to conduct an observation of a preschool circle time session. The observation will focus on children's level of engagement and demonstration of math-related skills.

First, review the observation guide to familiarize yourself with the type of information you will gather. Then, use the observation guide to record data while watching this video of a preschool circle time session:

<https://www.youtube.com/watch?v=P2C-HB2C-Iw&list=PL9B>

Be sure to record specific, concrete details of what you see and hear. One benefit of conducting this challenge with a video is that you can pause the video to allow you more time to record your data—and you can rewind to view activities a second time.

Children's Programming Observation Guide

Program Name:	Date:
Location:	Time:
Number of children:	Observer:
Number of adults:	
Setting:	
Provide a description of the setting for the observation.	
Summary of Activities:	
Provide an overview of the activities that took place during the observation.	

RECORD DATA

- Capture concrete, specific details of what you see and hear
- Record the moment-by-moment sequence of events
- Reflect on the observation overall to rating scales or checklists
- Avoid generalizations, vague descriptions, interpretations

HANDOUTS

Children's Programming Observation Guide	
Program Name: Adventures with Animals	Date: 6/12/2019
Location: Eastwood Branch Library	Time: 3:00-3:45
Number of children: 14	Observer: Lisa
Number of adults: 3	
Setting:	
Provide a description of the setting for the observation.	
Multipurpose room of the Eastwood Branch Library	

Children's Programming Observation Guide	
Program Name: Adventures with Animals	Date: 6/12/2019
Location: Eastwood Branch Library	Time: 3:00-3:45
Number of children: 14	Observer: Carla
Number of adults: 3	
Setting:	
Provide a description of the setting for the observation.	
This program was held in the multipurpose room of the Eastwood Branch Library. Staff from the Springfield Zoo were present at the front of the room. Two animals were brought to share with the children: a blue and white cat named Mr. Blue and a small, brown, fluffy chick named Mr. Fluffy. The front of the room was decorated with a large blue and white striped banner that read "Adventures with Animals". The children were seated in a circle on the floor, and the adults were seated around the perimeter of the circle. The children were engaged in the program and the adults were providing support and encouragement.	



Lisa's data				
Engagement For each dimension described below, rate the level of children's engagement you observed. Then describe specific, concrete examples of what you saw and heard to illustrate and support your rating.				
	Did not occur	Occurred somewhat	Occurred frequently	
1. Children directed their attention to the presenters and animals.	1	2	3	4
Examples or description: Children really liked the animals. They paid attention and were quiet.				

Lisa's data				
Engagement For each dimension described below, rate the level of children's engagement you observed. Then describe specific, concrete examples of what you saw and heard to illustrate and support your rating.				
	Did not occur	Occurred somewhat	Occurred frequently	
1. Children directed their attention to the presenters and animals.	1	2	3	4
Examples or description: Children really liked the animals. They paid attention and were quiet.				

Carla's data				
Engagement For each dimension described below, rate the level of children's engagement you observed. Then describe specific, concrete examples of what you saw and heard to illustrate and support your rating.				
	Did not occur	Occurred somewhat	Occurred frequently	
1. Children directed their attention to the presenters and animals.	1	2	3	4
Examples or description: Throughout the event, nearly all of the audience focused their attention on the zoo staff and the animals. Children often pointed at the animals, laughed when the zoo staff shared funny stories, and made a face or said "Yuck!" or "Gross!" when zoo staff described what the animals eat. Children sometimes commented to others sitting near them; however, the comments I heard were closely related to the presentation ("Cool!" "I saw an alligator like that at the zoo." "I like snakes. Everyone thinks they're gross, but I like them." "I had it once BUGS.") I did not observe the zoo staff or librarians asking the children to pay attention or be quiet. After the formal presentation, children formed long lines to touch the animals.				


Carla's data				
Engagement For each dimension described below, rate the level of children's engagement you observed. Then describe specific, concrete examples of what you saw and heard to illustrate and support your rating.				
	Did not occur	Occurred somewhat	Occurred frequently	
1. Children directed their attention to the presenters and animals.	1	2	3	4
Examples or description: Throughout the event, nearly all of the audience focused their attention on the zoo staff and the animals. Children often pointed at the animals, laughed when the zoo staff shared funny stories, and made a face or said "Yuck!" or "Gross!" when zoo staff described what the animals eat. Children sometimes commented to others sitting near them; however, the comments I heard were closely related to the presentation ("Cool!" "I saw an alligator like that at the zoo." "I like snakes. Everyone thinks they're gross, but I like them." "I had it once BUGS.") I did not observe the zoo staff or librarians asking the children to pay attention or be quiet. After the formal presentation, children formed long lines to touch the animals.				

Children pointed at the animals

"I like snakes. Everyone thinks they're gross, but I like them."

I didn't not observe the zoo staff or librarians asking the children to pay attention or be quiet.

Children formed long lines to touch the animals.

NEXT STEPS				
				
OBSERVATIONS: DATA HIDING IN PLAIN SIGHT Part of RPL Follow-Up Lesson Alison Clarke, Katie Fox, Rebecca Teasdale				
1. Conduct a (virtual) observation and record data 2. Tune in to the recorded follow-up lesson				

IMAGES LICENSED UNDER CREATIVE COMMONS				
Binoculars by Peter Miller Story time by San Jose Public Library Snapshot day at Darien Library by Darien Library Technology & computers by Austin Public Library Focus by Michael Dales Directions to the rest of the world by Michael Coghlan Test by essenj Morning Circle at Preschool, still image from video: https://www.youtube.com/watch?v=PZY-hB2C-Iw&t=908s Waiting for the entertainment to arrive by marneejill				

OBSERVATIONS: DATA HIDING IN PLAIN SIGHT				
RIPL Data Bootcamp Rebecca Teasdale, Alison Clarke, Katie Fox				
				