OBSERVATIONS:
DATA Hiding IN PLAIN SIGHT
RIPL Data Bootcamp
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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?

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
OBSERVATIONS

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
- 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?
- X 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?
- X 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
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

- 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

- 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

TESTING
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

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- “How are people using the spaces in the library?”
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Sample question from Patron Survey:

1. Do you feel welcome when you come to the library?
   - Yes, ___ No, ___ Other, ________________

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 @ Brampton 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 with Colorado State Library

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

Next time:

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

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

1. Conduct a (virtual) observation and record data
2. Tune in to the recorded follow-up lesson

OBSERVATION CHALLENGE

Instructions: Observation Challenge

- 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

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
Children pointed at the animals

“\textit{I like snakes. Everyone thinks they’re gross, but I like them.}”

I didn’t 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**

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 & computer by Austin Public Library
Focus by Michael Drake
Directions to the rest of the world by Michael Coghlan
Test by essa:
Morning Circle at Preschool, still image from video: https://www.youtube.com/watch?v=PZYhB2C-Iw&t=908s
Waiting for the entertainment to arrive by marneejill

**OBSERVATIONS:**

**DATA HIDING IN PLAIN SIGHT**

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