

The Strategic Use of Observational Data to Support Program Development and Improvement
AEA Minneapolis 2012, Roundtable Presentation 296

Observations offer a rich source of information. Large-scale evaluations may follow resource-intensive rigorous methods to develop observation protocols and train observers. But is the need for credible evidence less in small-scale evaluation activities that inform program development and improvement?

Informally collected observational data can lead to missteps at critical early junctures. Challenges include

- complex environments
- observer preconceptions
- ambiguity in goals and protocols.

Some strategies to improve the reliability and validity of small-scale, quick turnaround observational data collection:

- Involve program staff in planning, data collection, and interpretation
- Use a theory of change model to identify key considerations, identify a narrow set of well specified questions
- Collect data multiple times using multiple observers and under varying conditions
- Use a highly structured data collection protocol (

A Hypothetical Scenario: A school or informal learning program regularly sponsors family nights. Program staff want to improve involvement and learning among participating members of the community.

1. Staff discussion and perception of need for more information.

Discussion among staff regarding past family nights brings out that there is usually great turn-out and a lively atmosphere, but visitors tend to walk by or spend little time at the exhibits.

2. Draw upon and refine the program logic model, previous learning, and lessons from others.

3. Look at the program's theory of change: How does the family night support the program's goals? What are the objectives of the family science night?

- To acknowledge the work of the students?
- To convey content knowledge to families that will give them recycling and conservation skills?
- To raise awareness and increase interest and commitment in recycling and conservation in the community?

3. Decide on questions and the type of information that will help in program-decision-making.

Short-term program goal: improve involvement with exhibits to increase awareness, interest, and knowledge of recycling and conservation in the community.

Staff comments that the environment seems more conducive to socializing than spending time at exhibits. They wonder about changes in exhibit arrangements, display, or content.

A facilitated staff discussion of whether to do an exit survey or observations. Decision made to do both exit survey of participant impressions and self-assessed learning and also observations to explore changes that could be made in the exhibits.

4. Facilitated discussion of dimensions that could be relevant and exemplars of anchors.

Exhibits too crowded or too spread out. Title a statement or a question. Hands-on materials visible. Literature flat on table or a stand-up display. Time it takes to understand the focus of the content or activity. Possible gender differences in who stops.

Sampling considerations: Will different people be arriving at family night at different times; e.g., Moms versus? Families with young children? Choose stations that provide contrasts on dimensions of interest.

Example Observation Data Collection Sheet

Instructions: Use tallies to record numbers for adult participants only. F = female; M = Male. Spend 12 minutes at each station. Observe at 5 stations. Do two rotations.

Rotation One

Exhibit 1 observation start time: _____ observation stop time: _____

Station 1	# Pass by	# Stopped	# Read	# Touched	# Asked question	# Interacted with materials	# Indicated prior knowledge
Start:							
Stop:							
					F or M	F or M	F or M

Observer notes:

Station 2	# Pass by	# Stopped	# Read	# Touched	# Asked question	# Interacted with materials	# Indicated prior knowledge
Start:							
Stop:							
					F or M	F or M	F or M

Observer notes:

And so on for the five chosen stations. Then use a second sheet for a second rotation.

RESOURCES RELATED TO OBSERVATIONAL DATA AND QUICK TURN-AROUND EVALUATION:

Centers for Disease Control and Prevention, Healthy Youth! Evaluation Research Team (2008). *Data Collection Methods for Program Evaluation: Observation*. Retrieved from <http://www.cdc.gov/healthyyouth/evaluation/pdf/brief16.pdf>

Centers for Disease Control and Prevention, Healthy Youth! Rapid Evaluation. Available at <http://www.cdc.gov/healthyyouth/evaluation/rapid/index.htm>

Division of Cooperative Extension of the University of Wisconsin-Extension. Common Methods for Collecting Data, Observation. Available at <http://www.uwex.edu/ces/4h/evaluation/methods.cfm>

Pianta, R. C. (2012). Implementing observation protocols: Lessons for K-12 education from the field of early childhood. Center for American Progress, Washington, DC. Retrieved from http://www.americanprogress.org/wp-content/uploads/issues/2012/05/pdf/observation_protocols.pdf

YOUR NOTES: