LASER PULSE

Lending Credibility to Your Evaluation Story with Data Quality and Assurance Approaches

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Context

Researchers from the US (Purdue), Somalia (SORDI), and Uganda (RAN) evaluated access, retention, academic, and SEL gains of an accelerated basic education program (ABE) in Somalia using a longitudinal study that followed a cohort of students for 2 years.

Problem

Stories emerging from an evaluation are sometimes unexpected or at odds with commonly held beliefs, causing stakeholders and funders to question the validity of evaluation findings. Evaluators must employ rigorous methods to ensure data quality and effectively communicate procedures and practices to add credibility to resulting stories.

Using effective data collection tools to streamline evaluation story telling

- ✓ Be specific and prescriptive to ensure consistency across large and international research teams
- ✓ Include information to aid "on the spot" decision making, e.g., "This template provides guidance on … It describes the ideal case and presents alternatives if the preferred situation cannot be accomplished"
- ✓ Include learnings, e.g., language from earlier collection efforts
- ✓ Actively promote inclusion of enumerator observations

Calibrating training methods to sensitize enumerators to the story

- ✓ Use pre- and post-training assessments for enumerators
- ✓ Organize interactive workshops that focus on the power of active listening, and building rapport
- ✓ Give an overview of the data collection tool(s) , e.g., Tangerine, ODK, Kobo Collect, Qualtrics
- ✓ Use role-playing exercises that simulate likely real-life scenarios to give enumerators practice on the ethical and culturally appropriate data collection
- ✓ Provide supervised field practice that allows enumerators to apply their knowledge and skills and receive feedback for improvement in a real-world setting

Using data management and cleaning techniques to ensure data quality

Develop and maintain detailed metadata (codebook) file
- ✓ Be detailed as possible
- ✓ Include links or crosswalks between the collection device and final data labels
- ✓ List all possible values seen including any oddities
- ✓ Detail any computed or recoded items

Be thorough and deliberate with data cleaning
- ✓ Be consistent across each time point
- ✓ Maintain detailed notes across time points to back up your story and to back up the logic of your decision-making
- ✓ Check not only for errors in the data, but does it make sense?
- ✓ Use software like R or Python to automate cleaning procedures
- ✓ Identify outliers using scatter and box plots

Data Collection Research Strategy

Type of Data	Focus Group Discussion	Key Informant Interviews	Exit Survey
Number of Participants			
Type of Participants			
Selection Criteria			
Number of Sessions			
Total	*Providing an overview of the total number of required data collection helps plan the administrative side of data collection*		
Number of Facilitators needed			
Type of Facilitators needed	*e.g., 1 interviewer, 1 notetaker*		
Allotted time per session			
Prior necessary arrangements	*e.g., space reservation, reminder about time and locations*		
Equipment needed			

FIELD NOTES TEMPLATE FOR DATA COLLECTION

Circle all that applies. Use extra space to elaborate on answer

Description of the Environment

How is the lighting?	daylight	dark	shaded	too dark
Which noises do you hear in the background?	construction	explosion	playing children	call for prayer
How is the space/room?	spacious	cramped	not well ventilated	ventilated
How is the weather?	humid	dry	cold	warm

Description of the School
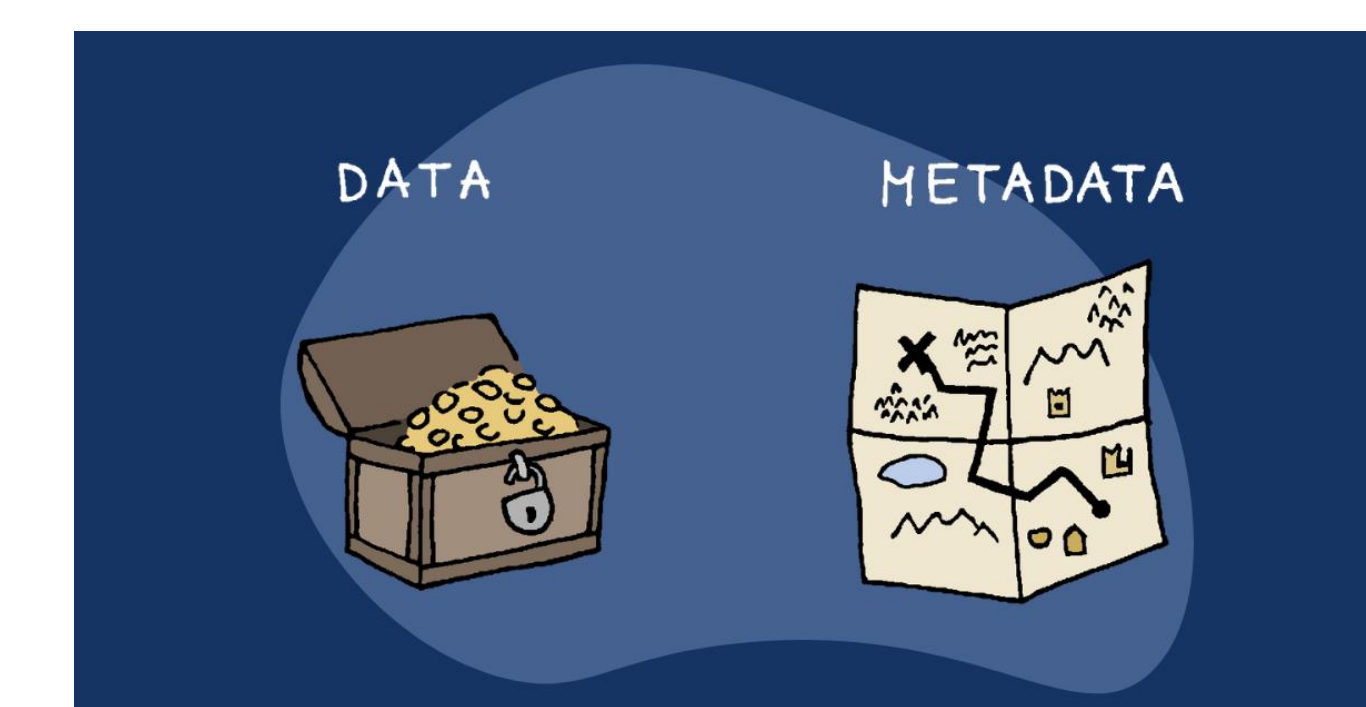
Infrastructure and condition (include travel to destination)	good	partially destroyed	road blockades (checkpoints)	flooded
Availability of running water	yes	no	well is not secured	broken pipes
Language of Instruction	Maxaa tiri	Maay	Other:_____	

Overall Reflections

What (if any) challenges did you encounter during data collection? _____

Box Plot Analysis of EGRA
Endline Level 2 and Grade 3 Scores

Outliers
EGRA Gain

Box Plot Analysis of EGMA
Endline Level 2 and Grade 3 Scores

Outliers
EGMA Gain

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