USAID
FROM THE AMERICAN PEOPLE

Module 15

Qualitative Methods

Module Objectives

By the end of this module you will be able to:

1. Understand and explain the central differences between the qualitative and quantitative perspectives in evaluation research
2. Identify evaluation questions that would be well or best served by an evaluation that includes qualitative approaches
3. Describe:
   - Several qualitative evaluation designs or frameworks and their main focus
   - 5 methods for collecting qualitative data
   - Steps or continuum of qualitative data analysis
   - Ways of enhancing the trustworthiness of qualitative evaluation findings

ADS References

ADS Reference	Topic or Issue
ADS 203.3.1.6	Given the nature of development activities, both qualitative and quantitative methods yield valuable findings, and a combination of both often is optimal; observational, quasi-experimental and experimental designs all have their place. No single method will be privileged over others; rather, the selection of method or methods for a particular evaluation should principally consider the empirical strength of study design as well as the feasibility.
ADS 203.1.9	Findings should be specific, concise and supported by quantitative and qualitative information that is reliable, valid and generalizable.
ADS 203.3.1.6; 3.7	There is no standardized methodology for evaluations of USAID programs. Methods of data collection [for which USAID's ADS provides TIPs] will generate qualitative and/or quantitative data that require specific types of data analyses.

What Are They?

Qualitative approaches range from the use of a single qualitative method for collecting and analyzing data in an evaluation…..

…… to evaluation designs that serve as a qualitative framework for interpreting data that may be both qualitative and quantitative in nature.

We begin with frequently used methods and build to broader qualitative evaluation strategies.

Distinguishing Characteristics

Quantitative Approaches

- Deductive Reasoning
- Outsider perspective
- Focus on specific concerns
- Environment neutral
- Selection of units – often probability sampling methods
- Number of units may be large
- Numeric emphasis in reporting

Qualitative Approaches

- Inductive Reasoning
- Insider perspective
- Holistic
- Environment sensitive
- Selection of units – often purposive sampling methods
- Number of units often small
- Narrative and visual emphasis in reporting
- Heuristic and Iterative

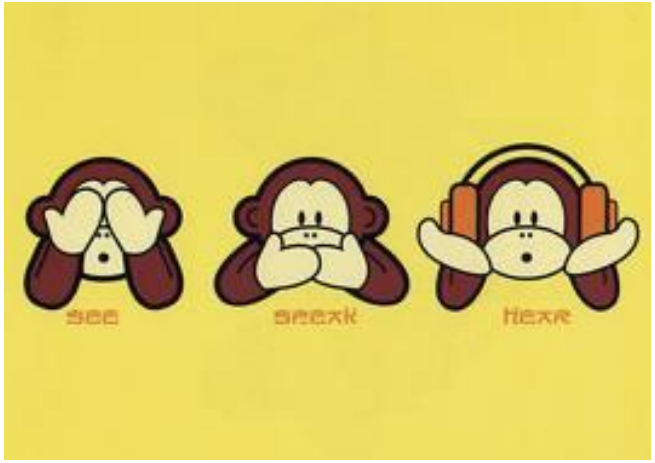
Methods

Evaluations with a qualitative design or emphasis use a variety of data collection methods. The focus is on capturing holistic picture, not reducing a complex phenomenon to a few numbers.

Methods include:

Asking questions in ways that produce rich narrative answers.

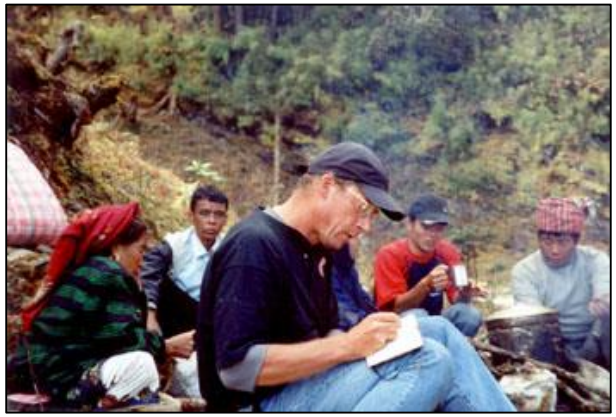
Observation with our eyes and our ears what people say and do.



Data Collection Basics

Structured Methods

Forms and other mechanisms used to standardize the way data are collected



Unstructured Methods

Reliance on training, memory and adaptability to capture data.

Data Collection Basics

Obtrusive Methods

People are aware that data are being collected

Unobtrusive Methods

People do not know that data are being collected

Data Collection Basics

How evaluators look may have an impact on the data collection process. What we wear and our body language may be neutral in some settings – and anything but neutral in others.

For All Methods

- Consider the “pros” and “cons” for each method.
- Before deciding on a method, look at which is appropriate for your purpose. A combination?
- Develop written instruments in advance of field work. All instruments must be included in an annex in a final report.

Collecting Narrative Data

Which questions require qualitative data? Quantitative?

- **How many farmers have adopted improved farming methods methods, i.e., use of new CIMMYT maize variety Longe 1 and inorganic fertilizer?**
- **Who are the adopters and non-adopters of improved farming methods?**
- **What characterizes or explains their adoption or non-adoption?**

Options for Collecting Narrative Data

Evaluation Question	Data Source/ Unit of Analysis	Data Collection Method	Data Analysis Method
Who are the adopters and non-adopters of improved farming methods promoted by USAID's project? What characterizes or explains their adoption or non-adoption?	Farmers in the target area (Iganga District)	Interview individual farmers? Interview groups of farmers? Interview *key informants* who can describe farmer behavior and thinking?	

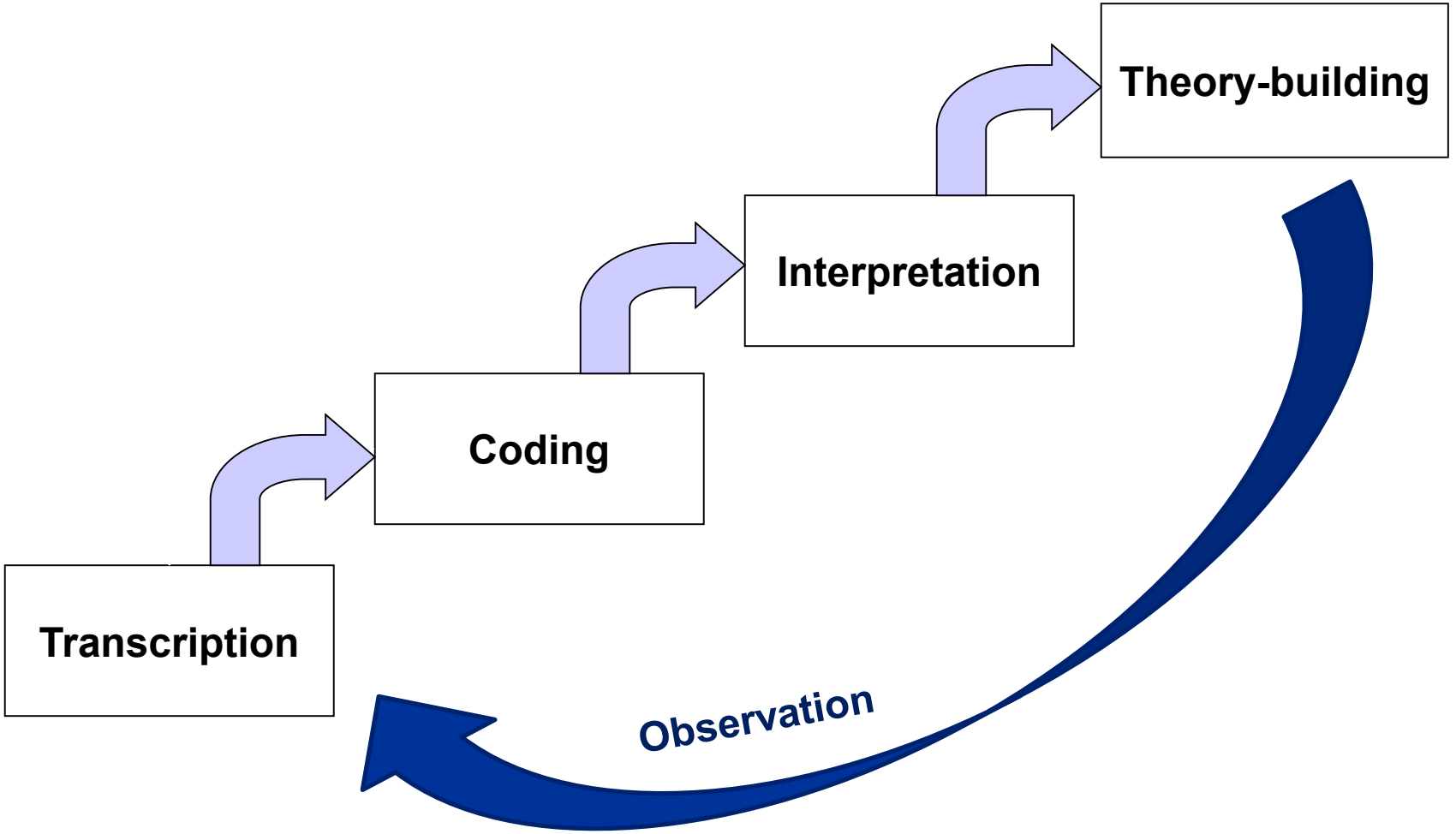
Tool Shop

Divide into groups and make sure that each group will read the appropriate reference for one of the following qualitative data collection methods:

- Key Informant Interviews (R-9/ R2R)
- Evaluative Case Studies (R-10)
- Focus Groups (R-11)
- Direct Observation (R-12)
- PRA Tecniques (R-13/R2R)

Prepare a 10-minute presentation to the class teaching about that qualitative method. What is it? How do you do it? What are common challenges and solutions? Be creative – use role play, games, or other teaching techniques.

Progression in Qualitative Data Transformation



Transcription

Qualitative transcription seeks an accurate descriptive record not yet subject to processing by the researcher.

- Complete, not summarized or “sound bites”
- Holistic – includes gestures, body language
- Multi-media – words, pictures, drawings

Transcription

When transcribing narrative responses, set the data up for pattern analysis as you go.

Saves time later!

Responses from Mayors on Interview Question 5: Quality and reliability of garbage collection services
The people don't understand the garbage collection schedule, when garbage is not collected it is their fault for putting it out the wrong day (Mayor 1)
With a small budget, we have to hire drivers only when we can pay them, sometimes we have to skip a pick up (Mayor 8)
Some of the contractors we use do not stick to our garbage pick-up schedule (Mayor 11)
This is a complex problem mostly from schedules which are not followed either by citizens or the pick-up agents (Mayor 2)

Coding

Coding is iterative and progressive. Also called content analysis (narratives) or pattern analysis (observations).

- **Open coding – moves from categories to themes**
- **Axial coding – identifies relationships among codes**
- **Selective coding – occurs when the researcher steps in and selects a main category or theme around which to organize or explain other codes**

Coding

Recognize that, even at this early stage of qualitative data analysis, the chances that you are being truly "objective" are slim. Be mindful as you code.

Researcher objectivity – said Nobel Laureate, Gunner Myrdal – is limited by:

- All that we have learned in our fields of study – the thoughts of writers and teachers who came before us.
- The cultural, social, economic and political milieu in which we live and work – today, and its history.
- The influence of our own personalities and life histories.

Open Coding

Open coding examines text or visual materials asking "what is this about?"

- **Topical coding – key words and phrases. Often limited to manifest (obvious) meaning.**
- **Thematic coding – may follow after topical coding – and consider latent as well as manifest meaning: meaning that is potentially there or clearly present but not active; words that are symbols for larger meanings.**

Open Coding

For narrative data combine impressionistic and systematic approaches to coding:

- **Nouns – topics in the narrative**
- **Verbs – action in the narrative**
- **Adverbs – when, where, why, or under what conditions**
- **Adjectives – judgments, degree, intensity**

Exercise 15-1

Coding content is often an iterative process.

After a first round of coding, you may see other patterns emerge.

Code and capture all important patterns in the content of responses.

Responses from Mayors on Interview Question 5: Quality and reliability of garbage collection services	Code
The people don't understand the garbage collection schedule, when garbage is not collected it is their fault for putting it out the wrong day (Mayor 1)	
With a small budget, we have to hire drivers only when we can pay them, sometimes we have to skip a pick up (Mayor 8)	
Some of the contractors we use do not stick to our garbage pick-up schedule (Mayor 11)	
This is a complex problem mostly from schedules which are not followed either by citizens or the pick-up agents (Mayor 2)	

New Software

New software that visually displays word frequencies or groups of words saves evaluators time and may force them to notice patterns they might have missed counting manually.

Rubble Removal Continues in Haiti

Visual data show a strong pattern in approach used.

Is there a more efficient, affordable option?

Software can be used to code visual images as well as text and they can be analyzed together.

Qualitative Analysis Software

- ➔ Manages data of many types
- ➔ Supports coding process
- ➔ Helps establish an audit trail as coding evolves
- ➔ Wide range of choices – from CDC's EZ-text (free) to commercial products, many of which manage data from multimedia sources and have free demonstrations and trial download

Qualitative Data Transformation

After qualitative data are coded it may be desirable to transform them into a quantitative form.

➔ **Of the mayors who were interviewed, what number or percentage attributed problems with garbage collection to citizen lack of awareness?**

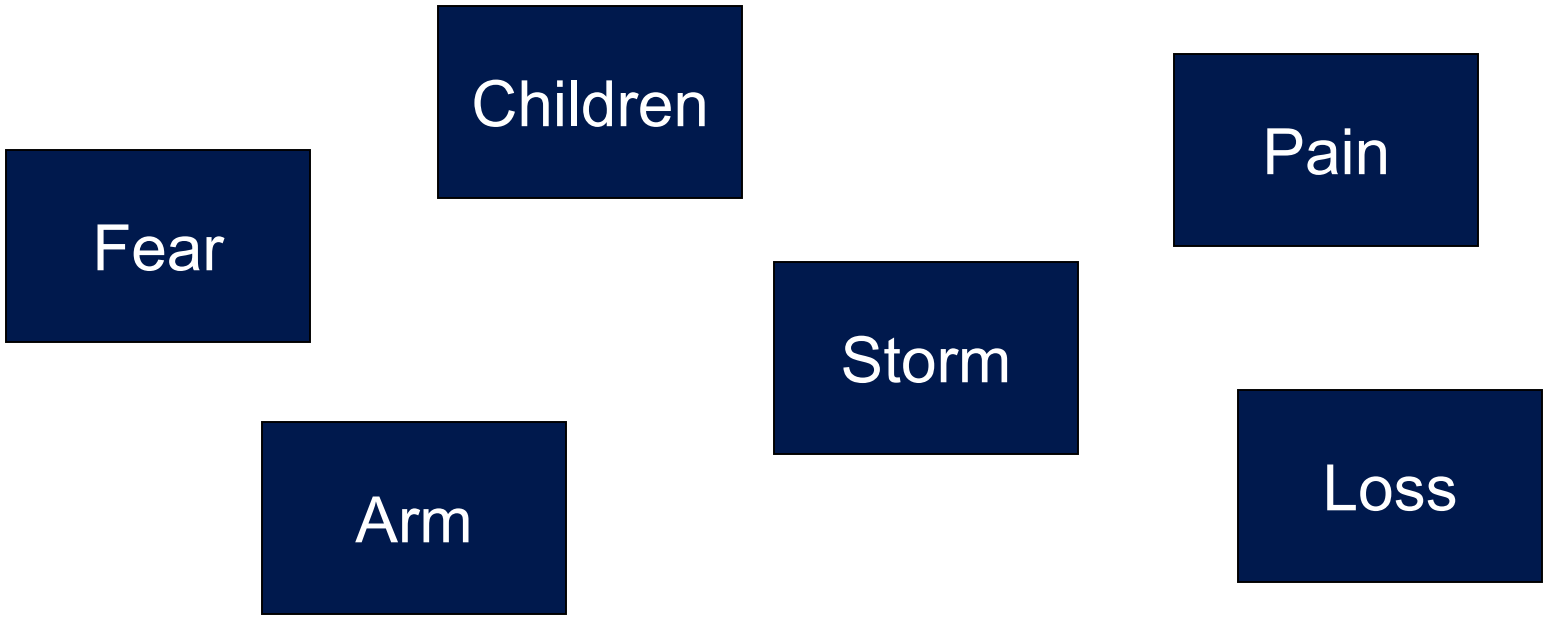
Once transformed, this data can be integrated into a broader analysis, e.g., with citizen survey on awareness of the day trash is picked up in their neighborhood.

- **58% of mayors think citizens do not know the trash schedule.**
- **72% of citizens correctly identified their neighborhood "trash day"**

This doesn't match up.
Let's dig further!

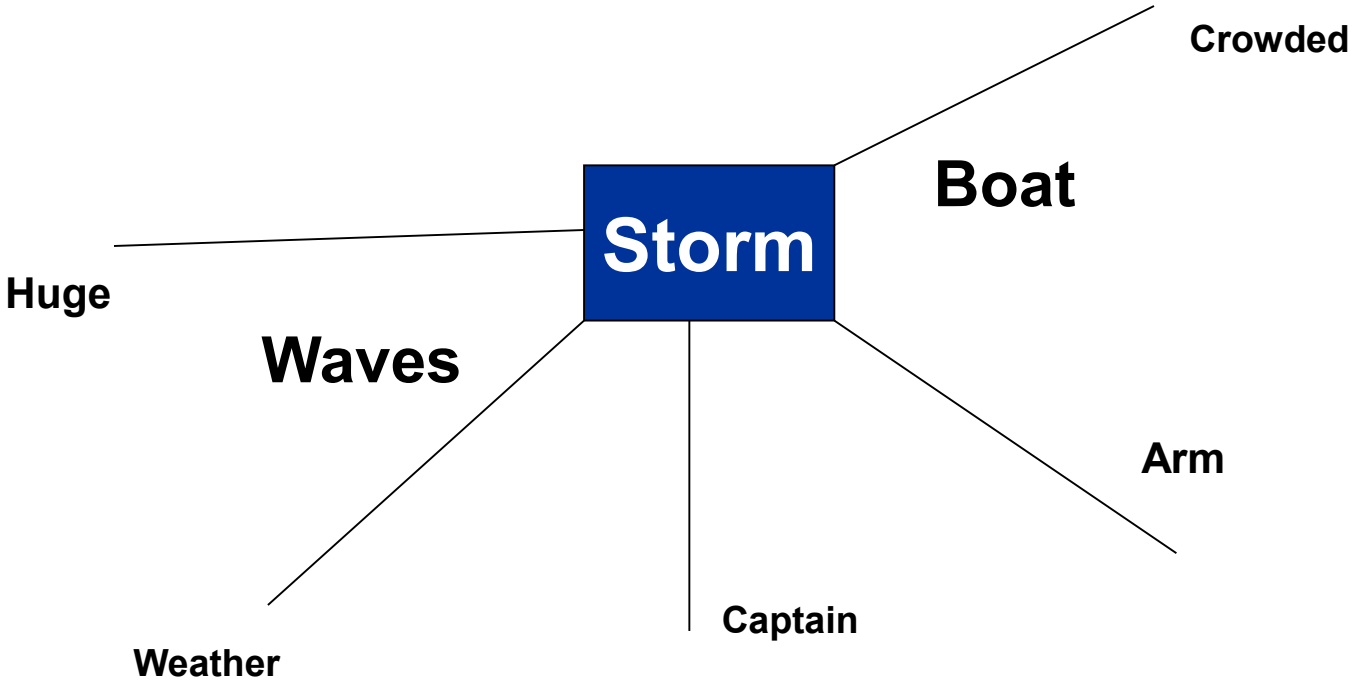
Axial Coding

Axial coding examines relationships among codes – including potentially causal relationships.



Axial Coding

Try diagrams, different size words to indicate frequency, and other techniques for suggesting relationships.



Interpretation

Interpretation is the first point at which the researcher actively intervenes to transform qualitative data.

- Interpretation of qualitative data is intended to extract meaning – not necessarily pass judgment.
- Interpretation often draws on theory and experience as well as on data collected during the study.
- Meaning is meaning “to me” or “to those we studied” -- be transparent about the perspective from which meaning is being derived, and who is interpreting the meaning of the data

Theory-building

Interpretation that goes beyond extracting meaning to posit explanations, generate hypotheses, or make predictions involves theory-building – sometimes called "grounded theory":

➔ Explanations of how processes work in the study environment – decisions about years of education for male and female children.

➔ Predictions about how a new phenomenon -- cell phones – will affect the environment.

Qualitative Evaluation Designs

- Serve as an analytic framework for studies with a predominantly qualitative focus.
- Incorporate characteristic qualitative research features – inductive reasoning; holistic and insider perspective.
- Utilize qualitative data collection and analysis methods – as well as other methods.

Common Qualitative Study Designs

RWE
p. 267

- Case study – focuses on the "case" as it is defined
  described briefly in Module 7
- Ethnography -- focuses on the culture, or a project's fit with a culture
- Phenomenology – focuses on a lived experience
- Action Research – focuses on stakeholders' involvement as researchers and on the "learning by doing" principle

All of these qualitative frameworks use a variety of methods for collecting data. As designs or frameworks they provide the structure through which evaluation data will be analyzed.

Characteristics of Common Qualitative Study Designs

Type of Design	Focus of the Inquiry	Dominant Methods	Evaluation Applications
Case Study	The case, a bounded unit of analysis – wide range of units	Key Informant Interviews and other methods; triangulation	In-depth look at a practice that works, a critical incident or other cases of interest
Ethnography	Fit between an intervention and a culture; or simply beliefs and practices in a culture	Participant observation, interviews, and other methods as appropriate	Acceptability or fit of an intervention in a culture, e.g., secondary school education for girls in some cultures, or fit of a new system in an organizational culture
Phenomenology	A phenomenon, as it is perceived -- often a lived experience, e.g., of a type of assistance received	In-depth Interviews Focus Groups	HIV/AIDs afflicted experience of treatment Trafficking survivors experience of assistance
Action or Operations Research	An intervention – services, a new system; policy; other deliberate change	Performance measures, interviews, and other methods as appropriate	Fine tune an intervention to ensure intended results are achieved

Case Study

A case study is a method* (or approach) *for learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive description and analysis of that instance taken as a whole and in its context.

U.S. Government Accountability Office

Case Study

Bolivia's eco-certified forest grows

Santa Cruz, Bolivia | February 27, 2004

In the face of growing demand for industrial timber, development workers are helping resuscitate Bolivia's forests. Their efforts have created the largest sustainably-managed forest in the Amazon basin, transforming Bolivia from a worst-case example to an ideal model for forestry certification.

Bolivia now boasts more than 30 percent of the world's certified tropical forests, thanks to the Bolivia Sustainable Forestry Management project, a $25-million effort funded by the U.S. Agency for International Development.

Under the auspices of the project, commonly known as Bolfor, Bolivia is on target to claim 2 million hectares of certified forest this year. To put this into perspective, roughly 5 million hectares of tropical forests are certified worldwide, according to the Forest Stewardship Council, an independent body.

Ten years ago, Bolivia's forests were in anarchy. Timber could be extracted by anyone with the means to do it. And those licensed to log paid no attention to conserving the country's tropical forests, which cover half of Bolivia's landmass and contain a wealth of biodiversity.

That has changed. Today, nearly half of Bolivia's productive forests are regulated under sustainable management plans while the other half is protected and being studied for future management.

These management plans were implemented by groups whose livelihoods depend on forest products, including timber companies, indigenous groups, private property owners, and rural communities.

"Our initial mandate was to find ways to make management of natural tropical forests socially sound, economically viable, and ecologically sustainable," said John Nittler, a Chemonics consultant and chief of party for the first seven years of the project. "And we had to convince the entire forest sector of the validity of these findings."

Case Study

The case study is the design most frequently used in USAID evaluations.

-- Single project case studies.

-- Comparative case studies

-- Multiple case studies, including a synthesis

Case Study

Focus in Evaluation Case Studies May Vary

Explanatory – may examine cause and effect to understand how changes came about – though a holistic, in depth examination of a single case. May or may not start with a "theory of change".

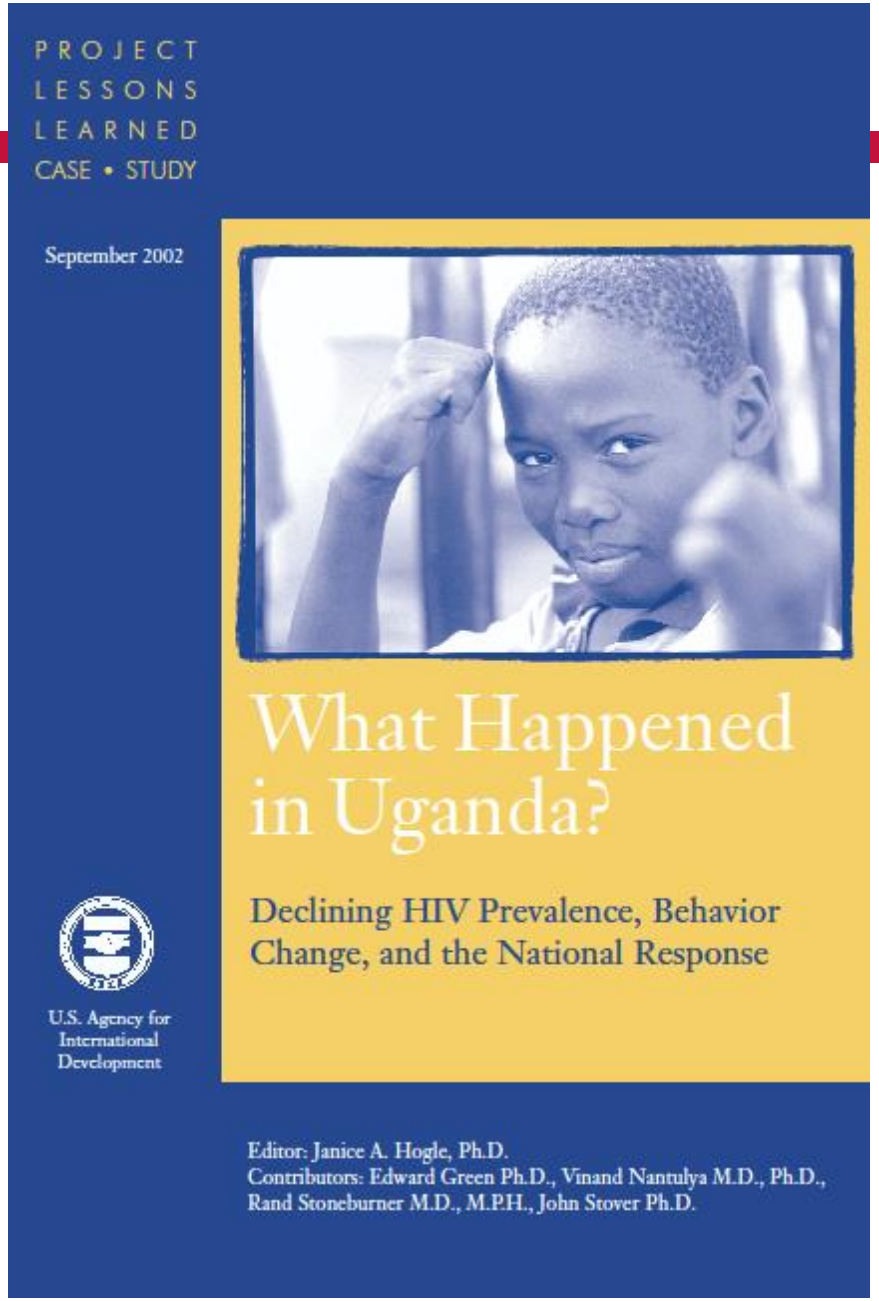
Critical Incident – how political changes came about; the impact of the tsunami, other unique events.

New York Times story on how Egypt shut down the internet was a critical incident case study.

Program Implementation – how processes are working, or not.

Critical Incident Case Study

When Uganda seemed to be the only country in Africa that was able to slow the rate of increase of HIV/AIDs, case study approaches were used to determine why.



Logic Behind Case Study Selection

Best Case	**What makes this project effective?**
Worst Case	**Why isn't this project working?**
Bracketing	**What do the extremes of performance look like? What characterizes the best and worst cases?**
Representative	**In instances chosen to represent important variations (e.g., in location, in types of beneficiaries), what are project processes and results like, and what best explains differences?**
Typical	**In a typical site, what is happening? [Difficult to select typical cases unless prior research has identified them]**
Special cases	**In unusual locations (e.g., where there is conflict, or drought) how is the intervention proceeding and with what results?**

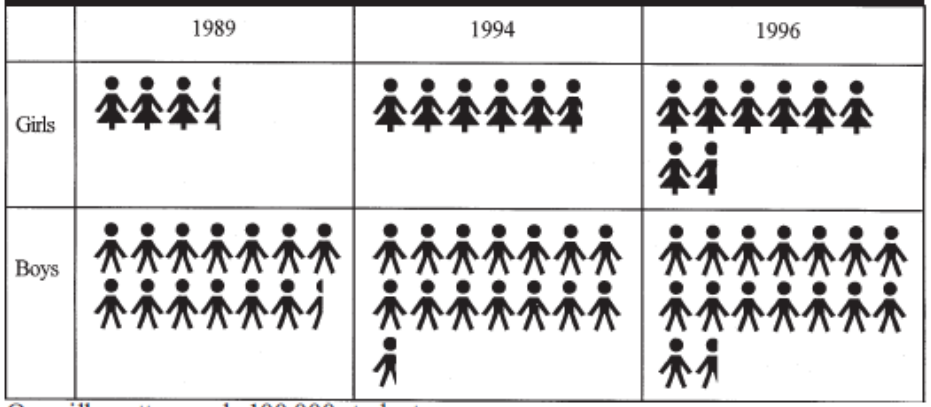
Case Study

USAID Evaluation of Girl's Education

Multiple Case Studies

Guatemala, Pakistan
Guinea, Nepal and Malawi

Figure 1. Girls' and Boys' Gross Enrollment, Balochistan and North-West Frontier Province



One silhouette equals 100,000 students.

Household Views on Benefits And Costs of Schooling

Results of a survey of 20 families, 10 each in rural Blantyre and urban Blantyre, a city in the southern highlands, give a glimpse of what motivates parents to send their children to school. Families shared these thoughts:

Value of schooling. Schooling is highly valued because it is perceived to increase the chances of finding employment. Most interviewees said that it is equally important for boys and girls to be educated, preferably through high school or university. Respondents in both urban and rural communities consider education to be "crucial" and "important for everyone on earth."

Schooling costs. Both primary and secondary schooling are costly to households. Some respondents initially said that primary schooling was free, because they no longer paid school tuition fees. But after further discussion, it became clear that primary schooling has other substantial costs, including uniforms and materials. In the rural area visited for this survey, parents spend an average of 79 kwacha per year ($4.53) to send their children to primary school. In the urban areas visited, households reported spending, on average, 149 kwacha per year ($8.54) to send their children to primary school.

Synthesis Volume

Synthesis Volume from USAID's Evaluation of Girl's Education

In a case study synthesis patterns are examined to develop findings and lessons

USAID EVALUATION HIGHLIGHTS NO. 64 June 1999

More, But Not Yet Better: USAID's Programs and Policies to Improve Girls' Education

Center for Development Information and Evaluation
U.S. Agency for International Development (USAID), Washington

Summary

During the 1990s the nations of the world formally recognized that no country had emerged from third world status without educating its citizens. They further acknowledged that girls' and women's education is strongly associated with increased economic productivity, smaller family size, improved health and nutritional status, and education of the next generation of children.

USAID was one of the first donors to invest in girls' education. The Agency gave the issue visibility in international forums such as the 1990 World Conference on Education for All: Meeting Basic Learning Needs, in Jomtien, Thailand. To inform an active dialog within USAID about best practices and strategies to ensure that all girls as well as boys get a good basic education, the Agency's Center for Development Information and Evaluation (CDIE) conducted an evaluation in 1997–98 of USAID's efforts. It consisted of five field studies (Guatemala, Guinea, Malawi, Nepal, and Pakistan), a country desk study (Egypt), issue-oriented research on Bolivia and Thailand, and an extensive literature review. The evaluation was guided by five fundamental questions that consistently resurfaced during interviews with dozens of USAID technical and senior management staff:

- What are the best ways to get girls into schools?
- How can the quality of girls' education be improved?
- What are the best ways to help girls complete a basic education?
- How are boys affected by efforts to improve girls' education?
- What are the critical features of approaches that lead to sustainable outcomes?

To get more girls into school, USAID encouraged host nations to increase the proportion of their investments in primary education, to design schools that are acceptable for girls, and to increase the supply of schools near girls. The Agency also engaged local communities to participate in their schools. Where possible, the Agency tried to strengthen institutions responsible for primary education, both public and private. And it encouraged school systems to eliminate or minimize obstacles to girls' participation, such as threats to their security, costs for their schooling, and regulations that excluded them. All of those measures contributed to enrolling more girls in school. But a rapid increase of enrollments comes with a price.

The evidence from the case study countries suggests that when the supply of schools expands rapidly, education systems struggle to manage the complexities of recruiting, training, and supervising large numbers of new teachers. Also complicated are the logistics of providing instructional materials, school construction, maintenance, and supplies. As a result, educational quality stagnates or declines, especially in the earliest grades, where the surge in enrollments is highest.

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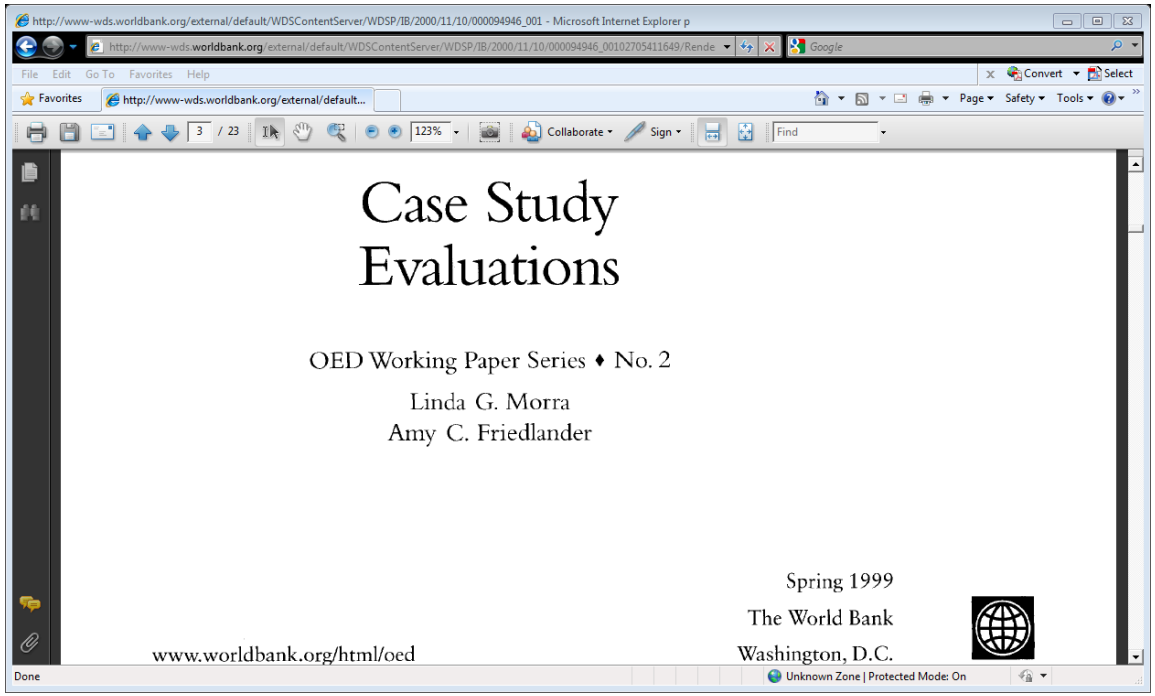
Case Study

The World Bank and the U.S. GAO both have case study evaluation handbooks available on line.



World Bank
http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/3DCA834E680B8E04852567F3004BAD27/$file/OED_WP1.pdf

GAO/PEMD-91-10.1.9: http://www.gao.gov/special.pubs/10_1_9.pdf

Ethnography

While an ethnographic approach to social research is no longer purely that of the cultural anthropologist, a more precise definition must be rooted in ethnography's disciplinary home of anthropology. Thus, ethnography may be defined as both a qualitative research process or method (one conducts an ethnography) and product (the outcome of this process is an ethnography) whose aim is cultural interpretation.

Brian A. Hoey, Ph.D.
Marshall University

Ethnography

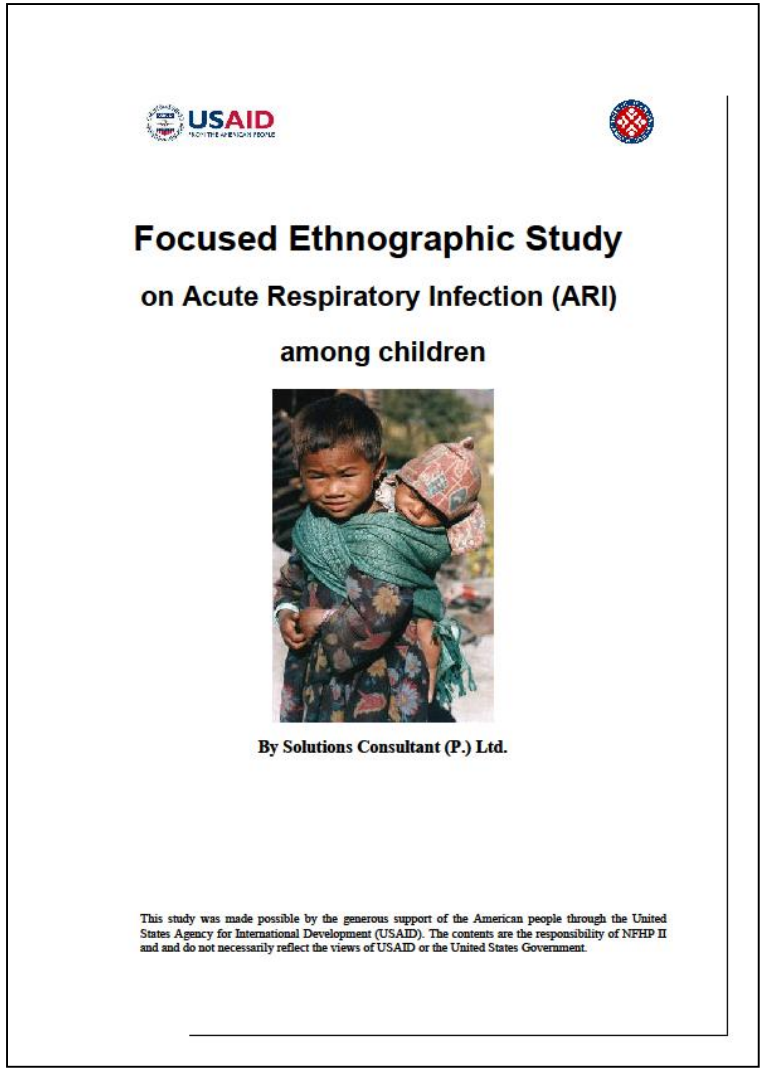
In the international development context, we can use standard ethnographic methods – participant observation – to:

- ➔ **Prospectively examine how things work in a cultural setting where we are considering funding a project intervention.**

- ➔ **Retrospectively examine differences in the way a project intervention work in one or more cultural settings.**

Ethnography

In Nepal, USAID invested in an ethnographic study to help staff understand, on a pre-project or "baseline" basis, how acute respiratory diseases were understood and treated in several different caste/ethnic groups.



USAID

Focused Ethnographic Study

on Acute Respiratory Infection (ARI)

among children

By Solutions Consultant (P.) Ltd.

This study was made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of NFHP II and and do not necessarily reflect the views of USAID or the United States Government.

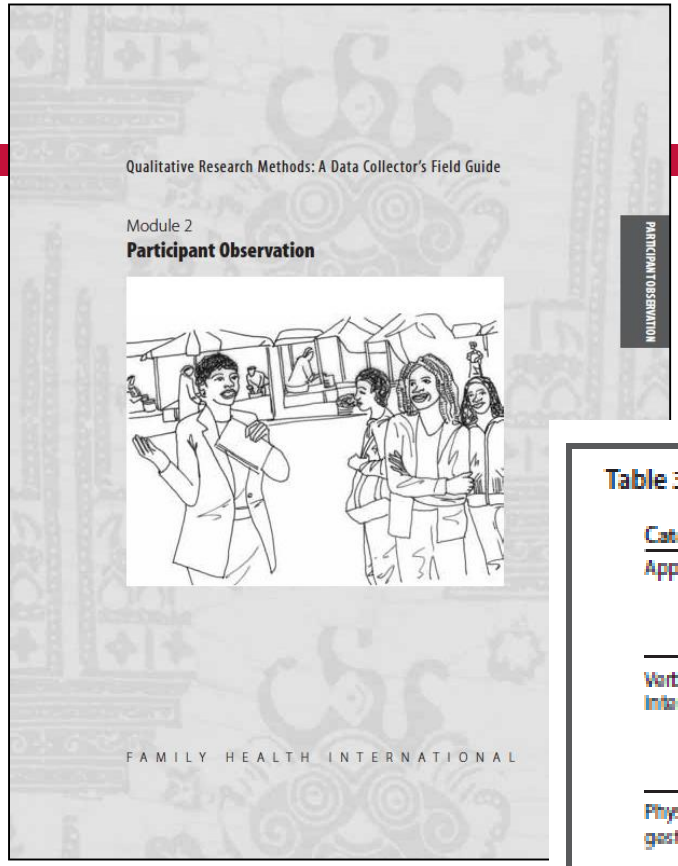
http://nfhp.jsi.com/Res/Docs/ethno_study_ari.pdf

Ethnography

Participatory Ethnographic Evaluation and Research (PEER) is a term used to describe rapid appraisal methods for gathering observation data when they are used in an ethnographic study framework and on a participatory basis.

This is one of the methods that USAID said should be used in its SOW for an evaluation of its Eastern Caribbean Community Action Project (EC-CAP).

Ethnography



Source: Family Health International

Guidelines on ethnography and participant observation are available on line and in book form, including from USAID partners.

Table 3. What to observe during participant observation

Category	Includes	Researchers should note
Appearance	Clothing, age, gender, physical appearance	Anything that might indicate membership in groups or in sub-populations of interest to the study, such as profession, social status, socioeconomic class, religion, or ethnicity
Verbal behavior and interactions	Who speaks to whom and for how long; who initiates interaction; languages or dialects spoken; tone of voice	Gender, age, ethnicity, and profession of speakers; dynamics of interaction
Physical behavior and gestures	What people do, who does what, who interacts with whom, who is not interacting	How people use their bodies and voices to communicate different emotions; what individuals' behaviors indicate about their feelings toward one another, their social rank, or their profession
Personal space	How close people stand to one another	What individuals' preferences concerning personal space suggest about their relationships
Human traffic	People who enter, leave, and spend time at the observation site	Where people enter and exit; how long they stay; who they are (ethnicity, age, gender); whether they are alone or accompanied; number of people
People who stand out	Identification of people who receive a lot of attention from others	The characteristics of these individuals; what differentiates them from others; whether people consult them or they approach other people; whether they seem to be strangers or well known by others present

http://www.fhi.org/nr/rdonlyres/ed2ruznpftevg34lxuftzjiho65asz7betpqigbbyorggs6tetjic367v44baysyomnbdjkdtbsium/participantobservation1.pdf

Phenomenology

An attempt to capture experience as lived, through descriptive analysis. It studies how things appear to consciousness or are given in experience, and not how they are in themselves.

Phenomenology is a way of unfolding the dimensions of human Experience. It examines:

a. *What is distinct in each person's experience.*

b. *What is common to the experience of groups of people who have shared the same events or circumstances*

Victor Daniels, PhD
Sonoma State University

Phenomenology

In Macedonia, following a period of ethnic tension, USAID mounted a community self-help project in the education sector, with a confidence building focus. Mid-way through the project USAID sought an evaluation.

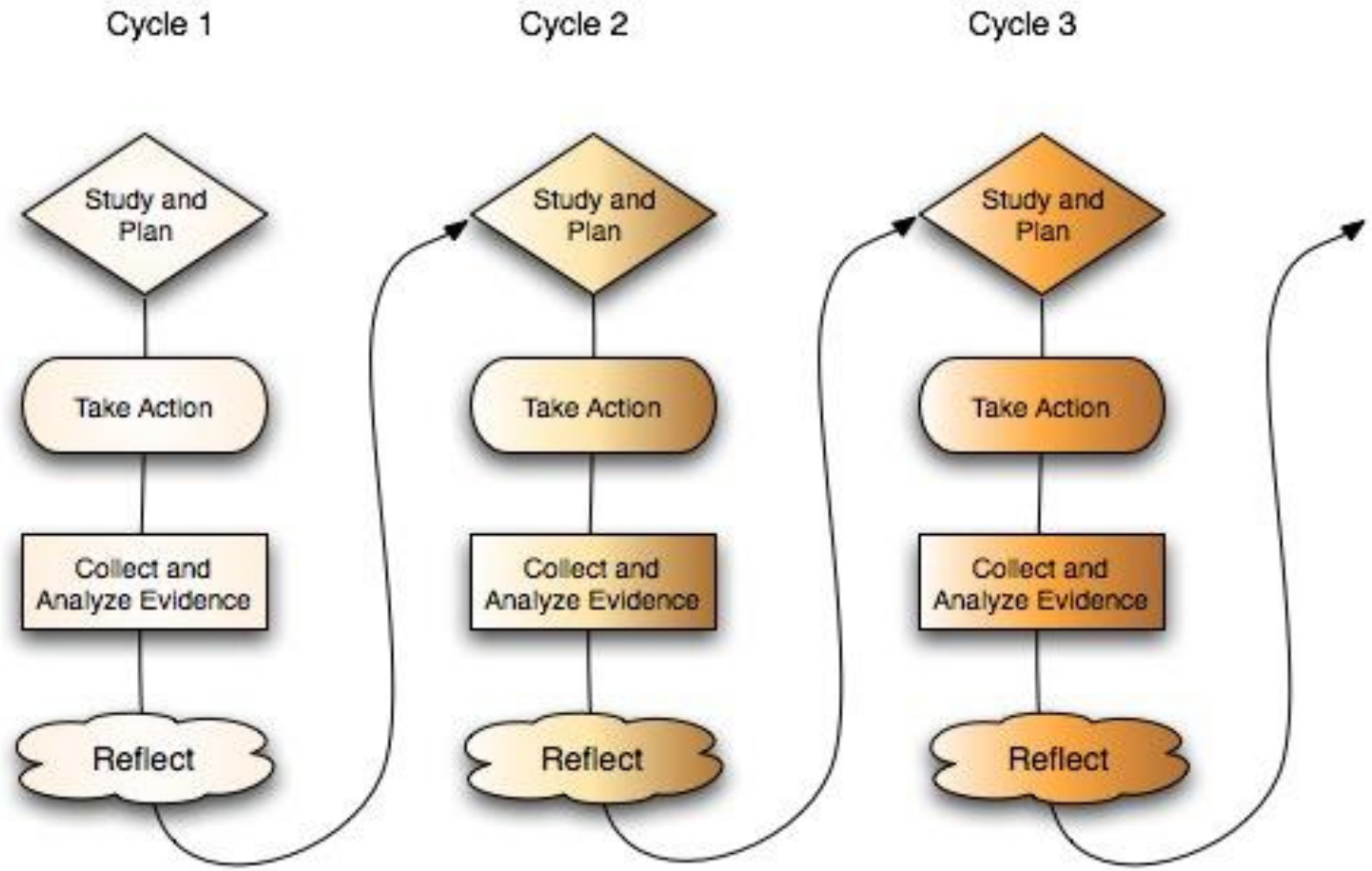
The evaluation focused on perceptions of the project among staff and stakeholders. Phenomenological research methods were employed.

Action Research

Action research is known by many other names, including participatory research, collaborative inquiry, emancipatory research, action learning, and contextual action research, but all are variations on a theme. Put simply, action research is "learning by doing" - a group of people identify a problem, do something to resolve it, see how successful their efforts were, and if not satisfied, try again.

Rory O'Brien, University of Toronto.

Action Research Cycles Stress Evidence-Based Planning



Progressive Problem Solving with Action Research

Source: Center for Collaborative Action Research

Action Research

USAID frequently integrates Action Research into project implementation when the intervention it is delivering is still in an exploratory phase – being improved as it is being delivered.

Action Research may be a good choice when an intervention is innovative – but not yet stable enough to warrant an Impact Evaluation

Strengths and Limitations of Qualitative Studies

Strengths	Limitations
• Methods can be relatively flexible and adjusted to meet evolving needs and understanding unexpected results. • May take more time and effort to collect and analyze data than is true for other types of evaluation designs, but this is not always the case. • Provides a rich understanding of informant's categories of meaning and experience and context in which the intervention was/will be implemented. . • High confidence in accuracy of picture drawn if member checking and other qualitative validity checks were employed. • Useful for developing a comprehensive understanding how interventions operate and what fosters and hinders their success.	• Method may be difficult to replicate, particularly if emergent design was used that resulted in significant design and methods modifications. • Quality depends heavily on skills of individual researchers. • Not always viewed as being adequate for generalization, i.e., predicting how an intervention will work in other situations. (Multiple case studies and phenomenological studies with a fairly large number of informants are stronger than single case studies in this regard, particularly if their findings converge.) • Causation findings may be ideographic (unique and not replicable). • Findings could be misleading if units examined were selected using inherently biased methods, or were otherwise non-representative (even of best cases if purposive sampling was used).

Deduction, Induction, and Detection!

Across a wide range of disciplines – beyond program evaluation – we accept evidence of causality that is based on the elimination of alternative explanations, rather than on randomized assignment and statistical analyses.

- Epidemiology – what caused the out break of disease or food poisoning?
- Justice systems – who committed the crime? (Sherlock Holmes, Law & Order, NCIS)
- Journalistic and historical inquiry – what precipitated the 2008-2009 recession?

Many of the instances in which we establish causality at an acceptable level (beyond a reasonable doubt) by demonstrating that no other cause was logically possible are single instance situations -- like case studies.

Modus Operandi

Modus Operandi (MO) was conceptualized by evaluation theorist Michael Scriven (1976) as a way of inferring causality when experimental designs were impractical or inappropriate. The MO approach, drawing from forensic science, makes the inquirer a detective. The inquirer/detective observes some pattern and makes a list of possible causes. Evidence from the inquiry is compared to the list of suspects (possible causes). Those possible causes that do not fit the pattern of evidence can be eliminated from further consideration. Following the autopsy-like logic of Occam's razor, as each possible cause is compared to the evidence, that possible cause supported by the preponderance of the evidence and offering the simplest interpretation among competing possibilities is preferred and considered most likely.

Michael Quinn Patton

The Qualitative Standard: Trustworthiness

Trustworthiness as a composite concept:

- **Credibility** – Are the findings believable to the participants on whom they report?
- **Transferability** – Are the study's findings generalizable - do they help us understand other situations?
- **Dependability** or Auditability – are the methods documented? Replicable?
- **Confirmability** – Can the findings be confirmed or corroborated? Other studies? Other voices?
- **Utilization** – How useful are the findings to clients, researchers, and the communities studied?

Threats to Trustworthiness

- **Reactivity** – Has the presence of the researcher affected behavior and thus the study data? (Hawthorne effect)
- **Researcher bias** – To what degree have researcher pre-conceptions and opinions colored the way in which data are recorded or interpreted?
- **Respondent biases** – To what degree have respondent perceptions of the process distorted the data: withholding information; deliberate misdirection; selective memory or interpretation of questions or events.

Strategies for Limiting Threats to Trustworthiness

Prolonged Engagement	• Researcher present enough times and for long enough periods to be recognized and accepted/tolerated
Triangulation	• Findings are consistent across variety of methods of study, observers and perspectives.
Peer Debriefing/ Support	• Researcher participation in deliberate sharing and feedback mechanisms with peers and colleagues, particularly if researcher is operating alone in the field.
Member Checking	• Findings presented to participants for their reactions – credibility, completeness
Negative Case Analysis	• Data that do not align with the researcher summarization/interpretation and their implications are fully examined
Audit Trail	• Adequacy of documentation of process; transparency.

Review Questions

- When and why should qualitative data collection methods be used?
- What are some commonly used qualitative data collection methods?
- What are the key steps of qualitative data analysis?
- How could you enhance the validity of inferences based on qualitative data?

Exercise

Exercise 15-2:

Watershed Case Study