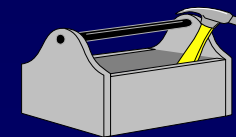
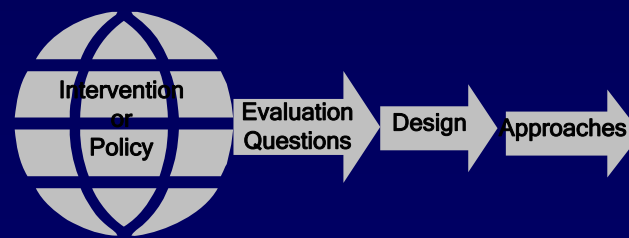
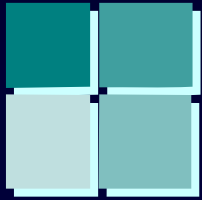


IPDET

# Module 8: Data Collection Methods

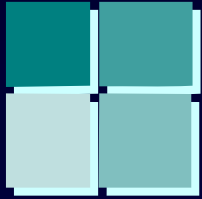


- Participatory
- Available Data
- Observation
- Survey
- Questionnaire
- Focus Groups
- Diaries, Journals, Self-reported Checklists
- Expert Judgment
- Delphi Technique
- Citizen Report Cards



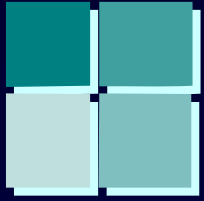
# Introduction

- Data Collection Strategies
- Data Collection General Rules
- Key Issues about Measures
- Quantitative and Qualitative Data
- Introduction to The Toolkit
- Techniques for Using Surveys
- Techniques for Using Focus Groups



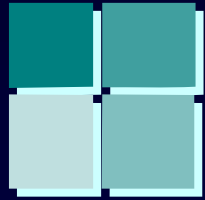
# No One Best Way

- Decision Depends On:
  - What you need to know
    - numbers or stories
  - Where the data reside
    - environment, files, people
  - Resources and time available
  - Complexity of the data to be collected
  - Frequency of data collection



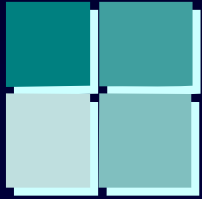
# Structured Approach

- All data collected in the same way
- Important for multi-site and cluster evaluations so you can compare
- Important when you need to make comparisons with alternate interventions



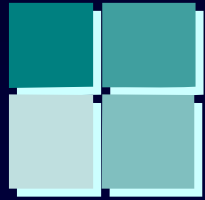
# When to Use Structured Approach:

- You wish to be very precise
- You are working with a large sample or populations
- You are sure of what you wish to measure
- You want to show your results numerically
- You need to make comparisons across different sites or interventions



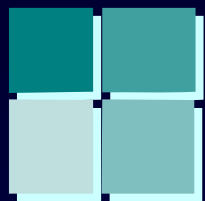
# Semi-structured Approach

- Systematic and follow general procedures but data are not collected in exactly the same way every time
- More open and fluid
- Does not follow a rigid script
  - may ask for more detail
  - people can tell what they want in their own way



# When to Use Semi-structured Approach:

- You are conducting exploratory work in a new development area
- You are seeking understanding, themes, and/or issues
- You want anecdotes, stories, or in-dept information
- You are not sure of what you wish to measure
- There is no need to qualify

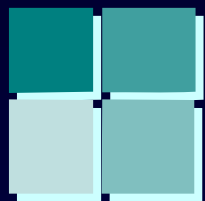


# Data Collection

## General Rules

- Use available data if they already exist
- If using available data, be sure to find out how they:
  - collected the data
  - defined the variables
  - ensured accuracy of the data

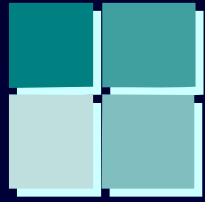
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# Data Collection

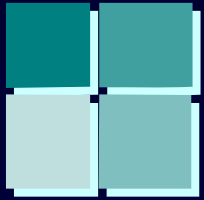
## General Rules (cont.)

- If you must collect original data:
  - establish procedures and follow them
  - maintain accurate records of definitions and coding
  - pre-test, pre-test, pre-test
  - verify accuracy of coding, data input



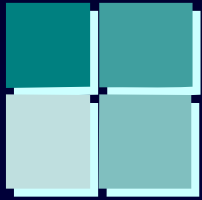
# Key Issues about Measures

- Are your measures credible?
- Are your measures valid?
- Are you measuring what counts?
- Are your measures reliable?
- Are your measures precise?



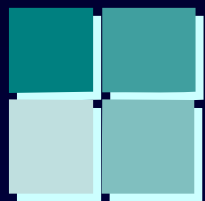
# Credibility

- How trustworthy or believable is your data collection ?
  - Are the data you are collecting giving you information about the actual situation?
- Make sure data you are collecting are relevant and most important information



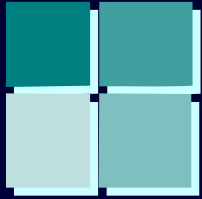
# Validity

- Does the measurement actually measure what it is supposed to?
- Two kinds of validity
  - face validity
    - contents of the test or procedure *look* like they are measuring what they are supposed to measure
  - content validity
    - content of the test or procedure adequately represents all that is required for validity



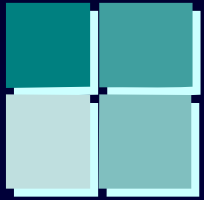
# Reliability

- Term to describe the stability of your measurement
- Measures the same thing, same way in repeated tests
- Examples:
  - in sports, speed measured by stopwatch
  - birth weights of newborn infants
  - attendance rates at schools



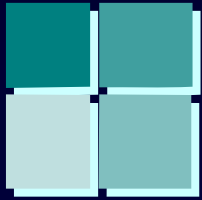
# Precision

- How the language used in the data collection matches the measure
- Example:
  - if the question is about countries, the measures must be at the national level
  - if the question is about people, the measures must be on the individual level



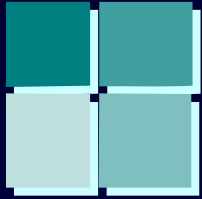
# Quantitative Approach

- More structured
- Attempts to provide precise measures
- Reliable
- Harder to develop
- Easier to analyze



# Qualitative Approach

- Less structured
- Easier to develop
- Can provide “rich data” – detailed and widely applicable
- Is challenging to analyze
- Is labor intensive to collect
- Usually generates longer reports



# Which Data?

*If you:*

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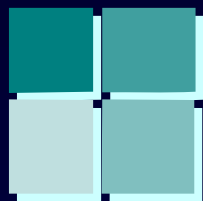
- want to do statistical analysis
  - know exactly what you want to measure
  - want to cover a large group
- 

- want anecdotes or in-depth information
- are not sure what you want to measure
- do not need to quantify

*Then Use:*

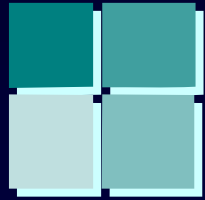
**Quantitative**

**Qualitative**



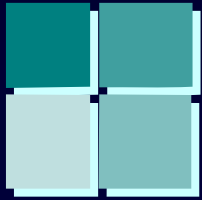
# Obtrusive vs. Unobtrusive Methods

- Obtrusive - observations are made of behavior with the participant's knowledge
  - interviews, surveys, focus groups
- Unobtrusive - observations done without the knowledge of the participant
  - historical/document/archival data
  - watching participants at a distance



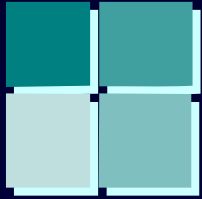
# How to Decide on Data Collection Approach

- Choice depends on the situation
- Each technique is more appropriate in some situations than others
- Caution: All techniques are subject to bias



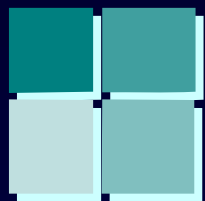
# Combinations

- Can use a variety of data collection approaches to answer different questions or for multiple sources
- Triangulation: collect same information using different approaches



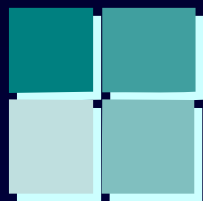
# Data Collection

- Participatory Data Collection
- Available Data
- Observation
- Surveys
- Focus Groups
- Diaries, Journals, Self-reported Checklists
- Expert Judgment
- Delphi Technique
- Citizen Report Cards



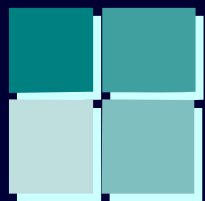
# Toolkit 1: Participatory Data Collection

- Data that are collected when interacting with people
- Examples:
  - transect walks
  - social mapping
  - community meetings



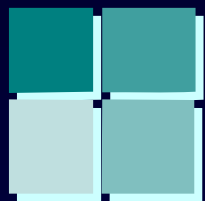
# Mapping

- Collect and plot information on the distribution, access, and use of resources within a community
- Useful tool to involve stakeholders
  - provides a way to work together
  - increases understanding of the community
  - generates discussions, verifies secondary sources of information, perceived changes



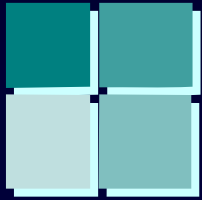
# Mapping Process

- Draws a picture of the community
- Places resources and assets in their locations
  - individual assets: skills, talent, networks, money, etc.
  - civic assets: faith associations, clubs, social groups, etc.
  - institutional assets: businesses, schools, health services, public transportation, etc.
  - environmental assets: parks, roads, farmland, housing, clean air and water, etc.



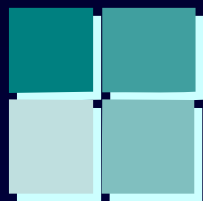
# Uses of Mapping

- Global Positioning System (GPS)
- Google Earth



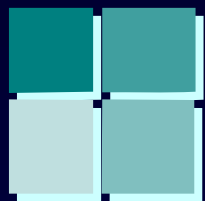
# Toolkit 2: Available Data

- Example sources:
  - files/records
  - computer data bases
  - government reports
  - other reports or prior evaluations
  - census data
  - documents (budgets, organizational charts, policies and procedures, maps)



# Using Agency Records

- Agencies may have already collected the data you need
- May also have summaries and/or reports, such as:
  - internal management reports
  - budget documents
  - reports to the public or funding agencies
- Key issues:
  - validity, reliability, accuracy

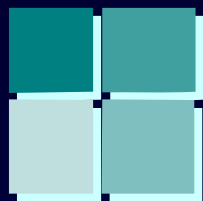


# Advantage/Challenge: Available Data

**Advantages**      Often less expensive and faster than collecting the original data yourself

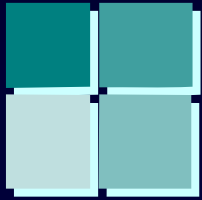
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**Challenges**      There may be coding errors or other problems. Data may not be exactly what is needed. You may have difficulty getting access. You have to verify validity and reliability of data



# Toolkit 3: Observation

- See what is happening
  - traffic patterns
  - land use patterns
  - layout of city and rural areas
  - quality of housing
  - condition of roads
  - conditions of buildings
  - who goes to a health clinic

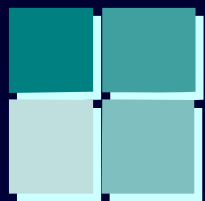


# Ways to Observe

Unobtrusive    No one knows you are observing

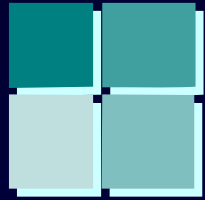
Participant    You actually participate in the activity

Obtrusive    The people being observed know you are there to observe them



# Guidelines for Planning Observations

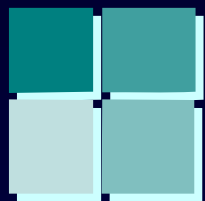
- Develop a checklist to rate your observations
- Develop a rating scheme
- Have more than one observer, if feasible
- Train observers so they observe the same things
- Pilot test the observation data collection instrument
- For less formal approach, have a few key questions in mind when you arrive



# Advantages and Challenges: Observation

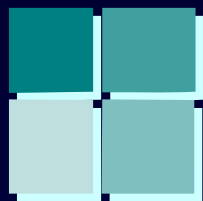
**Advantages** Collects data on actual vs. self-reported behavior or perceptions. It is real-time vs. retrospective

**Challenges** Observer bias, potentially unreliable; interpretation and coding challenges; sampling can be a problem; can be labor intensive; low response rates



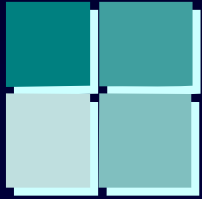
# Toolkit 4: Surveys

- Great for asking people about:
  - perceptions, opinions, ideas
- Less accurate for measuring behavior
- Sample should be representative of the whole
- Big problem with response rates



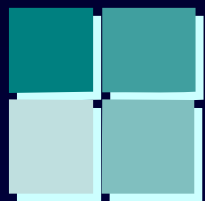
# Methods for Surveys

- In-person interviews
- Mail /phone/Internet interviews or surveys
- Self-administered questionnaires



# Structures for Surveys

- Structured:
  - Precisely worded with a range of pre-determined responses that the respondent can select
  - Everyone is asked exactly the same questions in exactly the same way, given exactly the same choices
- Semi-structured
  - Asks the same general set of questions but may leave many, if not all, of the answers open-ended

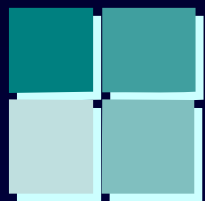


# Structured vs. Semi-structured Surveys

**Structured**    harder to develop  
                      easier to complete  
                      easier to analyze  
                      more efficient when working with large numbers

---

**Semi-structured**    a little easier to develop  
                              labor intensive to conduct  
                              harder to analyze but provide a rich source of data  
                              subject to bias in interpreting  
                              burdensome for people to complete as a self-administrated questionnaire

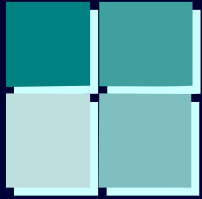


# Advantages and Challenges of Surveys

**Advantages** Best when you want to know what people think, believe, or perceive, only they can tell you that

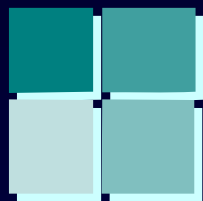
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**Challenges** People may not accurately recall their behavior or may be reluctant to reveal their behavior if it is illegal or stigmatized. What people *think they do* or *say they do* is not always the same as what they *actually do*.



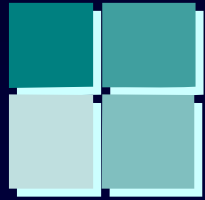
# In-person Interviews

- Useful for in-depth understanding of experiences, opinions, or descriptions
- Useful when other approaches do not work
- Should be conversational
- Can be done individually or in groups
- Can be structured or semi-structured



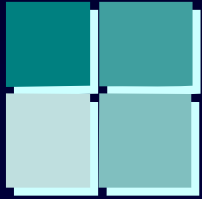
# Mail / Phone / Internet Interviews and Surveys

- Literacy issues
- Consider accessibility
  - reliability of postal service
  - turn-around time
  - do respondents have telephone access?
  - do they have Internet access?



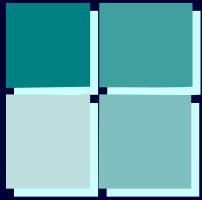
# Self-administered Questionnaires

- Written surveys that the respondent completes
- Can be structured, semi-structured, or a combination
- Should be short (no more than 20 min.)
- Usually include one or two open-ended questions
  - help make respondents more comfortable



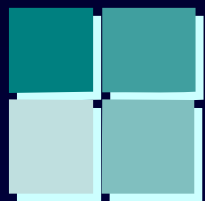
# Advantages of Interviews

- Can be structured, unstructured, or a combination
- Can explore complex issues in depth
- Forgiving of mistakes: unclear questions can be clarified during the interview and changed for subsequent interviews
- Can provide evaluators with an intuitive sense of the situation



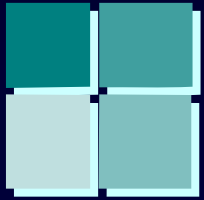
# Challenges of Interviews

- Can be expensive, labor intensive, and time consuming
- May not be able to explore why people have different viewpoints
- Selective hearing on the part of the interviewer may miss information that does not conform to pre-existing beliefs
- Cultural sensitivity: gender issues



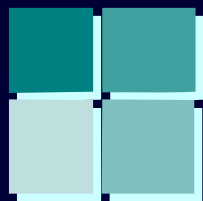
# Toolkit 5: Focus Groups

- Type of qualitative research where small homogenous groups of people are brought together to informally discuss specific topics under the guidance of a moderator
- Purpose: to elicit reliable data, not just interesting information



# Uses of Focus Groups

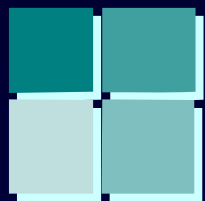
- Help develop a survey questionnaire
- Contextualize survey data
- Be used in tandem with surveys
- Be used as a separate data collection tool



# Focus Group Process

*Step*    *Process*

- 1 Introduce the focus group meeting
- 2 Have the participants introduce themselves
- 3 Present the first question, it should be easy, an ice-breaker
- 4 Ask the main questions
- 5 Ask the last (summary) questions
- 6 Ask if there are other comments or questions
- 7 Write-up impressions, major issues and points of discussion

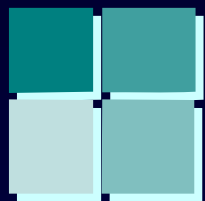


# Advantages and Challenges of Focus Groups

**Advantages** Relatively quick and easy, may take less staff time than in-depth, in-person interviews; provides flexibility to make changes in process and question; ability to explore different perspectives; it can be fun

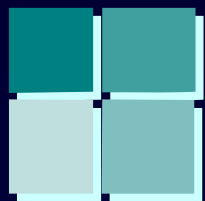
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**Challenges** Analysis is time consuming, participants might be different from rest of population; risk of bias in interpreting data; risk of group being influenced by moderator or dominant members



## Toolkit 6: Diaries, Journals, Self-Reported Checklists

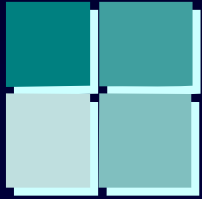
- Use when you want to capture information about events in people's daily lives
- Participants capture experiences in real-time not later in a questionnaire
- Used to supplement other data collection



# Guidelines for Diaries or Journals

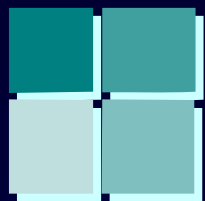
*Step*    *Process*

- 1 Recruit people face-to-face
  - encourage participation, appeal to altruism, assure confidentiality, provide incentive
- 2 Provide a booklet to each participant
  - cover page with clear instructions, definitions, example
  - short memory-joggers, calendar
- 3 Consider the time-period for collecting data
  - if too long, may become burdensome
  - if too short may miss the behavior or event



# Self-reported Checklists

- Cross between a questionnaire and a diary
- The evaluator specifies a list of behaviors or events and asks the respondents to complete the checklist
- Done over a period of time to capture the event or behavior
- More quantitative approach than diary



# Advantages and Challenges of Diaries, Journals ...

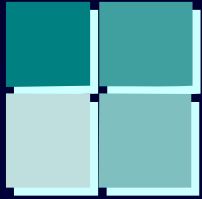
**Advantages**

- Rich data can capture the details that might be quickly forgotten over time
- Good for information on how people use time
- Helps in collecting sensitive information
- Supplements interviews

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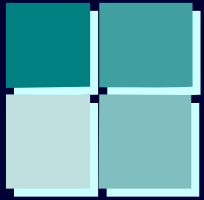
**Challenges**

- Requires literacy
- May change behavior
- Data may be incomplete or inaccurate
- Poor handwriting, difficult to understand phrases



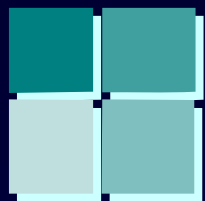
# Toolkit 7: Expert Judgment

- Interviews with experts, one-on-one or in a panel
- Can be structured or unstructured
  - everyone answers a set of specific questions
  - or free flowing (focus group model)
  - or formal presentations



# Selecting Experts

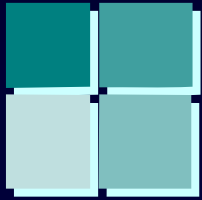
- Establish criteria for selecting experts based on:
  - recognized expert
  - areas of expertise
  - diverse perspectives
  - diverse political views
  - diverse technical expertise



# Advantages and Challenges of Expert Judgment

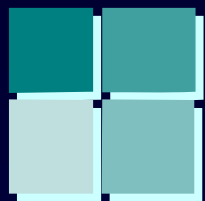
Advantages	Fast, relatively inexpensive Communication of final results can give credibility
Challenges	Weak for impact evaluation May be based mostly on perceptions Worth of data is only as good as the perceived credibility of the experts

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# Toolkit 8: Delphi Technique

- Enables experts who live in different locations to engage in a dialogue
- Experts asked specific questions
- Answers are returned to a central source for the evaluator to summarize and feed it back to the experts for further comments
- No one knows who said what so conflict is avoided
- Experts can agree or argue with others' comments



# Advantages and Challenges of Delphi Technique

## Advantages

Inexpensive

Conducive to independent thinking

Allows sharing of information

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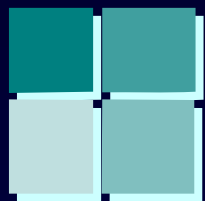
## Challenges

Judgments of a selected group only

Tendency to eliminate extreme positions

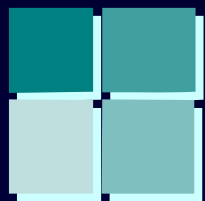
Time consuming and requires skill in communication

Requires adequate time and participant commitment



# Toolkit 9: Citizen Report (Score) Cards

- Used to collect citizen feedback on public services from actual users of a service
- Can assess the performance of individual service providers and/or compare performance across providers
- Can generate a database of feedback on services that can then be placed in the public domain



# Advantages and Challenges of Citizen Report Cards

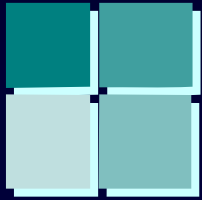
**Advantages**

- Mixes focus groups and questionnaire data collection
- Increases response rates
- Simple communication

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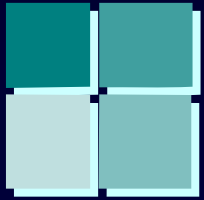
**Challenges**

- Local conditions must be conducive
- Requires a large sample
- Lack of predictability in how different players respond



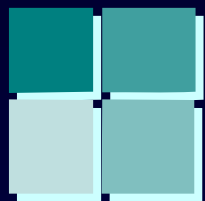
# Developing the Survey

- Define the purpose and objectives
- Decide the important issues to be covered
- Establish the relative weight of the different modules in the survey
- Identify important issues within sectors
- Question writers may need to learn more about how specific programs work
- Once this background work is done, the actual writing of the survey may begin



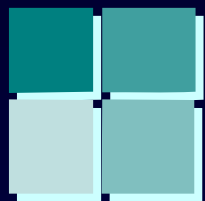
# Writing Questions

- Progressively more detail is needed at each level
  - Define overarching objectives
  - Balance between sectors
  - Balance within sectors
  - Write questions to study specific issues or programs



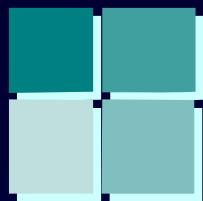
# The Right People to Develop Questions

- Small group
  - will know what subjects are of interest (policy and analytic) to the evaluation
  - will have experience using data from similar surveys on a variety of topics
- Team must get input from policymakers and program managers
- Use people outside to check for jargon



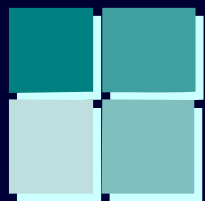
# Field (Pilot) Testing

- Test with small number of subjects, diverse areas and socioeconomic groups
- Field test should look at three levels:
  - as a whole
  - each section
  - individual questions
- Make revisions based on results of test



# Sequencing Questions

- Get the respondents involved in the interview as soon as possible
- Before asking about controversial matters, first ask about some facts
- Intersperse fact-based questions throughout the interview
- Ask questions about the present before questions about the past or future
- The last questions might be to allow respondents to provide any other information

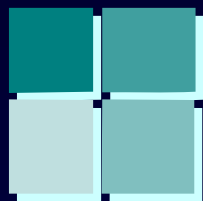


# General Guidelines for Conducting Surveys (1 of 3)

- Keep it simple, clear, easy, short
- Locate other people who have done the kind of evaluation you are interested in and locate surveys similar to what you think you want to do
- Make sure people know why you are asking them to participate
- Ask questions that are easy to answer and do not frustrate respondent's desire to be clear in their responses

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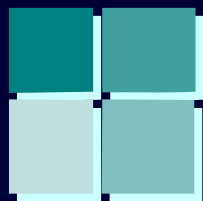
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# General Guidelines for Conducting Surveys (2 of 3)

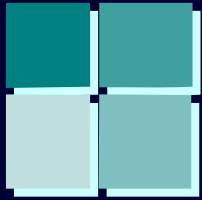
- Do not ask respondents for information that requires them to go to a file or other source. If you must do this, you need to let them know in advance so the material can be assembled prior to administering the survey.
- Respect their privacy. Treat surveys confidentially and have procedures in place to assure privacy. Make sure you can insure confidentiality. Never promise anonymity unless it can be absolutely delivered.

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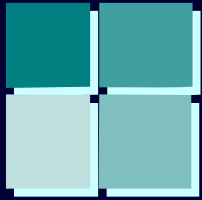
# General Guidelines for Conducting Surveys (3 of 3)

- Respect respondents' time and intelligence
- Tell them how they were selected and why their participation is important
- Do no harm: keep responses anonymous. For example, in your report, use aggregate responses; and assign an identification number to the data and destroy the link to the person's name



# Interviewing

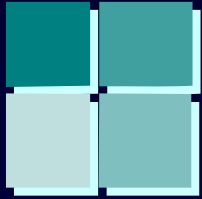
- Use trained data collectors
- Use as few data collectors as possible
- Establish a protocol for data collection
- Do a “walk through” or trial run
  - 3-4 face-to-face interviews
  - 10 questionnaires



# Developing an Interview

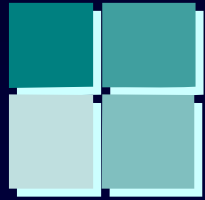
## *Step Procedure*

- 1 Define the purpose of the interview. Link your purpose to the evaluation objectives
- 2 Decide on open-ended or close-ended questions
- 3 Draft interview questions and sequence the questions
- 4 Prepare an Introduction and Closure for the interview
- 5 Prepare to record responses
- 6 Pre-test the instrument



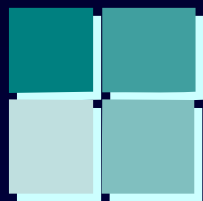
# Conducting Interviews

- Let the interviewees know:
  - why they are being interviewed
  - how they were selected
  - how the data will be used
  - whether it is confidential
  - how long the interview will take
  - whether you might want to talk to them again



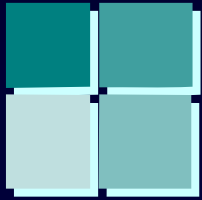
# Conducting Interviews: Set Up

- Try to pick a time a place that is quiet and free of distractions
- Ideally, have a second person to help take notes
- Tape recording might be a possibility; make sure you check with interviewee and get permission before recording
  - might want to ask when setting up the appointment



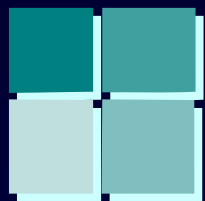
# Interviewing Skills

- Stick to your script
  - if asking close-ended questions, ask exactly the way written
  - have a script for clarifications
  - if asking open-ended questions, go *with* the flow rather than *directing* it
- Be aware of cultural norms: eye contact, direct questions, gender issues



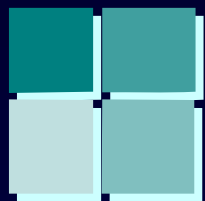
# More Interviewing Skills

- Balance: if you ask about what they think are the major supports, follow with what you think are the major barriers
- Try to avoid asking “why” questions, some may find this aggressive or critical
- Accept whatever they say with empathy and without judgment



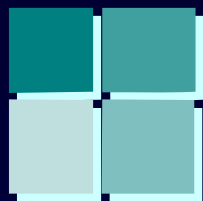
# Conducting Interviews: Added Touches

- Share interview questions ahead of time
  - no surprises
- Offer to share a summary of what you understand from the interview
  - this might be especially useful to give the interviewee (especially if a high ranking official) a greater feeling of control
- Thank you note afterwards



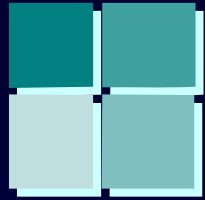
# Interviewing: Taking Notes

- Take good notes without distracting from the conversation
  - maintain eye contact while writing
  - write key words or phrases, not verbatim
  - but – if someone is saying something you want to capture, it is OK to ask them to repeat it or to finish what you are writing before asking the next question
  - may want to ask “May I use your exact words?”



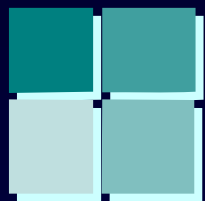
# Writing-up the Interview

- Every word and idea is valuable
- Take time to write up your notes as carefully and in-depth as possible
- It is best to do at least a brief clean-up of notes immediately afterwards (leave an hour between interviews)
- Write up full notes within a day of the interview: memory decay sets in quickly



# Writing Questionnaire Surveys

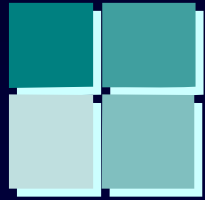
- Must be understandable to everyone
- If possible use an existing questionnaire as a guide
- Make the survey easy to complete
- Ask general questions first, then demographic, then more specific, then a final open-ended question or two
- Have draft questions reviewed by experts
- Pre-test, pre-test, pre-test



# Questionnaires Tips and Tricks

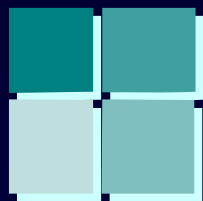
- Use simple, clear language, appropriate for audience
- Ask only one question at a time
- Write your questions so that all feel their responses are acceptable
- When possible, write questions so that responses range from negative to positive

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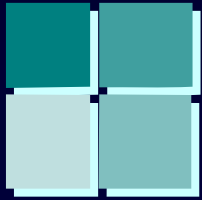
# Questionnaires Tips and Tricks (cont.)

- Avoid “yes” or “no” responses
- Avoid absolutes at either end of the scale (always, never), consider using scales
- Ask questions about the current situation
- Leave exits (no opinion)
- Avoid using double negatives



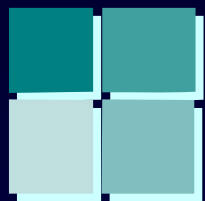
# Planning and Logistics

- Need several weeks to plan
- Focus group sessions usually 1 to 2 hours
- Some up to 3-5 hours with planned break (executives, in-house management, high-level participants)
- Have clear starting and stopping times
- Consider need for food and transportation



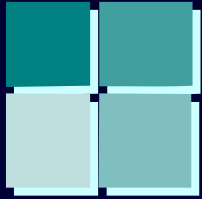
# Facilities and Materials

- Ideal - commercial facility designed specifically for focus groups
- Neutral, accessible, hotel meeting room, school or church meeting area
- Table and chairs (comfortable setting)
- Name tents
- Laptop computer for taking notes (if possible)
- Consider need for video or audio tape recordings or have additional people take notes



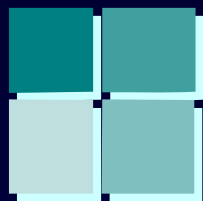
# Number of Focus Group Sessions

- No fixed rule
- Generally, do sessions until no new issues emerge or when common themes are consistent
  - usually 3 to 6 group sessions



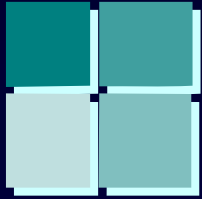
# Ground Rules

- “What is said here, stays here”
- Everyone is encouraged to participate but not everyone has to answer every question
- Respect different viewpoints
- There are no right or wrong answers
- One person speaks at a time



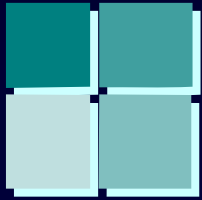
# Typical Questions

- What did you learn at the teachers college that is most helpful to you in teaching primary school?
- What are your greatest challenges in teaching primary school students?
- What should the college teach so that graduates are prepared to meet the current challenges?



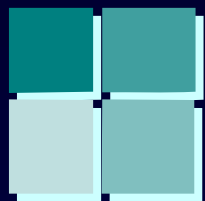
# Facilitator/Moderator Role

- Be familiar with the script, rather than reading it, so the session appears conversational
- Make sure everyone is heard
- Manage time, closing off discussion, moving to next topic
- Set ground rules
- Say as little as possible
- Keep personal views outside the room
- Use active listening
- Probe for elaboration (Tell me more)



# Write-up

- Write-up your impressions immediately after each focus group
  - major issues, major points of discussion
  - anything unusual that happened
- Compare with partner
- If recorded, make arrangements to have it transcribed, or to carefully watch/listen to it later
- Identify themes and emerging issues



# Data Collection Summary

- You can choose more than one data collection technique, multiple tools often help you meet the evaluation needs
- Do not let the tool drive your work
- Choose the correct tool to meet the needs of the evaluation

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