EDP 617: Data Collection

A Crash Course for Evaluators

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Welcome!

Data collection is a must in every evaluation. This slideshow will give you a compact primer and/or reminder of all things basic research methods.

Please note that most images have active links

Crafting a Design: The Framework

Here you select an evaluation model, approach, etc. or develop your own synthesis/integration of others. Ask yourself the following when thinking of your choice

- **Who** is likely to know what you are interested in? How can you represent various groups of participants?

- **What** particular aspects of the program are you interested in (criteria, issues)? What kinds of data relate to your questions/issues?

- **Where** do relevant activities occur? If you can't directly observe it, where is it reflected?

- **When** do relevant activities occur? When should you collect data?

- **How** can you explore the phenomena in ways that accommodate both your needs and stakeholder needs? Consider your resources and constraints. Be realistic.

Activity Part 1

Think about the criteria, standards, potential indicators and/or issues you may come across in an evaluation - possibly even one you or your group are considering.

> *Start with a brainstorm*. List as many as possible without worrying about whether they are feasible
>
> *Prioritize your brainstorm*. Rank those most likely to reveal program quality at the top of the list
>
> *Retain your brainstorm*. Keep your list because you will use it later

Data, Data Everywhere

Quantitative Data

- *Concrete* and more closely connected to standards-based approaches

  Tests

  Surveys

  Program Performance

  Statistics

Qualitative Data

- *Interpretive* and more closely connected to responsive evaluation approaches

  Document Analysis

  Interview

  Observation

  Surveys

Collecting Quantitative Data

Identifying existing program data sources

If possible, finding existing instruments / measures to collect additional data with

Developing surveys and tests to collect additional data with

A Note About Testing Sources

WVU Library database

Measurement Instrument Database for the Social Sciences (MIDSS)

RAND Education Assessment Finder

Sources of Test Information

On the next five slides we'll look at some sources you can utilize to get and assess established tests

Catalog

Mental Measurement Yearbooks (MMY)

> Provides factual information on all known tests
>
> Provides objective test reviews
>
> Comprehensive bibliography for specific tests
>
> Indices: acronyms, developers, publishers, subject, titles

BUROS
CENTER FOR TESTING

Another Catalog

ETS Test Collection

Annotated bibliographies on achievement, aptitude, attitude and interests, personality, sensory motor, special populations, vocational/occupational, and miscellaneous

Includes test title, author, publication date, target population, publisher, and description of purpose

Published and unpublished tests

Sources of Tests and Test Information

- Tests in Print

  | See all known commercially produced tests currently available

- Professional journals

  | See what others have used

- Test publishers and distributors

  | See current and former test types and kinds

Issues to Consider in Selecting Tests

- Psychometric properties

  - Validity

  - Reliability

  - Length of test

  - Scoring and score interpretation

- Non-psychometric issues

  - Administrative time

  - Cost

  - Duplication of testing

  - Objections to content by parents or others

Designing Your Own Tests

- Get help from others with experience developing tests

    - Item writing guidelines

        Avoid ambiguous and confusing wording and sentence structure

        Use appropriate vocabulary

        Write items that have only one correct answer

        Give information about the nature of the desired answer

        Do not provide clues to the correct answer

Survey Data Collection Methods

- Measures

  Interview

  Observation

  Surveys

- Media

  Face-to-face

  Online

  Mail

  Telephone[1]

[1] Maybe! This type of delivery is being utilized less and less.

Beneficial Extras

Follow-up or additional survey

Explain non-response in the narrative and include count of respondents v. non-respondents

Telephone (again...maybe)

Reminder postcard (paper surveys) / email (online surveys)

Qualities of Good Items

Address single concept

Avoid jargon

Avoid leading questions

Avoid sensitive questions

Do not assume facts not necessarily true

Include point of reference

Always Pretest/Pilot Test items

Collecting Qualitative Data

- Descriptive analyses of artifacts from participants' experiences – extracted through document analysis

- Participants' descriptions (in their own words) about their lived experiences, beliefs, feelings, and understandings – obtained through interviews

- Detailed descriptions of participants' activities, behaviors, and actions – recorded from observations

Types of Interviews

|	
Closed	mixed-response
Informal	conversational
Semi-structured	open-ended
Standardized	open-ended

Good Questions Are...

- Carefully worded – the wording determines how a participant will respond

- Open-ended – avoid forcing responses (How satisfied are you... v.s. Describe how you feel about...)

- Neutral – don't lead (Describe what makes this program successful v.s. Describe your perceptions of this program.)

- Singular – avoid "double-barreled" (How do you feel about this program *and* the way it is administered?)

- Clear – use language your participants use.

- Relevant to the central issues you want to explore – be parsimonious, value their time.

Good protocols…

- …include questions to elicit descriptive demographic information (age, education, family configuration, relevant experiences, etc.) if necessary and relevant

- …are thoughtfully ordered

  - Getting to know your participants, their experiences
  - Easing them into the research event
  - Sequencing to build trust in order to elicit their opinions, feelings
  - Sequencing to maintain interest

- …are of a reasonable length - 8 to 10 substantive questions is often a 45 minute to hour-long interview

- …remind you of the critical elements you may need to probe for

- …include a variety of types of questions

- …close by giving control over the interview to your participants (Is there anything I haven't asked about that you think I should know?)

Observation

Level of Engagement

Observation ←——————————————→ Participation
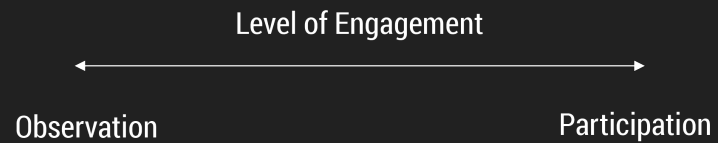
Different points at different times in an evaluation:

- Full observer

- Observer as participant

- Participant as observer

- Full participant

Unpacking and Interpreting

Strange → Familiar   seeking to understand

Familiar → Strange   questioning your own assumptions

Staying in long enough to get the insider's point of view, but not so long that you completely go native

Early Days in the Field

- Anxiety is a good thing: *Is what you're doing "right"?*

- Don't force yourself in – look for easy access.

- Where are the open places?

- How can you get into the closed places?

- Be wary of ordered permission – it isn't a proper invitation.

- Follow the contextual schedule – be as unobtrusive as possible.

- Don't assume you don't know anything, but do assume you don't know everything. Use what you do know to learn more.

Taking Notes

- Be unobtrusive – situate yourself carefully.

- With a team divide up the setting.

- Use a small pad or folded paper to take notes.

- Practice looking, listening, writing and keeping written lines separate.

- Detail, detail, detail – not good grammar and sentence structure.

- Jot down key words to jog your memory later.

- Keep a card with you or a guide that helps you focus on the things most important in the observation – but note other things, too.

- Continuous scripting – stopping sends the message "that's not important" or you're "looking for something."

- Be aware of everything!

- Attend to figure-ground. Go wide then narrow your focus.

- Keep track of yourself, your interpretations or reactions in brackets - Evaluator's awareness of self. You can be judgmental here!

- Keep track of the time.

- Use all of your senses.

- When recording conversations try to capture first, middle and last words. Listen for key words. Develop a shorthand. Verbatim quote " "

- Close, not exact ' '

- Missed something ____, fill in the blanks ASAP.

- Quote people all the time! What was said, how was it said? If something is said prior to the observation event, include that in your notes.

- At minimum summarize what seems to be idle talk.

Cooking Notes

- Begin cooking raw notes ASAP – fill in the blanks before you leave the scene

- Finish cooking ASAP, preferably immediately after event, but at least the same day– memory fades quickly and multiple observations tend to bleed together

- Be concrete. Distinguish verbatim accounts from paraphrasing and general recall.

- Work at the lowest possible level of inference

Good *Cooked* Notes Include...

- Mapping (drawn or descriptive) - Capture the physical setting, social arrangements.

- Descriptive, but not judgmental language.

- Excruciating, mundane detail.

- Visualization

- Sensory experience

- Presence of self

- Presence of others

- Context

- Figure-ground

- *Notes on Notes*

What the **** are *Notes on Notes*?

- Your "hunches" and preliminary analyses - *How will you follow up?*

- Your subjective feelings - *Why do you feel that way?*

- Contrary analysis by asking *Are you being biased or avoiding certain questions?*

- Clearly bracket these so you know what is true field notes vs. what is notes on notes.

Finding Documents

First begin with the public – work toward the private. Gaining access to documents follows the same path as establishing rapport with participants – the deeper the rapport, the more private documents you'll have access to.

Then rely on your guiding questions / issues, questions that emerge during data collection and data analysis, and your "hunches" to make decisions about what to look for and what to analyze.

Types of Documents

Public records   publicity materials, board meeting minutes, evaluation reports, etc.

Program generated internal   memos, email correspondence, training manuals, time cards, performance logs, etc.

Personal documents   journals, scrapbooks, photos, letters, etc.

Physical materials   equipment, tools, records of the results of actual behavior

Why Conduct Document Analysis?

Triangulation

Primary source information about goals, performances, contexts, etc...

Proxy for non-observables

History, private behavior / interactions… you can't be there all the time.

Mulling

To stimulate thinking about important questions / issues to pursue through more direct observations and interviewing.

Limitations

Information may be incomplete or may not line up neatly with your evaluation questions and issues.

Sampling may be unrepresentative – documents produced by one group may not be produced by another group.

May be difficult to establish authenticity, accuracy, biases.

Establishing the Provenance

- Ask about the history of the document – when was it produced, where has it been archived?

- Consider how you obtained the document – who gave it to you, why did they give it to you?

- Is the document legitimate, authentic, accurate?

- What are the circumstances of the document's production – why was it produced, who produced it, when was it produced (historical context)?

- What informed the document's production – a firsthand account, a secondhand account, a reconstruction, an interpretation

- Consider possible biases and their impact on the document

- Are there other documents that may help you verify the legitimacy, authenticity or accuracy of the document?

Activity Part 2

Return to your prioritized list of criteria and/or issues for your class project

- For several items near the top consider what existing data there is that you are aware of AND specific ways you might collect data

- Think about how far down the list you might feasibly go for your course project

And That's It

Stress that your choice in method(s) will likely determine the type and strength of outcomes you get from your evaluation. If you have any questions, please feel free to reach out.