Data Collection Techniques Guide

The following guide should be used for determining the use of specific data collection techniques in a social research inquiry. While the details listed here should provide the bases for how each technique comes to be used, the practitioner-researcher should contemplate how each technique might be extended, used in conjunction with other techniques, and in general, applied to best provide access to data to respond to the research inquiry.

Qualitative Techniques

Qualitative Research is interested in uncovering narrative accounts of the experience of a location, event or phenomena. As such, qualitative data collection techniques typically develop *narrative* descriptions, and rely heavily on the direct insights of individuals- through the soliciting of community members' views.

Qualitative data collection techniques would be used where an insight into the experiences, feelings or attitudes attached to a particular phenomenon is sought.

Interview

Purpose:

Interview involves engaging directly with individuals to seek their views through conversation.

Structure:

Interview technique will normally work from a series of broadly pre-determined topic areas for discussion. While *fixed* questions may not be necessary to define, a general sense of themes for discussion should be identified in advance of the interview being conducted. **The practitioner-researcher needs to have a clear sense of what the discussion will be about and what lines of enquiry should be covered during the discussion with the interview participant**. These themes will relate to the *Research Questions* defined for the research inquiry, as set out in the *Research Design* for the project.

Process: Interviews can be:

- direct or 'cold-call' discussions conducted as the community member is encountered at an event.
- pre-arranged, in which a community member would be invited to the interview at a set time and location.

An interview should ALWAYS commence with an invitation to participate in the interview, with permission to record the interview noted. This invitation will detail the interviewers name and position, explain the purpose of the interview and note why the interview is being recorded. This invitation and the community member's acknowledgment of participation should be recorded.

Resources:

An interview should be recorded using an unobtrusive recording device; an iPod or similar recorder is ideal.

Researcher field notes capturing the non-verbal aspects of the interview might also be made directly after the interview. These field notes would record such things as notable gestures made by the interviewee, notes on the general ‘feel’ of the interview, detail on what was happening in the setting as the interview was occurring. These notes provide a sense of context for the interview.

Considerations:

Interview provides a powerful means for capturing community member views. However consideration should be given to:

- Community member frustration: if the interviewee is showing signs of frustrations at being engaged in the interview, or is clearly uninterested, politely cease the interview. Frustrated or bored interviewees do not produce good data.
- Researcher presence: who you are as a practitioner-researcher will influence how community members respond to you during interview conversations. Consider dynamics of gender, race and age difference and how your identity will influence how interviewees respond to you.
- Time and Location: where will the interview be conducted? How long will it run? Is the setting of the interview conducive for recording?
- Data: how will you store and organize the interview data for analysis and later use in reports and research outcomes?

Observation

Purpose:

Observation provides the researcher’s account of the setting or location being researched, with emphasis on recording the layout of the physical space, the description of individuals and groups present and the ‘dynamics’ at play within the setting.

Structure:

Observation data is derived from the recording of the practitioner-researcher’s view of the setting, and will be captured via field notes and photographic/videographic means.

Process:

The recording of field notes and photographic/videographic capture of a setting should work in tandem, with reference in field notes to specific photographs. The practitioner-researcher will be interested in capturing a sense of the nature of the setting.

Resources:

Observation will require the use of (typically) hand-written field notes produced at the setting, with accompanying photographs and video also captured. Consideration should be given to the appropriateness of photographing the setting.

Considerations:

Observation provides an invaluable means for capturing a sense of the broad dynamics of a setting, but consideration should be given to:

- Researcher partiality: Observations are views captured by the researcher alone, and should be considered alongside data that captures community member viewpoints (such as via Survey and Interview)
- Preparing Field notes: field notes can be difficult to produce at the setting. Consideration should be given to how a rich and meaningful description of the setting can be recorded in field notes within the constraints of the setting.

Document Analysis

Purpose:

Document Analysis enables insight to be drawn from those documents that circulate in a particular setting or event.

Structure:

Document Analysis involves 'decoding' the documents that attach to a particular event or setting to determine the views that went into the production of the document (and event). In particular, Document Analysis can be useful for seeking the 'official' views of an event or phenomenon (such as via a formal report or policy) or alternative views (such as via graffiti). These 'documents' will be read by the practitioner-researcher as portraying certain viewpoints.

Process:

Following the 'noticing' of useful documents, a process of 'decoding' the document will occur. The researcher will analyse the document for keywords, images, and suggestions that provide insight into the phenomenon being explored.

Resources:

Although some documents will be able to be physically collected (including such documents as brochures and flyers, newspaper articles and reports) others may need to be captured photographically (including such documents as graffiti and large signage). A good quality, high-definition, image of the document should be captured, along with photographs that show the broad location of the document within its setting.

Considerations:

Document Analysis can provide a rich sense of the viewpoints that underpin an event or phenomenon according to the ways these views find expression in documentation. But consideration should be given to:

- Range of documents: consideration should be given to the range of documents available in a setting, and from which sources they derive. Who is speaking within these documents?
- Viewpoints expressed: is there a dominant viewpoint from which documents attached to a setting or phenomenon derive? What alternative views are available?
- Over-analysis: it is possible to over-analyse a document and read too much into what it is saying. What other data sources are available to confirm the analysis you have made of the document?

Quantitative Techniques

Quantitative Research is interested in uncovering the amounts and frequencies attached to a particular location, event or phenomenon. As such, quantitative data collection techniques typically result in *numerical* data that can be expressed in statistical form.

Quantitative data collection techniques would be used where an insight into the *how many*, *how often*, *how long* questions are required.

Survey

Purpose:

Survey, like interview, provides insight into community member views, but will record these views against focused, pre-determined sets of defined questions. The survey provides an invaluable means of gauging community views around a defined set of themes.

Structure:

The survey will be deployed via the development of a survey instrument, administered face-to-face by the practitioner-researcher, via distance (for example through a mail-out) or electronically using a third-party survey application (such as Survey Monkey).

Survey questions should be grouped together and progress in a logical flow. Questions should provide the respondent with a fixed set of response options (as a 'Likert' scale or 'Yes/No' options) and contain clear, unambiguous questions.

Process:

The practitioner-researcher will compile the survey questions according to insights that are required by the *Research Questions* determined for the research inquiry. The survey questions should be grouped in a sequence and carry a logical flow from one to the next. Decisions will be made by the practitioner-researcher as to whether the survey will be administered face-to-face, by distance or in hard-copy or electronic form.

Resources:

The survey will require the development of a *survey instrument*- the survey question set and response scales that constitute the survey. If the survey is to be administered electronically, access to a suitable application will need to be confirmed.

Considerations:

Survey provides a valuable means of gathering community responses on a set range of topics. However the following considerations should be given when designing and implementing the survey:

- Response rates: survey response rates are typically low for surveys conducted at distance (for example, via mail-out). Consideration should be given to what minimum number of survey responses are required for a valid data set.
- Questions: the design and sequencing of questions should be considered carefully. Are questions clear and

direct? Does each question link to the next and provide a logical sequence for the respondent?

- Face-to-face or Distance delivery: consideration should be given to the way the survey will be administered. Face-to-face capture allows the research to record responses directly to the survey instrument whilst in conversation with the community member, but these will usually be shorter surveys. Distance delivery of surveys allows for a targeted group of respondents to be identified, however response rates will typically be lower.
- Scope of responses: as a data collection technique that provides limited scope for response by the respondent, survey does contain limitations on what it can tell about a respondent's views. The questions asked and sequencing of these questions needs to be considered carefully to enable a rich understanding of the respondent's views to be deciphered.

Statistical Counts

Purpose:

Statistical counts provide an invaluable means of gathering data connected to the rate and frequencies connected to a particular event or setting. Statistical counts are especially useful in gathering data connected to attendance rates at events.

Structure:

The statistical count will typically be collated as a tally. This tally might contain complexity and provide insight into several measures simultaneously (including attendance rates, as well as well break-downs of demographics, via such characteristics as gender, age or ethnicity).

Process:

The Statistical Count will be collated by the practitioner-researcher according to a tally. A pre-planned tally sheet should enable the collection of data with consideration of the collation of this data by time, demographics and location.

Resources:

The Statistical Count will work from a tally sheet, completed by the practitioner-researcher. Photographic records (captured as part of an Observation) of the event or setting being explored might accompany the Statistical Count to provide a visual reference to the tally data.

Considerations:

The Statistical Count provides a clear insight into who attended a specific event or how frequently a certain phenomenon occurred. However, the following points should be considered:

- Anomalies in frequency: the researcher-practitioner should consider how any anomalies in the frequency being explored might influence data. In particular, attendance rates early at events will typically be higher than at the end; this will need to be explained in the analysis of the data.
- Consideration of context: the nature of the setting or event will influence how data derived from a statistical count might be interpreted. For example, events that have a heavy gender focus will typically show emphasis of one gender over the other; age restricted events will typically show a low-nil presence of young people.
- Researcher presence: undertaking the statistical count can be time consuming. The practitioner researcher should be prepared be in attendance for the duration of the full event to enable the collation of a representative stock of data collected at set points throughout the duration of the event.