

Needs Survey and Data Collection

Contents

Introduction

Data collection by observation

Interview and Questionnaire methods for data collection

Introduction

When you do research or are involved in a project, after the completion of planning, you need to collect relevant information or data. First of all you have to determine what the information you need for your research or project is. Then you have to decide from whom you are going to collect the data, and what techniques or instruments are to be used for the data collection. It is important to pay ensure that the techniques, instruments and the sample of people used are appropriate for the information needed.

The term “survey” frequently is used to describe research that involves administering questionnaires and interviews. Therefore, “needs survey” refers to a survey that focuses on the needs of a particular organisation or group of people.

Information also can be gained by direct observation. For teacher educators, observation involves watching and listening to what others say and do in order to understand what is happening and why.

Data collection by observation

All data collection methods have particular strengths and weaknesses. This is why you should always use two or more methods to collect your information – because the strengths of one will compensate for the weaknesses of the other. This is called ‘triangulation’. Observation allows information to be collected directly without significantly intruding on the time or work of others. Observation involves the researcher or ‘data collector’ to identify and interpret what he or she sees – or believes they have seen – as it occurs. What one sees or observes, of course, is open to personal bias and previous experiences. This is why observational data – on its own – can often prove to be very inaccurate.

An important advantage of observation is that the observer often may be able to see what participants cannot. In addition, observation can provide information from those who cannot speak for themselves such as babies, very young children and animals. Always remember, however, that you must never collect information from anyone by any method without their consent, or that of their parents or guardians. Observation is a very helpful method for cross-checking information that is collected by other techniques such as questionnaires or interviews.

However, there are also limitations for observations. First, some events or behaviours occur rarely, and may not be evident when the observer is present. Second, when people are observed, they consciously or sub-consciously change the way they behave (this is called the Hawthorne Effect). Third, observations are filtered through the interpretative lens of the observer, and so can be inaccurate and misleading. Finally, when compared with other data collection methods, it can be very time consuming and therefore costly.

Procedures for observations

Observational methods can be a useful way of collecting information on many educational issues and problems. Denzin (1989) has outlined eight key steps in using observational methods:

1. Formulate a very clear statement of the problem or issue to be addressed.
2. Decide who you want or need to observe, and where.
3. Make contact and establish a trust relationship with the people to be observed.
4. Negotiate observational methods and times.
5. Begin observation and recording.
6. Decide how you are going to code the data, and then code it.
7. Analyse the results for key ideas, relationships, and suggestions.
8. Write your report and discuss the findings with appropriate people.

Interview and Questionnaire methods for data collection

An interview is a process for collecting information through conversation with people involved with a particular issue or problem, or who are in a position to make informed comment or suggestions. In broad terms, there are two kinds of interviews: structured and informal.

Structured interviews are used to collect beliefs, perceptions, ideas, feelings, motivations, experiences, accomplishments and needs through a standard schedule of questions. Everyone interviewed is asked the same question, and usually their responses are coded by the interviewer or researcher to allow the answers to be re-

coded in set categories. Data from structured interviews usually is analysed and reported in the form of tables and statistics.

Informal interviews ask only a small number of 'stimulus questions' that are designed to get the respondent to talk generally and broadly about the issues or problems. A typical question might be: "Why do you think this is happening?" or "Can you tell me about the background to this problem?". Data from informal interviews usually is analysed and reported in the form of key issues or messages to guide practice.

Good interviewing requires practice and skill, both in conducting the interview itself and in analysing the information obtained. In particular, interviewers must: quickly develop a trust relationship with the respondent; have a clear plan for the topics to be covered in the conversation and the questions that might draw out the necessary information; account for the Hawthorne Effect – respondents giving the answers they think the interviewer wants rather than what they actually think or believe; and ensure that the privacy of those being interviewed is maintained.

The term 'questionnaire' usually is applied to a series of predetermined questions that are answered in written form. Questionnaires items can broadly be classified as open or closed. Open items allow the respondent to express their opinion and to write several sentences about their views or how they feel. Closed items require respondents to answer on a scale provided. Information from open items usually is reported as key issues to be addressed or significant messages to guide practice. Information from closed items usually is reported in the form of tables and statistics. When using a questionnaire, the researcher must consider a number of important issues, including: wording the questions to ensure they are clear and unambiguous; ensuring each question contains only one idea; deciding on how big a sample to use; developing strategies for maximizing response rates; and deciding how the information collected will be recorded and analysed.

Generally, the major advantage of interviews over questionnaires is that they allow the researcher to hear the tone of voice used, and to observe body language. The major advantage of the written questionnaire is that it can be distributed to a much greater number of people and so obtain a far broader response to an issue or problem.

References

Denzin, N.K. (1989). *Interpretive Biography* Newbury Park: Sage