**An Overview of Research Methods Used by Social Scientists**

Social scientists have a range of methods they can use for the third step in the inquiry process- gathering data. The research method chosen will depend on the question or problem and the field of study. Anthropologists, psychologists, and sociologists often prefer different approaches.

**Case Studies**

A case study is the observation of an individual or a group over a period of time. A psychologist may work closely with one individual in order to understand and help that particular person. A sociologist may observe and interview the students of one class. An anthropologist may study people in one culture.

Why study one example or case? By studying one situation in depth, a lot of detail can be unearthed, and hypotheses about similar situations can be developed. Researchers may then use these hypotheses to study and understand other individuals, social groups, or cultures. For example, if you were to study the case of one student whose marks seem to be falling as a result of having a car, you might be able to apply what you have learned to other students who are not doing well in school.

**Experiments**

The essence of an experiment is to determine how one factor is related to another- for example, could one factor be caused by the other? What happens if

one factor is changed? How does this change appear to affect other factors?

In the natural sciences, such as physics, biology, and chemistry, experiments are widely conducted. However, in the social sciences, this research method is used with great care due to the ethical questions involved in experimenting with human beings. For example, it might be possible to measure the impact of car use on grades by encouraging one group of students to spend every evening over the next few months driving around, while a control group spent several hours each evening doing homework. Would this be ethical? Probably not- it’s likely that the grades of the students in the experimental group would fall, and the students would suffer the consequences. It would be ethical, however, to record how many hours car-owning students do homework per week, compare this number with students who do not have access to a car, and then observe their grades. In this case, the social scientist would not be intruding or harming the students.

**Sample surveys**

Sample surveys are used to obtain information about the thoughts or behaviour of a large group of people. They are called “sample” surveys because researchers ask questions of a fairly limited number of individuals who represent a larger group. For example, a researcher might investigate the impact of car use on grades in the entire school by surveying several teens from different classes. Sample surveys are often used by sociologists because they provide a general idea of trends and responses. The tool used to gather information is usually a **questionnaire** – a series of formulated questions aimed at collecting information for research or statistical study. Many questionnaires use a multiple-choice format, which allows researchers to collate the results easily.

How many people must be sampled to have a reliable result? The sample should be large enough to include a range of characteristics that might affect the result. For example, a car use survey should include students with different levels of academic achievement. In political surveys, when polling companies ask 1000 people whom they will vote for, they must make sure that they question a range of people representing different aspects of the population with respect to age, sex, occupation, region, culture, and other characteristics. From this representative sample, they will draw conclusions about Canadians in general. One drawback is that sample surveys do not allow people to explain their thoughts or opinions beyond responding to the questions themselves.

**Interviews**

Interviews are used when a researcher requires detailed information from a few people and is looking for explanations or descriptions of thought and behaviour. An interview takes the form of a dialogue between the interviewer and the subject. Generally, a number of questions are prepared before the interview, the interviewer may stay with these questions or allow the interview to develop according to the direction that follows. Interviews are a useful tool for anthropologists, psychologists, and sociologists alike.

**Observation**

In everyday life, we use observation to learn about how people respond in certain situations. Observation techniques are also important in the social sciences- in psychology, sociology, and anthropology. Methods that rely on observation have the advantage of helping researchers learn about people in their normal surroundings or “in the field” as social scientists say.

There are several methods of observation. **Unstructured observation** involves studying people without a predetermined idea of what to look for. A researcher may sit in a cafeteria or on a park bench and note what people do and say, open to anything that might occur. Unstructured observation allows for fresh insights and ideas, and provides new hypotheses for further research.

**Structured observation** involves planning beforehand what will be observed and noted, and keeping a list of things to look for. For example, a researcher studying the effect of car use on grades might observe a class and look for signs of fatigue or restlessness in students known to be car owners. The observer might also use content analysis, which is a particular kind of structured observation.

**Participant observation** is a technique used mainly by anthropologists. The researcher not only observes the group but also participates in the group’s activities – for short periods of time in one’s own society or for longer periods of time in other cultures. Anthropologists may live with people in another culture or country for as long as one or two years.