

Chapter 2

Research Practice: methods, application, analysis and presentation

Objectives

By the end of this chapter you should be able to:

- identify a research problem;
- formulate relevant research questions and/or hypotheses;
- understand the purpose and importance of the literature review;
- evaluate existing information about the problem;
- identify and apply appropriate methods of enquiry;
- identify and apply appropriate methods of sampling;
- present data in a variety of appropriate forms;
- apply appropriate techniques to analyse data;
- discuss your findings and draw reasoned conclusions;
- make relevant and practical recommendations.

This chapter provides practical information on planning and carrying out your investigation into Caribbean issues and in producing the report which you need to submit for the School-Based Assessment part of your course.

The Research Problem

A research problem is the topic you would like to investigate, to address or to study. It is a statement on an area of concern, something that needs improvement or an issue to be investigated and/or resolved. This statement presents the problem in a neutral way – it does not say how to do something or offer any kind of view or solution. Your research problem should be a topic that is of some interest to you and one which is, to some extent, familiar to you. Identification of the research problem is the first stage in the research process.

Identification of a Research Problem

There are many issues in the world that need corrective actions and the implementation of policies. In general, society is beleaguered by numerous problems and they need to be studied to find solutions. Chief among them are social inequality, resistance to diversity, poverty, discrimination, epidemics, unemployment and religious intolerance. The Caribbean is an area that has its share of social issues which need addressing.

There are three basic sources from which a research problem is derived:

1. Your own interest.
2. A modern or contemporary interest.
3. The existence of different views in an area which invite investigation.

Exam Tip

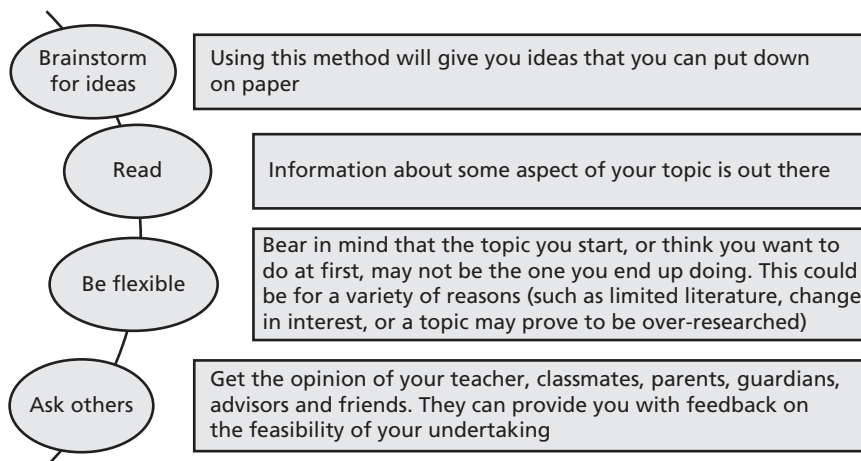
Research Problem Selection

The CAPE® syllabus has provided you with a wide range of issues from which to you can investigate. Popular ones over the years have been:

- Pollution
- The impact of the media on culture
- Sports and the regional/national economy
- The impact of dancehall music on society
- Causes and consequences of migration
- Traditional/modern medicine
- The effects of crime on society
- Folk forms of worship
- Technology on Caribbean society
- Natural and human disasters

There are many issues in the Caribbean which have yet to be investigated, so it should not be difficult for you to select from the proposed themes in order to arrive at a topic.

The choice of topics is very wide and you should be able to find an issue in your country, city, town, community or school to research. Start by being more observant and reflective, and be on the lookout for things that catch your attention or cause you concern.

Figure 2.1 Ways of identifying a research problem

What are the elements to focus on in the selection of the research problem? Asking yourself the following questions can lead to the selection of your research problem:

- How can my research improve the standard of living in society? (The goal of social research is to find solutions for societal problems.)
- Which societal problems are the most pressing and require the attention of researchers?
- Which of these problems need an urgent solution?
- Do I want to dedicate the time, effort and commitment to undertake this research?
- Can my research findings and recommendations make a difference?

Check Your Knowledge

Lance lives in Speightstown, Barbados, and is concerned with the residents' practice of improper garbage disposal along the coast and poor farming practices that include the use of chemical fertilisers and pesticides, and he knows that this is bad for both the environment and humans. On which topic(s) could he conduct his research?

- I. An investigation into the effect of the environment on residents in Speightstown.
 - II. An investigation into how improper garbage disposal affects the residents in Speightstown.
 - III. The use of chemical fertilisers is responsible for the poor crop yield for residents in Speightstown.
 - IV. Examine to what extent residents' poor farming practices affect the water supply system of residents in Speightstown.
- A. I and III only
 - B. II and IV only
 - C. I, II and III
 - D. II, III and IV

The correct answer to this is B. These two research topics, II and IV, relate to the case that he is interested in. I is an incomplete idea and does not express a research problem, while III is a hypothesis.

Exam Tip

Your project is marked out of 60 and will be weighted by CXC® to 120 marks. The School-Based Assessment is worth 40 per cent of a candidate's total mark for the subject. For this reason, it is very important that you plan and meet all agreed deadlines so that you complete your project in a timely manner and that it meets the required layout and structure as stipulated by CXC®.

Exam Tip

Be realistic in your choice of a research problem. Choose one that you are interested in. Remember, you are required to dedicate a significant amount of time and energy in the process of completing this research. If you have no personal interest in the topic, then it is going to be very difficult for you to maintain the momentum to complete the project with any degree of quality and legitimacy.

Significance of the Study

The Significance of the Study is usually referred to as the 'Rationale'. It is the explanation or justification of the worthiness of conducting that particular research. It is a description of the work's importance, the benefits that are to be derived from the study and the overall impact that it will have. The Significance provides a brief explanation of why your research topic is worthy of study and why it may have a significant impact on the body of already existing research.

The researcher must consider the following in presenting the Significance of the Study:

- How the study will fill knowledge gaps in that area or promote further research.
- The impact the study will have on the public as well as those in the field of research.
- The practical benefits to be derived.
- The influence it might have on public policy.

Example

The researcher sees that every student has an electronic device that they use while travelling on the bus to school, but their conversations tend to show how ignorant they are of the dangers of using these devices to post information. This is cause for alarm as there is a generation of young people who appear to have little understanding of the repercussions of the inappropriate use of technology.

Recent laws have made it illegal to post videos, comments or pictures which are deemed to be cyber-bullying, sexting, sextortion, gang violence, acts of terrorism and pornography. The fact that students' lives can be ruined because of their ill-thought out actions is cause for concern. The researcher feels that this topic needs to be investigated and it is for this reason that he has decided to analyse the effects of posting inappropriate information over the internet on students' academic careers.

Key Term

Literature review – an evaluative report of existing literature related to an area of study. It should summarise, evaluate and compare the literature, provide a theoretical base for research and help determine the nature of the research.

Literature Review

No research is complete without a **literature review**, which is the foundation of research because it summarises the findings or assertions of previous research. A literature review is:

- a critical analysis and summary of a published body of knowledge;
- the researcher's conclusions about the topic.

In conducting research, there are numerous authentic sources from which you can gather information for your literature review. The main sources from which you should gather information are textbooks, statistical reports, archives, minutes of meetings, newspaper reports, internet sources and oral histories. You will definitely need to read widely when constructing a literature review.

Benefits of conducting a literature review:

- Allows the researcher to gather current findings about the research topic.
- Provides greater understanding of an unfamiliar topic.
- Gives new ideas that can be utilised by the researcher.
- Prevents the researcher from doing what has already been done.
- Allows the researcher to identify flaws and problems of previous research.

- Highlights conflicts between the views of different authors.
- Provides the researcher with options in the selection of possible approaches.

Once the literature review has been completed, the researcher should:

- have a solid foundation of knowledge in the area;
- have a clearer understanding of where their research will go and what questions they need to pose;
- know the experts he will need to consult if questions about the topic arise.

To summarise, the purpose of the literature review is to:

- identify and discuss the sources that have contributed to your research topic;
- define, refine, establish and focus your research topic;
- provide information about the viewpoint your research will take;
- draw attention to inaccuracies in previous research;
- justify your research by showing there has been previous interest in the area and by highlighting gaps in the previous research which your research can help fill.

Exam Tip

It is important to understand that for a literature review you must do more than write a summary listing what each source has advanced; rather, you should synthesise the information as a whole in order to provide your perspective on it. In essence, you must identify what is relevant, what is questionable and what is lacking from the existing literature.

Research Objectives

So, you have selected a research problem, now what? The next step is to identify the objectives of your research.

Writing Research Objectives

Research objectives, which summarise or describe what is to be achieved in the project, are used as statements of purpose for the study. These objectives provide you with the HOW of your research topic. In essence, how do you intend to achieve the aim of your research? There are two types of objectives, general and specific.

Key Terms

General objective – the stated intention of a study that expresses what the researcher expects to achieve by the study in general terms and why. This is your **Problem Statement**.

For example: To investigate the effectiveness of warning labels on cigarette packages to deter teen smoking.

Specific objectives – objectives that describe the variables which are to be measured by the study. They are logically connected parts of the general objective and systematically address the various aspects of the problem.

For example: To determine if the warning labels catch the attention of the consumers; to identify the understandability and clarity of pictorial messages and symbols.

Problem Statement – the statement that guides the general purpose or aim of the research project.

Exam Tip

Consider having one general objective for your research, which is your Problem Statement. From that general objective, you then generate specific objectives or research questions.