

MULTIMEDIA TRAINING KIT

INTRODUCTION TO BASIC RESEARCH METHODS HANDOUT

Developed by: Alan Finlay

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About this document

These materials are part of the Multimedia Training Kit (MMTK). The MMTK provides an integrated set of multimedia training materials and resources to support community media, community multimedia centres, telecentres, and other initiatives using information and communications technologies (ICTs) to empower communities and support development work.

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Introduction: What is research?

Most of us are researchers most of the time. We don't necessarily think of ourselves as researchers but research is really about collecting information that tells us about something and it

helps us make informed decisions. We do this every day, whether it's reading a newspaper or listening to the radio. Perhaps we want to know what political party to vote for, and want to find out more about it, or we need to phone a company to find out more about a job vacancy. Perhaps we're enquiring about a school, or the best price for buying a new computer. Most of these processes involve research at some level. In fact, some people might argue that merely observing what is going on around us is a form of research – a way of gathering *data* or information which we then organize in a coherent way, so that we can act.

Of course what we *call* research (as in 'basic research methods') is a more formal way of going about asking questions. We usually begin with something very specific we want to know. Then we ask the question or questions in a structured way. This structure is called a *methodology*. In research, there are a lot of different kinds of methodologies, and some of them can be very complicated. However, there are some basic ones that have been tried and tested, and which can be easily learned.

There are many different kinds of research. For example:

Market research is learning about business markets so that investment or business decisions can be made. The kinds of questions that get asked here include: Who are the potential customers? What do the customers need? Who are the competitors? And what is the market environment?

Economic research has its own way of going about things. For instance, it may involve specially constructed formulas and equations that facilitate an understanding of the economic environment. It may ask questions such as: Are the economic fundamentals in place? What are the economic trends in the manufacturing or mining sectors? Of course, some of the questions economic research asks may be similar to those market research asks.¹

Scientific research may involve a whole range of sophisticated and specialist *research instruments*, such as mathematical or chemical formulas and very specialized methodologies.

Media research will involve looking at issues such as media content and audience. Its own kind of specific instruments – such as ways of measuring audience preferences and its spending power² – have been developed for this.

Social research is quite a broad term and may involve different kinds of research: from gathering information on the population (*demographics*) to the attitudes and behaviours of people in a community or country.

Although many of these different kinds of research have developed methodologies that are specific to their particular discipline, there are basic research methods that are common to most. This MMTK unit outlines some of these basic methodologies and offers a step-by-step guide to planning your research.

Basic research methods

The types of basic research methodologies this unit will introduce you to are:

- *Quantitative research*

¹ In fact, many of these different kinds of research may cross over disciplines. For example, media research may be conducted as part of social research or vice versa; social research might be conducted as part of scientific research, and so on.

² For example, in South Africa two of these are called Radio Audience Measurement Survey (RAMS) and the Television Audience Measurement Survey (TAMS).

- *Qualitative research*
- *Participatory research*

Within this context, this unit also looks at:

- *Conducting surveys*
- *Conducting interviews*
- *Conducting focus groups*
- *Developing case studies*

Each of these methodologies helps you find out different things in different ways. They can be used on their own, or in a variety of combinations. You may even want to use elements of each to make up your own way of going about research. But first it is important to try to understand what each methodology entails.

Quantitative research

Overview

Quantitative research (the word 'quantitative' comes from the word 'quantity') involves information or data in the form of numbers. This allows us to measure or to quantify a whole range of things. For example: the number of people who live below the poverty line; the number of children between specific ages who attend school; the average spending power in a community; or the number of adults who have access to computers in a village or town.

A common way of conducting quantitative research is using a *survey*. Surveys usually involve filling in a questionnaire. The usefulness of a survey is that the information you get is standardized because each *respondent* – the person who fills out the questionnaire – is answering the exact same questions. Once you have enough responses to your questionnaire, you can then put the data together and analyse it in a way that answers your *research question* – or what it is you want to know.

It is important to realize that quantitative research does not necessarily mean that respondents will give numbers for their answers to your questions. Sometimes they may answer a 'yes' or 'no' question, as in: 'Do you have a computer?' Sometimes they might write down an answer, a word, a sentence, or a paragraph to describe something, as in answers to: 'What is the brand or make of your computer?' and 'Please describe in detail what you use your computer for.' Other answers may involve numbers, as in: 'How many computers do you have in your business or organization?'

How these varied responses become numbers is in the way they are analysed. From the example questions above, one might be able to say: 20 out of the 30 (66%) respondents use a particular brand of computer, while 5 (16%) use another. The remaining five respondents all used different brands of computers which you would list. You might then want to provide some examples of how the computers are used.

There are, of course, many different kinds of quantitative research besides the survey. *Observational research* involves watching or observing various behaviours and patterns.³ Perhaps you want to find out how many cars of a particular make use a specific intersection. To do this you might stand at the intersection at a particular time of day, and record the makes of

³ Observation can also be used effectively for qualitative research. See *Research tip: Site visits and observation* below.

cars. Perhaps you want to monitor the number of people entering a particular shop at specific times of the day, recording their behaviours, and whether or not they buy anything or are just browsing.

More complicated forms of quantitative research are *experimental research* or *mathematical modelling research*.⁴ (See the glossary for their definitions.)

Media research may use a form of quantitative research to understand the number of articles published in a range of newspapers on a particular topic. These articles are then analysed according to various *monitoring criteria*, such as the specific focus of the article, the author, the date of publication, page number, the column length and even the headline. From this, you can make analyses such as: 'Of all the commercial newspapers in Nigeria, 25% of them carried stories on HIV/AIDS during January and February 2004.' You may want to add that most of these were written by five journalists, or that none of them appeared on the front page of the newspaper during this period.

With all kinds of research, it is important to be as specific as possible, and to explain your assumptions. Remember, your research results might not tell you everything but they will be valuable for what they do reveal. In the example of the media research, we might be able to conclude that HIV/AIDS didn't feature prominently in the commercial media during the monitored period. We might want to find out the reasons for this and decide to interview the newspaper editors. By doing this, we would be doing some *qualitative* research.

Research tip: Surveys

Surveys can be conducted in a number of ways. The most important thing is to think clearly through the kind of questions you want to ask, and to make sure that the responses will answer your research question. When you get your responses, you need to be sure of exactly what they are (and aren't) telling you.

Here's a real example of how the answers to surveys need to be treated carefully⁵:

Recent research by the Human Sciences Research Council in South Africa has shown that more than three-quarters of South Africans are opposed to same-sex marriages and abortion, and that a similar number support the death penalty.

In response to the question 'Do you think it is wrong or not wrong for two adults of the same sex to have sexual relations?' the research found that 78% of respondents said it is always wrong for two adults of the same sex to have sexual relations. However, as the researchers pointed out, the answer only reflects an attitude, but does not necessarily mean that the respondents will *act* on their attitudes.

Besides being very careful about the kinds of questions we ask, and what the answers are telling us, it is often helpful to limit the kinds of answers respondents can give. You may want to phrase the questions in such a way that tick boxes can be used, so 'yes' or 'no' answers are possible, or the respondent fills in numbers instead of descriptions.

⁴ Peter J.P. & Donnelly J.H. (2000) A Preface to Marketing Management. McGraw-Hill Higher Education, USA.

⁵ James, C. (2004) A conservative bunch, Mail & Guardian, November 12 to 18. Mail & Guardian, Johannesburg.

Using the Internet for surveys

A good way to conduct a survey is through an online questionnaire. The Internet is useful for giving your survey geographic reach. Using the Internet, you can survey many different people from all sorts of countries – something that would not have been possible before or else too expensive. To do this, you can either distribute a questionnaire via e-mail or create a simple *online form*. An easy way is to use SurveyMonkey.com (<http://www.surveymonkey.com>). SurveyMonkey is an excellent online tool that helps you create and manage your own online survey easily.

With the online form, the responses will be e-mailed straight back to you. Many people don't have a lot of time to answer surveys, and online forms are often quicker for them to complete. However, keep in mind who you want to reach. Do they have reasonably fast access to the Internet? Do they *have* access to the Internet? You may want to provide a fax number for faxed responses, an e-mail address for e-mail responses and an online form to cover all of your bases.

Don't forget that you can even post a survey questionnaire using *snail mail* – although this is likely to be quite costly, and you may not get that many responses (this often depends on how persistent you are, how well the people you are surveying know you, or if you are offering them prizes or money for completing the survey).

Using the Internet to conduct a survey may not be useful when surveying a specific community. Here you may want to send a team of researchers into the street to collect responses or conduct a focus group (see *Research tip: Focus groups* below).

Advantages of surveys⁶

- Good for comparative analysis.
- Can get lots of data in a relatively short space of time.
- Can be cost-effective (if you use the Internet, for example).
- Can take less time for respondents to complete (compared to an interview or focus group).

Disadvantages of surveys

- Responses may not be specific.
- Questions may be misinterpreted.
- May not get as many responses as you need.
- Don't get full story.

Qualitative research

Overview

The aim of qualitative research is to deepen our understanding about something, and usually this means going beyond the numbers and the statistics. Qualitative research helps us to give reasons why the numbers tell us what they do. It is often contrasted to quantitative research –

⁶ Some of the advantages and disadvantages of various methodologies mentioned throughout are informed by Carter McNamara's Basic Business Research Methods, <http://www.mapnp.org/library/research/research.htm> [Accessed November 2004]

and they are very often used together to get the 'bigger picture' of what we are trying to find out. Qualitative research helps us 'flesh out the story'.

Face-to-face interviews and focus groups

The most common forms of qualitative research are *face-to-face interviews* and *focus groups*. Face-to-face interviews are just that: Meeting someone in person and discussing various issues. The *informant* – or person you are interviewing – may be an expert in a particular field (e.g. the editor of a newspaper) or they may be someone who is affected by the issues you are researching (e.g. someone who is HIV positive or who reads the media).

Although it is very important to develop a list of questions you want to ask someone, face-to-face interviews usually involve more than 'yes' or 'no' answers. The point is to try to understand the *complexity* of the issues you are researching. The nature of face-to-face interviews is that they are usually quite discursive.

Focus groups involve discussions with two or more participants. While questions for focus groups need to be prepared to guide and focus the discussions, the responses are often free-ranging, as the participants are encouraged to explore the issues at hand in an in-depth way.

While focus groups and interviews will help you develop explanations for quantitative data, sometimes they can provide you with quantitative data themselves. For example, you might find that 20% of the participants in a focus group discussion did not like the way HIV/AIDS positive people were portrayed in the media (quantitative data). Then you might find that the reasons (qualitative information) they gave were that:

- They found it demeaning;
- They thought that it was insensitive;
- They thought that HIV/AIDS positive people were treated as 'others'.

With focus groups and interviews, it is usual to write up the responses to your questions, to arrange and analyse the responses in a careful and meaningful way, and to include the most relevant ones in your *research report*.

Research tip: Face-to-face interviews

- Always prepare a set of questions to ask the informant;
- It is a good idea to record your interviews, so that you can check your facts later. Take notes during the interview, if you feel comfortable doing this;
- Remember: Interviews take time, and the informant is giving you his or her time for free. Interviews shouldn't really take more than an hour, unless the informant wants to spend more time talking to you. Usually 10 questions are enough for this amount of time;
- Sometimes people transcribe the interview recordings. This usually makes analysing the results easier, but it also takes time and can be quite an effort. Consider including a budget in your research proposal for transcription, and then pay someone else to do it;
- Sometimes you may need to ask the informant if they are prepared to be identified in your research, or if they would like to be quoted anonymously. This is usually the case if their identity needs to be protected, and sometimes if you are researching a controversial topic;
- You may want to consider letting your informant review any direct quotes you use before publishing the research report. However, this takes time and sometimes can delay the research process;
- Ask the informant if you can include their contact details in your research report;
- Ask the informant if he or she would like to be alerted when the research is published, and let them know where they can read the report if it is publicly available.

Advantages of face-to-face interviews

- Can allow for in-depth knowledge sharing;
- Helps to develop the bigger picture;
- Helps with analysis of results;
- Good for networking (e.g. you may be referred to other people to interview).

Disadvantages of face-to-face interviews

- Can be time consuming;
- May be difficult to arrange an interview time;
- Can be difficult to compare and analyse information.

Research tip: Focus groups

- Focus groups can sometimes take time to arrange, so prepare in advance. Try to find an intermediary to help you (an organization or individual in close contact with the potential focus group participants);
- Think about who you want to participate in the focus group by referring to your *research question*. What age group should they be? Should they be male or female? Should they come from a particular income bracket? You may want to consider holding separate focus groups for different age groups, or for different genders. For example, it may be important to hold a separate focus group for males and females if you are discussing sex and sexuality;
- Issues of power: The focus group facilitator holds an immense amount of power in the discussions. You need to keep this in mind. If a male facilitator questions young girls about sexuality, will that affect the research results? Some researchers will not let the people commissioning the research (e.g. government) be present in the focus group sessions. In some cases, special rooms are built with one-way glass so that the session can be observed unobtrusively;
- You need to find out if it is normal to pay focus group participants, and what the going rate is. Often focus group participants come from poorer communities. If it is not normal to pay participants, you may want to consider it and set a trend!

Advantages of focus groups

- Good for community participation (grassroots input);
- Helpful in developing ideas and sharing latent, or hidden, knowledge spontaneously;
- Enables you to get information from a number of individuals simultaneously.

Disadvantages of focus groups

- Can be difficult to set up;
- Participants may need to be paid;
- Need to be sensitive to who the facilitator is;
- May need a translator;
- Sometimes difficult to organize and analyse information.

Site visits and observation

Site visits (e.g. when you visit an organization, a manufacturing plant, a clinic or a housing project) are very useful, and sometimes even necessary ways of gaining additional insight and making your theoretical information concrete in your mind. Site visits will help you understand

your information better and will make the research process a much more rewarding experience. They allow you to observe what is going on, and to ask questions you may not have thought about. Be curious!

Even if site visits are not part of your research methodology, it is recommended that you include at least one in your research process, so you can form a mental picture of what's happening on the ground.

Observation is simply a way of gathering information. This may involve a site visit but it can also involve visiting a community, or a place, and watching what people do (e.g. stand in a street). Like a site visit, it is a good way to concretize your research, and to help you understand your research results better.

Advantages of site visits and observation

- Help you understand your research better;
- Help you ask questions you may not have thought of;
- Concretize your research;
- They are fun!

Disadvantages of site visits and observation

- Take time;
- Can be expensive (depending how far you need to travel);
- With observation in particular, you need to be careful how you interpret what you see. With site visits, you may want to make sure you have a guide so that you can ask questions.

Case studies

The term 'case study' is often used quite loosely. They are a way of capturing concrete details of a real or fictional situation, and presenting these details in a structured and compact way. Case studies tell a story, and are often very lively and colourful ways of presenting your research, or to go about conducting research.⁷

Case studies are used widely in a whole range of disciplines, such as psychology, anthropology, sociology and criminology. Business analysts have used case studies for over 80 years to discuss particular problems with businesses and how they overcame them. (Business case studies were first developed by the Harvard Graduate School of Business Administration in the 1920s.)

Because case studies follow a structured format, different situations can be compared or *analysed comparatively*. Case studies are typically short (often no more than 5 pages long) and usually only contain the essential information needed to present a situation and, if necessary, to describe and properly analyse a problem.⁸

⁷ In its essence, a case study is a way of presenting a problem in a concrete way, and then proposing a solution to the problem. However, the case study format is often used simply to capture factual information about a range of similar situations systematically (e.g. information about telecentres).

⁸ Some case studies are much more detailed than this, and much longer. But in the context of basic research methods, we are interested primarily in the short case study.

Case studies often contain both qualitative and quantitative data, adding to the richness and detail of the situation being described, and the problem being analysed.

There are many different structures to case studies, and you will need to decide on the most appropriate structure for what you are trying to convey. If you are doing more than one case study for the same research topic, it is important to ensure that the structure you use is consistent, so that your results can be compared.

Often case studies will contain:

- The essential details of the organization or situation under question (such as name of organization, description of core activities, socio-economic background);
- Some background information that has led up to the situation being presented;
- A detailed description of the situation being analysed;
- A description of the problems encountered;
- An analysis of possible solutions (if a problem is being presented).

Advantages of case studies

- Specific concrete example;
- Can help with problem solving;
- Are often interesting to read.

Disadvantages of case studies

- Can take time to develop;
- Depending on format, may need some level of good writing skills;
- Do not usually give broad overview of issue at hand.

Research tip: Writing case studies

Charles Warner⁹ has some useful tips for writing your own case studies. These can be summarized as follows:

- Keep your audience in mind (you may be writing for someone who doesn't know anything about the situation you are describing);
- Keep jargon to a minimum (or at least explain jargon clearly);
- Tell a story (make your characters and situations as real as possible);
- Set the scene (make your opening interesting, set up the confrontations, frustrations and the conflicts that you will describe);
- Don't analyse as you tell the story. Simply present the scenes and situations and make sure that your story proceeds in a logical, step-by-step way (save the analysis for your part on problem solving);
- Provide all the relevant details that are necessary to understand the situation and problem;
- Use lots of dialogue (your characters need to come alive);
- Leave the reader with a clear picture of the major problems at the end. The ending should leave you with the question: 'What is to be done now?'

⁹ See Warner, C. (undated) How to write a case study
http://www.cpcug.org/user/houser/advancedwebdesign/Tips_on_Writing_the_Case_Study.html
[Accessed November 2004]

Some of these tips may not be useful for your purposes. Often case studies are simply a way of capturing factual information in a compact and digestible manner. Decide what works for you, and use it.

Participatory research

One of the key problems with some kinds of research is that the wrong kinds of questions get asked, despite the researcher's best intentions. This doesn't necessarily mean that the researcher hasn't thought long and hard about his or her questions, or that they are not appropriate. However, sometimes questions are biased towards certain perspectives and are based on certain assumptions. There might be a whole other way of looking at a situation that the researcher, because of his or her background, does not realize. Unless the researcher is able to understand this different way of looking at things, the research results might simply confirm the presumptions and prejudices of his or her perspective.

Anthropologists, for example, often encounter these kinds of problems when they're doing *field work* and are living in or visiting a community they are researching. Good anthropologists are always conscious of their roles as outsiders, and how their mere presence can affect the research results. People sometimes behave differently when they know there is a researcher around. (See *Site visits and observation* above.)

Concrete examples of how research can reinforce prejudices are dotted throughout the history of anthropology. In their early encounters with native tribes, colonial anthropologists often described the customs and beliefs they observed as backwards and savage – quite the opposite of their grand vision of European culture!

One way around these sorts of dilemmas is *participatory research*. Participatory research allows community members, or a particular group being researched, to participate in developing research questions, designing the methodologies to be used in the research, and analysing the research findings. The usefulness of this approach is that perspectives that might otherwise be ignored by a researcher are incorporated into the research from the start. The analysis of the research findings shifts from being 'researcher-centric' (or biased towards the assumptions of the researcher) towards being 'community-centric', or incorporating the perspectives of the community.

Participatory research is a very good methodology to raise awareness around issues that a community or group might face, and it also helps in developing appropriate action plans in response to the research findings.¹⁰

Some specific types of participatory research, such as *autodiagnosis* or *participatory rural appraisal*, are explained in the glossary. However, the most important thing to remember is that participatory research is about a group or community being involved in all, or most, phases of the research process, from designing the questions, to finding out the answers.

Advantages of participatory research

- Can be more certain that research isn't biased;
- Involves community;
- Opportunity for awareness-raising in community;
- Can develop appropriate action plans from research.

¹⁰ Health Communication Partnership,
http://www.hcpartnership.org/Publications/Field_Guides/Mobilize/htmlDocs/glossary.htm
[Accessed: November 2004]

Disadvantages of participatory research

- Takes time to involve community;
- Need to manage research process well, in a participatory manner, while striking a balance between getting the work done efficiently and on time.

Planning your research

Journalists often use a basic formula for writing a straightforward news story. It's called the 5 Ws and an H structure: Who? What? Where? When? Why? and How? By answering all of these questions, you will get to the nuts and bolts of a story in a few sentences or paragraphs. The point of this is that all the most essential information is at the top of the story, making a newspaper easy to scan for a reader.

The 5 Ws and an H formula is a useful tool to apply to many situations, and helps you to remember to ask the most essential questions.¹¹ Thinking about these questions will help you plan your research, although you might want to consider them in a different order.

Step one: What?

You need to ask: **What do I want to know?**

Deciding on a research question

The first and most important thing to do when planning research is to properly understand and clarify what it is you want to know.

By understanding what it is you want to know – some people call this the *research question* – you will be able to answer all of the other questions that are necessary to plan your research properly, such as:

- How do I find out what I want to know?
- Where can I get the information I need, or who do I need to ask?
- When will my research be done by?
- And why? (or finding the right answers to the research question).

When you are formulating your research question, you need to bear in mind the purpose of your research. You need to ask yourself:¹²

- Who will be reading and acting on your research? (e.g. is it the community, a donor, or a business?)
- What do they *need to know* to inform their decisions?
- What decisions does the research need to inform?

Conducting a local information scan

Once you have decided on your research question (or questions) it is useful to conduct a local information scan. What information do you already have access to? You may want to surf the

¹¹ You might, for instance, want to use it when designing your survey questionnaire or developing your interview and focus group questions.

¹² Some of these observations are made by Carter McNamara's Basic Business Research Methods, <http://www.mapnp.org/library/research/research.htm> [Accessed November 2004]

Internet, or ask a few experts in the field you are researching, or perhaps you need to speak to a few people in the community. This will help you see what information is already out there, and help you refine your research question. Sometimes you may find that research has already been done in the area you want to work in. Then you may decide to ask a different kind of question, or focus on specific areas of research.

A local information scan needn't take up too much of your time, just enough for you to get your bearings on your *research topic*. Once you have conducted a local information scan, take another look at your research question. Should it be changed or refined in any way?

Theory

Some people insist on a *theoretical framework* for research. What social, scientific or economic theory are you going to use to understand or interpret your research results?

It is important to remember that we inevitably bring some sort of theory to our interpretation of research results, even if we aren't aware of it, or can't name it. For some research, a clearer understanding of theory may be necessary. However, a lot of basic research can be conducted without necessarily venturing into this sometimes complicated world.

If you want to develop a theoretical framework for your research, speak to an expert in the field and find out what might be a good one, and where you can read more about it. Alternatively, visit a library, or do some background research on the Internet. If a good theoretical framework exists, you should be able to find a lot of information on it easily.

Step two: How? Where? Who?

You need to ask:

How do I find out what I want to know?

Where can I get the information I need, or who do I need to ask?

By constructing your research question or questions, you will have decided quite specifically what it is you want to know. You will also have decided the kinds of information that will be necessary for the research results to inform a decision or a number of decisions.

How do I find out what I want to know?

Now that you are clear on what kind of information you are looking for, you need to decide on a methodology by asking:

- Do I need quantitative or numbers information?
- Or do I need qualitative or explanatory-type information?
- Or do I need a combination of both?
- Will case studies be helpful in properly understanding and presenting the research findings?
- If I need quantitative data, will I conduct a survey or develop a questionnaire?
- If qualitative information is needed, will I interview people or conduct focus groups?
- Will I conduct site visits or observation?
- Given the research topic, will I conduct participatory research?

Where can I get the information I need, or who do I need to ask?

Once you have decided on a methodology, you need to decide where you are going to find the information or who you are going to speak to. Are you going to search the Internet, or visit a

library? Are there other information resources you have access to (e.g. pamphlets or booklets)? Do you need to speak to people in a community? Or individuals or experts who do a particular kind of work? You should already have some idea about this having conducted your initial information scan.

At this point, you may want to build a simple table, setting out the most appropriate methodologies, and where you are going to find the information, as well as some of the challenges you may have to overcome. An example of how this table might look is given below.

Research topic: Attitudes to HIV/AIDS in the community					
How do I find out what I want to know?		Where to find information?		Potential problems	How to overcome the problems
Background research		Internet and pamphlets	HIV/AIDS websites (e.g. UN websites); past research on HIV/AIDS; government and NGO statistics; local clinic or NGO.	None expected.	
		Interviews	Health care workers; doctors and AIDS activists.		
Quantitative	Survey	Taxi ranks; at local shops; shebeens.	Smith street taxi rank; Paula's café; Xolani's 24-hour Midnight Razzle	How will I know that the commuters at the taxi rank are from the local community? Will I need Paula's or Xolani's permission?	Be sure to ask each person we approach if they are local. Ask Paula and Xolani for permission before approaching customers.
Qualitative	Face-to-face Interviews	Local government; Municipality; Doctors and health care workers.	Director of Health; Mayor; Two doctors at Chris Hani Baragwanath Hospital; Health care worker at Living Positively NGO.	The Director and the Mayor might be very busy.	Approach their personal assistant for an appointment at the start of the research process. Remember: We may need to persist.
	Focus groups		Community members aged 18-35. 8 males and 8 females. Will ask Living Positively NGO to help us organise this.	It may take some time to get the focus group participants together. Will we need to pay them?	Approach Living Positively right away, and find out what they recommend.

Research tip: Background research

Most research involves some form of background research. You have already done part of this in your information scan, but you will need to do some more thorough research into your research topic to understand and collect information that already exists.

Like an information scan, background research can involve a number of things:

- Online research;
- Visiting a library to discover more about what you are researching;
- Speaking to experts who can give you an overview of your research topic;
- Reading various literature, such as pamphlets and booklets.

Sometimes you may find that there is a lot of background information on the issue you are researching. Because all research has time limits, you need to keep your research question clearly in mind and decide as you go along whether the information you have found is relevant to your research needs.

It is a good habit to record or store the information you collect in a systematic way. You may want to keep a book with details such as title, publisher, date of publication, place of publication and authors' names, or you may want to bookmark the relevant websites you find on your Internet browser.¹³ This is important because if you are going to use any of the information you find, you need to reference it to show where you got it. Referencing can take up a lot of time if you have forgotten the source of a quote or idea.

When conducting background research, be critical! Some information you find on the Internet, in pamphlets or in libraries may not be that reliable. Ask: Does this look like a reliable source of information? Is it an official website or from a recognizable organization? Or does it look a bit suspect? Only use information that you think is reliable and accurate. Double-check the facts if you have to!

Where to find information

There are many places to find information. Some ideas have been listed below:

- Internet (general searching/specific websites);
- Pamphlets/promotional material;
- Conferences;
- Experts (you may want to develop a database of experts in various fields);
- Magazines;
- E-newsletters;
- Keeping track of published research (usually by signing up to mailing lists or e-newsletters, but keep an eye on the media as well; a lot of research – especially social research – will be written about in newspapers and magazines).

Step three: When?

You need to ask:

When do all the different parts of the research need to be done?

Proper planning means a more efficient research process, less time and money required to conduct the research, and a happier research team!

Now that you have a good idea of what your research is all about, you need to plan it so that everyone in your research team knows what's expected from them and when. It is also important to plan so that things that need to be done first - which other parts of the research are dependent on - are done in time. One way to do this is to develop a research *work plan*.

¹³ One tip for bookmarking websites in your browser: Change the default name of the website to something you can easily recognize and go back to. Sometimes the default name is not very descriptive. You may find that you bookmark 50 websites, and you don't want to have to open all of them again to find the information you remember reading!

There are many ways to develop a work plan, but the simplest is to use a table.

1. Begin by **listing all of the work areas** in your research. Be specific;
2. Put them in **order of priority**: Which ones need to be done first?
3. Try to **estimate the time** that you will need to accomplish each research activity;
4. **Build a calendar**, cross-referencing your work areas with the dates, as in the example below. Depending how specific you want to be, your calendar might work in days, weeks, months or even hours!

With most research, things can take a little longer – or if you’re lucky a little shorter – than you anticipated. So plan for unexpected events and leave a little spare time in your work plan. With time and experience, you will develop a much better idea of how long things will take.¹⁴

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Arrange interviews and focus group							
Develop survey questionnaire							
Background research							
Conduct interviews							
Report back to donor							
Conduct surveys							
Collate results							
Analyse results							
Fill in any gaps							
Write report							
Edit report							
Send final report to donor							

Now that you have developed a work plan, be sure to circulate it to all the members of the research team, and to discuss any queries they may have. Also share it with the people you are doing the research for, if appropriate. It will give them confidence that you are thinking clearly about the work you have to do.

Step four: Why? (Getting the answer)

Now that you have posed your research question, and planned your research well, you can go about collecting your data. This is best done methodically, continually measuring your performance against your work plan, and making adjustments where necessary. When problems are encountered (and you will encounter them), they need to be solved, or alternative courses of action planned.

¹⁴ For example, sometimes writing the research report and editing it can take a lot of time, so plan for this.

Returning to your research question

The most important way of getting your research answer or answers is to return to your research question. What did you begin by asking? The research question will be a good guide in helping you arrange your research results.

At the same time, you need to keep in mind who you are doing the research for, and what *they* want to do with it. For example, if the government commissioned the research, wanting to know how best to inform a community about conserving water, you might want to begin by discussing the demographics of the community. You might then create a section where you list ways in which communication already happens in the community, including media contact details (e.g. media consumed or radio stations listened to). You might want to go on to list the pros and cons of each of these communication vehicles. You might also have a section describing current attitudes to water conservation in the community. Finally you may want to develop two or three scenarios outlining possible ways in which communicating with the community might be effective.

Remember, it is usually best to provide a number of alternatives for a way forward – it is not necessarily the researcher's job to come up with one answer, unless you have been asked to do so. Decision-makers usually want to consider your research and decide on their own. It is your job to help them make that decision by giving them all the information they need.

Research tips: Analysing quantitative data¹⁵

1. Save your document/s with your original data in a separate folder on your computer. If you are working with paper documents, consider whether it is necessary to make photocopies of your results so that the originals can be filed away securely. Work off the copies, not the master documents. This is a good thing to do with any of your research results;
2. Tabulate the information. For instance, add up the number of responses you received for your survey and categorize them in an appropriate way by referring to your research question (e.g. the number of yes and no answers for each question; male and female responses or racial categories);
3. Work out what your tabulated answers are saying. For instance, convert some of your sums into percentages. Say 30% of the respondents said X, while 25% said Y. These are easier to internalize for those reading your report;
4. Try to be creative. Once you have tabulated and calculated your results, there may be some interesting and unexpected interpretations of the data that can be made;
5. Double-check all your calculations.

Research tips: Analysing qualitative data

1. Read through all the data, making notes of associations or ideas that occur to you;
2. Organize the data into similar categories (e.g. responses to particular questions; or categories of informants, such as government representatives, members of the community or newspaper editors);
3. Attempt to identify patterns or associations and causal relationships in the themes (e.g. responses from people in the same geographic area, from the same income group or the media preferences of people who don't have electricity at home). Be creative and analytical;
4. If you have done quantitative research at the same time, try to match some of your qualitative results to your quantitative results. Where are the links? How do the results 'speak to' or explain each other? What conclusions can be reached that aren't obvious at

¹⁵ These observations are adapted from Carter McNamara's Basic Business Research Methods, <http://www.mapnp.org/library/research/research.htm> [Accessed November 2004]

first glance?

Be methodical. Think step by step, and explain your assumptions if you have to. Remember, your research results might not tell you everything you want to know but don't be afraid to say what they *do* tell you. Be careful with your words, and be specific.

Remember to file your research results away in a safe place. You may want to refer to them sometime in the future.

You have now made an important contribution to how we understand ourselves. Even if it's a small step, it all contributes towards the 'bigger picture'. And that is changing all the time.