3 Planning the Project

INTRODUCTION

This chapter provides you with a step-by-step approach to planning your project. It begins by identifying the purpose of the study and taking you through the initial groundwork stages. This includes developing a hypothesis, making your first attempts at writing a question and planning a schedule. The crucial supervisor–student relationship is also covered. In this chapter, you will find:

- Getting started – pointers for kick-starting your thought processes, generating ideas, and focusing on a productive and achievable research topic.
- Advice on identifying the purpose of the study – thinking critically about what your research is going to achieve.
- How to plan your schedule – planning a realistic timetable for your work, and sticking to it!
- A guide to the supervisor–student relationship – understanding the expectations on both sides, establishing a professional relationship with your supervisor and what to do if things go wrong.
- Suggestions for keeping a research diary and advice for writing as you go along.

Key terms

Selecting a topic

Selecting a topic is not as easy as it might seem. With limited time at your

disposal, there is a temptation to choose a topic before the groundwork has been done, but try to resist it. Prepare well and you will save time later. Your discussions and inquiries will help you to select a topic which is likely to be of interest, which you have a good chance of completing, which will be worth the effort and which may even have some practical application later on.

Many researchers in areas such as education, social science and health are directly concerned with the practical outcomes of research and, in particular, the improvement of practice in their organization. The aim is not only to gain more understanding of the present but to use this knowledge to act more effectively in the future. This is not to deny the importance of research that may have no immediate practical outcome. Eggleston provides a timely reminder of the importance of longer-term objectives and of the need to look beyond current practices. To restrict research to current practices would, in his opinion, lay it 'open to the charge that its sole function was to increase the efficiency of the existing system in terms of accepted criteria and deny it the opportunity to explore potentially more effective alternatives' (Eggleston 1979: 5).

Clearly, there will always be a need to explore potentially more effective alternatives to existing provision. But after 100 hours of study, you are unlikely to be in a position to make recommendations for fundamental change to any system. Whatever the size and scope of the study, however, you will always be required to analyse and evaluate the information you collect and, in some cases, you might then be in a position to suggest desirable changes in practice.

Discuss possible practical outcomes with your supervisor and ask whether the department has any guidelines for the selection of topics and the preparation of research briefs. Consider what the emphasis of your study is to be. Is applicability to be important or is your study to have different aims?

Getting started

You may be assigned a topic to research, but in most cases you will be asked to select a topic from a list or to decide on a topic yourself. Formulating a research question is fundamental to a research project. It focuses the study, how you will collect and analyse the data, and the way in which you report your results. It begins with a research problem, an issue that someone would like to know more about or a situation that needs to be investigated or changed. You may have an idea or a particular area of interest that you would like to explore. You may have several ideas, all equally interesting. Write them down:

Something to do with mature students?

Stress at work?
The effectiveness (or otherwise) of research methods ?
Introduction to using social media in research ?
Introduction to the library course?
Teamwork in an accident and emergency department?
Questioning in the classroom?
Supervision of work placements?
Starting up a business?
The role of social media in elections?

All of the above are possible topics but before a decision can be made about which to select, some work needs to be done. Think about what each topic might involve and which of them will be likely to maintain your interest. If you become bored with a topic, the time will drag and it is likely that the quality of your research will suffer. Talk to colleagues and friends about your initial ideas. They may be aware of sensitive aspects of certain topics that could cause difficulties at some stage, or they may know of other people who have carried out research in one or more of these areas who would be willing to talk to you. If you are hoping to carry out the research in your own institution, then another very good reason for discussing possible topics with colleagues is that you will probably be asking for their support and collaboration: early consultation is essential if you are to avoid difficulties later.

Google your topic to determine whether similar research has already been conducted. Although there are other search engines such as Bing and Yahoo, I refer to Google throughout this book in recognition of the fact that it is the market leader. Some supervisors prefer you to write your research topic in the form of a question and I have also found this helpful when carrying out a Google search. Try similar keywords or synonyms related to your question. For example, for the topic, ‘How do houses built before 1900 contribute to global warming?’, ‘houses’ could be replaced by ‘homes’ and ‘built before 1900’ could become ‘pre-1900’ or ‘in the eighteenth century’.

If you are on Twitter, it may be worth entering keywords related to your research topic in the search feature. Yes, it may be a long shot, but it may produce a contact who is researching the same topic or who may know someone who is. It is well worth the short time that it will take to look through the search results.

If you have a LinkedIn profile, write an update about the research you are doing on your home page and ask if anyone else is researching the same area. If you are a member of any LinkedIn networks, do the same there too. If you don’t have a LinkedIn account or belong to any networks, you might consider setting one up to connect with people who are working in the same field of research as

you. LinkedIn is a network for professional people and will give you the opportunity to present your profile as a researcher, to connect with other researchers and to share ideas (see Chapter 9).

The research problem then leads to the research question or hypothesis.

Try to restrict your list of research questions to a choice of two – one likely to be of main interest and the second to fall back on if your preliminary investigations throw up problems. Let's say you decide you would be particularly interested in the topic of mature students, but that stress comes a close second. It will have become clear to you that 'something to do with mature students' requires more focusing before you can proceed. So far, you have been thinking in general terms but now you need to start the process of trying out ideas and asking yourself questions.

You should ask yourself whether your questions are:

- Realistic and feasible
- Clear – free from ambiguity or a lack of clarity
- Of sufficient importance to warrant a research study
- Ethical.

Start with your first choice (mature students) and begin to make notes of your ideas. If you prefer a digital record, you can use the note-making tool that may have come free with your phone or tablet. You can also download a version of Microsoft's OneNote, which is free for web and mobile/cell apps and compatible with both iOS and Android, or EverNote, which is the most versatile. Apart from text, both platforms can store images, web pages, photos and files. OneNote can also store audio notes and video clips. Both EverNote and OneNote can be accessed offline and have features that enable you to identify your notes with tags and organize them into different categories so that you can easily find them. Write 'mature students' in the middle of the paper or screen and link to it all the questions, doubts, theories and ideas you can think of. Insert arrows, if necessary, to link one idea or query with another. Write quickly and write as you think. If you decide to wait until your thoughts are in better order, you may (and probably will) have forgotten what you thought of first. It doesn't matter how illegible and disorganized your chart is at first, as long as you can understand it. You can put your ideas in order later – these notes are for you, not other people.

The purpose of this exercise is to help you to clarify your thoughts and what you actually *mean* by each statement and each question. It will give you ideas about refining the topic so that you focus on just one aspect of it, rather than researching everything there is to know about mature students. It will provide

clues as to whether the topic is likely to be too complex for you to complete in the time available to you, or that it might not be possible because you would require access to confidential information that might be difficult or impossible to access.

Your first draft will be a mess but that doesn't matter. Your second attempt will be far more focused and you will be on the way to making a firm decision about which aspect of your topic to investigate. Incidentally, don't throw away your first or your second attempts until after your research is complete, proofread and/or your work is published. You may need to refer to those early drafts at some stage, so start a 'reject' or a back-up folder.

Consider your priorities. For example, if you have decided that you would be interested in investigating barriers to learning among mature undergraduates, draw together the various items in your first and second thoughts notes into a list of questions on your selected topics, eliminating overlaps or rejects, and adding any other thoughts that occur to you as you write. At this stage, the order and wording are not important. You are on your way.

The purpose of the study

Start with the purpose of the study. It might be difficult at this stage to provide the exact wording but it's important to know why you want to carry out this research. Think about it. Write down your ideas. Ask yourself questions and make a note of any prompts about the likely sub-questions. Be critical. *The purpose of this study is . . .* what?

- *To identify barriers to learning for mature students?* Meaning of 'barriers'? Why do I need this information and how will I find it? Ask students? Ask a sample of students who started their degree course straight from school for comparison? Any differences? Any differences between mature students who experienced no barriers and those who did?
- *To identify any differences between the performance of mature and younger students?* How will you judge this? Degree classification of former students? Do you need access to statistics? Any data protection issues?

Each question raises other issues. Ask yourself:

- *What do institutions mean by 'mature'? What do I mean by 'mature' and 'older'?* Need to think of synonyms for 'mature'. Over 21, 25, 30, 60? Age at registration? Age at graduation? Need to get this sorted. How will I find out?

Will I be given access to records? Are the records paper-based or online/in databases or both?

- *Which mature students?* Those who graduated since the university was established? In the last three years? All students in the university, in one department, in one subject area, one group? Need to think.
- *Which institutions/faculties/departments/groups are to be included in this investigation?* Need to ask supervisor's advice about how to go about obtaining permission. Is one institution/department/subject area/group sufficient – or feasible? Would it be acceptable for me to concentrate on mature students on my course?
- *Has any research been done already on this topic?* Need to find what has already been written about mature students and see what those researchers said about the definition of 'mature' – and other things. Search on Google and use LinkedIn and Twitter to explore whether other researchers have carried out research in this area.

These questions will give you and your supervisor or tutor some idea of where you are heading. You're still at the *what* stage (the *how* stage comes later), but each stage continues to be a process of refining and clarifying so that you end with a list of questions, tasks or objectives that you can ask, perform or examine. These will become researchable questions, which will help you take a major step forward in the planning of your project.

Hypotheses, objectives and researchable questions

Many research projects begin with the statement of a **hypothesis** . Verma and Beard define a hypothesis as:

> ' . . . a tentative proposition which is subject to verification through subsequent investigation. It may also be seen as the guide to the researcher in that it depicts and describes the method to be followed in studying the problem. In many cases, hypotheses are hunches that the researcher has about the existence of relationship between variables.'
>
> (Verma and Beard 1981: 184)

This definition is taken a step further by Medawar, who writes:

> ' All advances in scientific understanding, at every level, begin with a speculative adventure, an imaginative preconception *of what might be true* – a preconception which always, and necessarily, goes a little way (sometimes a long way) beyond anything which we have logical or factual authority to believe in. It is the invention of a possible world, or of a tiny fraction of that world. The conjecture is then exposed to criticism to find out whether or not that imagined world is anything like the real one.

> Scientific reasoning is therefore at all levels an interaction between two episodes of thought – a dialogue between two voices, the one imaginative and the other critical; a dialogue, if you like, between the possible and the actual, between proposal and disposal, conjecture and criticism, between what might be true and what is in fact the case.'
>
> (Medawar 1972: 22; emphasis in original)

Thus hypotheses make statements about relations between variables and provide a guide to the researcher as to how the original hunch might be tested. If we hypothesize, because our conjecture suggests it may be so, that age (one variable) has an influence on degree results (another variable), then we can attempt to find out whether that is the case – at least among the individuals in our sample. The results of the research will either *support* the hypothesis (that age does have an influence on degree results) or will *not* support it (age has no influence on degree results).

The terms 'hypothesis' and 'theory' are sometimes used interchangeably, especially in everyday language. However, the term 'theory' properly refers to *scientific* **theory –** an explanation of some aspect of the natural world that can be repeatedly tested, using a predefined protocol of observations and experiments. You therefore should only use this term in its strictest meaning in academic research.

Small-scale projects of the kind discussed in this book will not require statistical testing of hypotheses often required in large-scale sample surveys. Unless your supervisor advises otherwise, a precise statement of objectives and a list of researchable questions are generally sufficient. The important point is not so much whether there is a hypothesis, but whether you have carefully thought about what is and what is not worth investigating. It may be permissible to make modifications to objectives or changes to the questions as the study proceeds, but that does not obviate the need to identify exactly what you plan to do at the outset. Until that stage has been achieved, it is not possible to consider appropriate methods of data collection, so it's now time to check the following items.

Working title and the project outline

Select a *working title* – 'Barriers to learning' or 'Mature students'? Either will do for the time being. You're almost ready to produce the project outline for discussion with your supervisor, but just go through the stages once again:

- Are you clear about the *purpose of the study* ? Are you sure about it? Do you think it's really worth doing?

- Have you decided on the *focus of the study* ?
- You have not yet *identified your sample* . Discuss with supervisor and seek permissions. You're not there yet.
- You've been through all your *key questions* (several times now) and know what your priorities are. There will almost certainly be adjustments as the research continues, but never mind.
- You have begun to consider *what information* you might need to be in a position to answer your questions. More work needed, but you've made a start.
- You have not yet begun to consider *how* you might obtain this information, but once the focusing is finished, you can begin to consider possible ways and means. Remember that you can't assume you will be allowed to interview people or give them a survey to answer. You have to clear official channels and obtain permissions.

There are still some decisions to be made, but you're ready to produce the first draft of your project outline for discussion with your supervisor. Before you do, think about your submission date. Think about *time* . What are your chances of completing your provisional plan in your allocated time? You are not going to be living in isolation with only a laptop and your mobile/cell for company for the duration of your research, away from work commitments, family responsibilities and holidays. They all need to be taken into account in your time plan. I make plans all the time and I live by lists. I don't always succeed in keeping to them, but at least their presence is enough to remind me about what still needs to be done and to nag me when I am thinking about all the things I'd rather do than get back to the writing.

Timing

There is never enough time to do all that needs to be done to do a thorough job, but if you have a handover date, then somehow the work has to be completed in the specified time. It is unlikely you will be able to keep rigidly to a timetable, but some attempt should be made to devise a schedule so that you can check progress periodically and, if necessary, force yourself to move from one stage of the research to the next.

If you have to complete more than one project in the year, it is particularly important to produce a list or a chart indicating the stage at which all data should have been collected, analysed and drafts produced. Delay on one project means that the timing for the second and third will be upset. It is immaterial whether

you produce a list or a chart, but some attempt at planning progress should be attempted.

One of the most common reasons for falling behind is that reading and associated research take longer than anticipated. Books and articles have to be located, and the temptation to read just one more book or to do one more search online is strong. At some stage a decision has to be made to stop reading and researching and start writing, no matter how inadequate the coverage of the subject is. Forcing yourself to move on is a discipline that has to be learnt. Keep in touch with your supervisor about progress. If things go wrong and you are held up on one stage, there may be other ways of overcoming the problem. Talk about it. Ask for help and advice *before* you become weeks out of phase with your timetable, so that you have a chance of amending your original project plan.

The project outline is for guidance only. If subsequent events indicate that it would be better to ask different questions and even to have a different aim, then change while there is time. You have to work to the date specified by the institution, and your supervisor and external examiner will understand that.

Make sure that you draw up a timetable for your research and put deadlines into your calendar. Don’t underestimate the amount of time that reading and background research will take. Try to stick to your timetable. If a task takes longer than you thought, reset your deadlines and work to the new timetable.

Supervision

Perhaps, not surprisingly, interviews with students and with supervisors reveal a wide variation in supervisory practice (Bell 1996; Phillips and Pugh 2000). The majority of students appear to have enjoyed very positive relationships with their **supervisor** . Their comments are generally along the lines of: ‘very helpful’; ‘taught me what research was all about’; ‘could not have done this without her’; and ‘he made me believe I could do it, saw me through the bad times, read all my drafts carefully, was straight about what I had written and what more needed to be done’. However, when things go wrong, they usually go badly wrong, with students’ commenting as follows: ‘could never get hold of him’; ‘never returned my calls’; ‘made me feel inadequate’; ‘showed no signs of having read my drafts’; ‘didn’t seem to feel she had any responsibility for advising about my approach’; ‘was only willing to see me once a term for a timetabled 20 minutes.

He was always late but always finished on time. I had to travel 100 miles for these 10 minute meetings'; and 'went on study leave, never told me, and no-one was allocated to "take me over" at a crucial time in my research when I really needed help'.

Some supervisors mount a vigorous defence. Regular telephone calls at 11 pm or later in spite of repeated requests not to call after 9 pm so exasperated one supervisor that he refused to release his number to his next batch of tutees. Supervisors' complaints include students not turning up for arranged meetings; demands for drafts to be read overnight; the assumption that supervisors should always be in their room and available for consultation whenever they are needed, and so on.

The point of raising these issues here is not to lay blame one way or the other but, rather, to consider ways of avoiding conflict if at all possible and – only if reason does not prevail – find ways of resolving difficult situations.

Codes of practice for supervision

All universities now have (or should have) a code of practice for supervision. However, providing such a code is one thing; ensuring that everyone involved follows the guidelines is quite another. You should certainly be able to see the code of your university or organization in order to know what your and your supervisor's rights and responsibilities are. Most codes advise that supervisors and students should at an early stage clarify what 'supervision' actually means and what is reasonable for both to expect. Some universities automatically provide a copy for students; others do not.

Keeping records of supervisory tutorials

I firmly believe that records of supervisory tutorials should be kept by supervisors *and* by research students. I am not speaking here of a large document that would require days or weeks to produce, but a one-page form that has space for the date of the tutorial, a (very) brief note of issues discussed, targets set, if any, summary of comments given on drafts and on the general progress of the research, advice given and taken (or not taken) and the proposed date of the next meeting. Five minutes maximum at the end of the tutorial with a copy for the supervisor and for the student. If you create the form in Google Docs within Google Drive and editing permission is given to your supervisor, you can both edit the form online and access it from any browser. Changes are automatically saved, almost as quickly as either party makes them. This provides a useful

record and reminder about what was said, promised and agreed (or disagreed), and acts as a log of progress. Keeping records is good professional practice.

Keep a dated record of your supervision sessions. Keep it to one side of A4 and summarize the actions you need to take before you meet your supervisor again.

The research experience

At its best, the supervisor–student relationship will ensure that your research experience is demanding, but also valuable, enjoyable and will result in the successful completion of your investigation – on time. Most of us need help, encouragement and supervisor expertise. As many first-time and experienced researchers have testified, a good supervisor is like gold dust, and is by far the most valuable resource you can have.

Writing as you go along and the research diary

Chapter 15 , 'Writing the report', considers what should be included in the final report, but if you wait until the final stage before you begin to write, you will be in trouble. Writing should be ongoing, starting with your planning and topic selection and from then on, *as you go along* . Start with a personal **research diary** , digital research log or research notebook – whichever works best for you. Everyone has different ideas about what you should record and what should be left out. Keep your notebook with you at all times, or if you are working digitally, save your research diary file, preferably to the Cloud. This document will track the progress of your research and be invaluable when you are describing the process of your research in your final report. Alternatively, use the note-making app or voice-recording tool on your mobile/cell to make a record of your research, including any meetings that you attend with your supervisor or research participants. Don't forget to ask permission to make a recording and be prepared to say how you will guarantee its confidentiality.

I have no difficulty in deciding what should go into my research notes because I include everything (or almost everything). Rough notes, brief summaries of certain sections, target dates (and targets achieved or not achieved), dates of interviews, dates surveys were distributed (and returned). Names and telephone numbers of people I have spoken to or met. Records of names, addresses,

telephone numbers, email addresses, good ideas I had in the middle of the night when I couldn't sleep, something I remembered when I was on a bus. Difficulties experienced, advice to myself not to do something in this or that way again! A reminder about something I must ask my supervisor. A note about how I might resolve the problem of . . . something or other. If I hadn't made a note of it at that time, I would probably have forgotten it the next day. A reference (new to me) that someone told me about when having a sandwich in the cafe. The times I left home to see someone and the times I returned, if I remember.

Every entry with a date. Do this tomorrow . . . Write this up before Thursday! Transfer this reference to the main list of references. I recall that one student considered my way of jotting down everything to be disorganized. I suppose it is, but I do flag or highlight items that need to be given further thought and, as I've already said and will continue to say throughout this book, we all have our own ways of working, so adopt ways of doing things that seem to work for you. As far as I'm concerned, the only rule is that *you start your diary as soon as you start your research, keep it going* and get into the habit of writing up small portions (with your comments) as you go along. Writing starts here and not when you are at the stage of writing the final report.

Self-reflection

You may not be able to answer these questions right now but you should come back to them when you are ready. Your answers will help you to make decisions about how you will carry out your research.

- Do you have an idea of two research projects that you might explore?
- What hypotheses do you have about what you might find?
- What are the research questions that you are trying to answer?
- What help will you need from your supervisor?
- How will you make notes of your tutorials and your research progress? Digitally? Audio? Notebook?

Planning the Project Checklist

1. Draw up a shortlist of topics.	Talk to colleagues, fellow students – anyone who will listen. Google your topic by asking questions about it. Bookmark interesting pages.	☑
2. Decide on a shortlist of two.	Select your first choice and keep the second in mind in case your first choice proves to be too difficult or not interesting enough.	☑
3. Make a list of first – and second – thoughts, questions or produce a chart or mind-map of ideas, possible problems – anything you can think of.	This is for your eyes only. The aim is to help you to clarify your thoughts about which aspects of the topic are of particular interest or importance.	☑
4. Select the precise focus of your study.	You can't do everything, so be clear about which aspect of the general topic you wish to investigate. Is your topic likely to be worth investigating? Think about it. The last thing you want is to be stuck with a topic that's going nowhere and which bores you to distraction.	☑
5. Make sure you are clear about the purpose of the study.	Give some thought to your sample. You need to consult your supervisor about which individuals or groups might be included.	☑
6. Go back to your charts and lists of questions, delete any items which don't relate to your selected topic, add others which do, eliminate overlap and produce a revised list of key questions.	You are aiming to produce *researchable questions* . Watch your language! Are you absolutely clear about the *meaning* of the words you are using? Words can mean different things to different people.	☑

7. Draw up an initial project outline. Check that you are clear about the purpose and focus of your study, have identified key questions, are clear about what information you will require and have thought about how you might obtain it.	Check your submission date. Do you have enough time to carry out the research you have outlined – and to submit on time?	☑
8. Consult your supervisor at the stage of selecting a topic and after drawing up a project outline.	You don't want to get too far down the research road before you check that all is well. Make sure you discuss a suitable sample and find out who you should approach for permissions.	☑
9. It's best to know about your institution's code of practice for supervision and what to do if the relationship with your supervisor breaks down.	Do your best to clarify any unclear areas of supervisor/student rights and responsibilities.	☑
10. Keep a brief record of what has been discussed and agreed in supervisory tutorials.	It will help to remind you about what tasks and targets have been agreed.	☑
11. Remember that a good supervisor is like gold dust and by far the most valuable resource you have, so don't make unreasonable demands. If you're asked not to phone after 9 pm, please make sure you don't.	Unfortunately, very occasionally supervisor–student relationships break down. If you have justifiable concerns, try to talk about them and to sort out problems. If that fails, go through formal channels, state your case clearly and fairly and, if that fails, request a change.	☑
12. From the start of your research, get into the habit	And don't throw away or delete your drafts or recordings until your	☑

of writing everything down or making electronic notes or voice recordings.	investigation has been submitted, assessed and/or published. You never know when you might need to refer to them.	
13. Start a research diary as soon as you begin your research.	And get into the habit of writing up small sections as you go along. Writing begins here, rather than when you reach the stage of writing the report.	☑

Further reading

Brett Davies, M. (2007) *Doing a Successful Research Project: Using Qualitative or Quantitative Methods* . Basingstoke: Palgrave Macmillan. Brett Davies considers how to draw up a personal roadmap, planning and analysing qualitative data, sampling – and much more.

Cryer, P. (2006) *The Research Student's Guide to Success* (3rd edn). Maidenhead: Open University Press. This book looks at the roles and responsibilities of supervisors ***and*** of research students and provides guidance about what to do if things do not go well.

Delamont, S., Atkinson, P. and Parry, O. (2004) *Supervising the Doctorate: A Guide to Success.* Maidenhead: Open University Press. This is a book written for supervisors, but it is also full of helpful ideas and advice for students.

Eley, A. and Jennings, R. (2005) *Effective Postgraduate Supervision: Improving the Student–Supervisor Relationship* . Maidenhead: Open University Press. The authors discuss the most frequently encountered difficulties in the student–supervisor relationship and offer realistic solutions to difficulties in 30 cases.

Rugg, G. and Petre, M. (2006) *A Gentle Guide to Research Methods* . Maidenhead: Open University Press. This book covers a wide range of topics, including research design, data collection methods, statistics and academic writing – all with helpful examples.