

at the end of this section you will find a handy work sheet on which you can record these deadlines:

- o due date.
- o date on which final, polished draft will be done. I'd suggest one to three days before the due date, depending upon the time needed to type and proofread the final typed copy. If you are having someone else type your final paper, you must be realistic about typists' schedules, and you need to allow enough time for you to proofread the typed copy *and* take it back to the typist for corrections. If you are typing the final copy yourself, be realistic about your typing skills and speed, and leave yourself sufficient time to proofread and correct the typed copy. If you are doing your drafts on a word processor, your schedule won't be quite so tight, but you need to leave sufficient time to proofread the final version carefully and make any necessary corrections.
- o date on which your first rough draft will be finished. This date is dependent upon the length and complexity of your paper and the amount of work you have to do for your other classes between this point and the due date. I'd suggest a date no later than two to two-and-a-half weeks before the due date, and you should allow yourself more time if the paper is going to be longer than ten pages.
- o date to begin your first rough draft. This date is also the target date for having the major part of your research completed; for those of you doing primary research projects, this is the date on which you will have all the necessary results and data from your study or experiment in your hands. I'd suggest no later than three weeks before the paper is due, perhaps earlier if your paper is more than ten pages.
- o date to begin work on the research project: when the assignment is given!

- Once you have set the deadlines above and developed your research strategies, you will be able to—and should—set deadlines for yourself for intermediate steps in the process. If you are doing a secondary research project, you should set deadlines for such things as gathering your first list of sources from indexes and bibliographies, having certain books and articles read, doing interviews, and the like. If you are doing a primary research project, it is crucial for you to set a number of deadlines: when your research design will be complete; when you will put together your apparatus or find your subjects or pass out your questionnaires; when you will run the experiment or study itself; and so on.

- Plan to devote an hour or two *every day* to this project. If you follow the steps laid out in the first four sections of this book, working on this project in small units of time won't be that difficult.

If you space your work out over weeks and even months, rather than trying to cram it into a concentrated period of time, you allow your brain to do its work—and your brain is the secret to a good research project.

Before you begin to gather evidence, there are three major decisions you need to make:

- You must decide *which idea* (working hypothesis/thesis) you are going to test.
- You must decide *how* you are going to test that hypothesis/thesis.
- You must develop a research strategy, a plan of action for finding your facts and evidence.

B. Step 1: The Researcher's Notebook

The first thing you need to do when you begin a research project is to buy a notebook that will be your Researcher's Notebook for this research project. Your Researcher's Notebook is probably the most important part of your research project. In it you will keep an ongoing record of what you need to do; more importantly, in it you will keep an ongoing record of your thinking about your topic as you do your investigation.

Consider this Notebook a strategy designed to help you write a successful paper. Nothing about the Researcher's Notebook is set in stone. Divide it up the way I suggest, or create your own divisions. What's important is that you understand the purposes it serves. The first purpose—more obvious in my first two divisions—is comparable to the function of those planner/organizer notebooks so popular today. It's a central place to direct and plan your investigation. The Researcher's Notebook's second purpose—and its more important one—is found in the last two divisions. It is a journal of what is happening in your mind as you examine your evidence.

1. The Sources section is simply a place to *keep a list* of books, articles, and other sources that have the potential for providing the evidence you need. Here you will write out complete citations for the books, journal articles, documents, and newspaper stories you find in indexes, abstracts, on-line computer searches (you'll learn more about reference materials when you get to Section 3). If you decide to do interviews, this is a good place to jot down the names, addresses, and phone

numbers of people you want to interview; you should also note the dates of the interviews. You need to keep a record of full bibliographic information for promising books and articles because you won't always have time to locate them when you come across information about them. Keeping a list of sources in one place makes it less likely that you will forget about, or misplace essential information about, a book or article or document you want to look at. When you are ready to locate these sources, you will be assured you have all the information you'll need to do so. The Sources section is just a labor-saving device; it will save you unnecessary frustration, too.

2. The **Research Strategy section** contains *lists of things to do*. You may want to subdivide it into several sections. The first page of the Research Strategy division of your Notebook would be a good place to record your various deadlines (see 2.J). Another subdivision should be devoted to writing out the research questions suggested by your working hypothesis/thesis and various places to check in your quest to answer them (see 2.F). There are any number of ways you could lay out this subdivision: questions on the left-hand page, places to look for answers straight across on the right-hand page; questions separated by lines left blank so that you can fill in places to look for answers; questions in one color of ink, places to look for answers in another. You should probably reserve another part of this division for a miscellaneous ongoing list of things you need to do. These are the types of items that might appear on such a list:

- o See if Reed College has a copy of Browning's book.
- o Make a list of books to request on interlibrary loan—and put in those requests!!!!
- o Ask Prof. Smith for names of people I could talk to at the Boys and Girls Society.
- o Find a color reproduction of *Afternoon on Grande Jatte*—check shadows.
- o Find out about Bahai—some encyclopedia of religion?
- o Read Wilson's book NOW!!!

3. In the **Reading section** you will *freewrite*¹ about the reading you are doing as you look at various books and articles. Please note that you will *not* be recording the evidence itself in your Researcher's Notebook.

¹Freewriting is a means of talking to yourself on paper, a means of recording what is happening in your mind as you are mulling over an idea. Freewriting is a very loose, unstructured mode of writing. When you freewrite, use abbreviations that you are comfortable with, and don't worry about correctness (grammar, spelling, sentence structure); all you need to worry about is putting down enough on paper so that you know what the words mean.

Your evidence or data will be recorded on notecards or computer printout sheets—some means that make the evidence or data easy to review and manipulate (see Section 4.A). In the Reading section of your Notebook you will be writing about *your reactions* to the conclusions of other experts and the ways in which they have reached their conclusions. Here you will be asking, and answering, questions like What do I think of this author's work? What are his/her conclusions? What methods did he/she use to test these conclusions? How does this study compare to others? What facts did this expert use? Am I aware of facts that this author didn't use? Do I fully understand the argument a particular author is making? You'll find samples of such entries when you reach Section 4, "Reading Critically and Taking Notes."

4. The **Working Hypothesis/Thesis section** of your Notebook is the most vital one. The rest of this book is premised on the assumption not only that you will keep this journal of your thinking but also that your work in this section—and in the Reading section—is your assurance that your own thinking will remain the core of this whole project. It is in this section that you should use the strategies laid out in the next three steps of the process. Once you have a working hypothesis/thesis and start testing it, you should return to this part of your Notebook every few days, writing to yourself about what you are thinking at each stage about the accuracy of your working hypothesis/thesis, about whether it is the "right" answer to your initial research question. If your research project is going to change direction, it is here that you will make that discovery and here that you will decide which new direction to take. If you decide that your original thesis is not "right," it is here that you will rewrite it to fit your current thinking. In this section of your Notebook you should talk to yourself, honestly and specifically, about whatever comes to your mind when you focus on the puzzle or mystery you've decided to "solve." Jot down any ideas related to your topic that pop into your mind. Write down any questions floating around in your head, no matter how silly or farfetched they may seem. Talk to yourself about confusions you are experiencing and tell yourself what you need to do to clear up these confusions. Use this section of your Notebook to carefully fit parts of the puzzle together. There are no real rules for a journal of one's thinking—except that, when you write here, you need to be thinking. It would be a good idea frequently to devote a whole entry to your answers to these questions: What picture is emerging from the evidence I already have? How does it compare with my original hypothesis/thesis? What areas of the

emerging picture are still fuzzy for me? What information do I need to make them clearer? Should I revise my working hypothesis/thesis? What should it say?

Here's a sample of what an entry made several weeks into the research process could look like:

I came into this project convinced that an open classroom was the best environment for kids' learning. Now I'm not so sure. Ramirez, Wilhelm, and Kim all stress how important it is for children to have structure. So—what's the story? A completely free environment in which kids do what they feel like doing when they feel like doing it or a version of military school? There has got to be something in the middle. OK, let's start with structure. What does that mean? If I am understanding what I've been reading, these experts are saying that children need . . . what? (1) a sense of what is appropriate and inappropriate behavior, (2) they need to know what kinds of tasks they are expected to do and when they should hand them in, (3) they need to know how to go about doing these tasks. Do students need to sit in rows of desks facing the teacher, never talking unless asked a question by the teacher, to have these kinds of structure? NO. Children talking to each other doesn't have to be classified as inappropriate behavior. In fact, Hashimoto and DeMartino both say that kids learn best when they work in groups. But they do need to be told HOW to work in groups. There's the structure. I'm cooking. Let's go on with this.

I cannot emphasize too much how important it is for you to use your Researcher's Notebook constantly throughout the research process. If you want to break the "passive sponge" syndrome and take control of your research process, you must keep a *written* record of what is happening in your head. If you do not jot down ideas that pop into your head, you forget them. If you try to work out a complex idea in your head, you may soon become confused and overwhelmed. Write out these ideas, putting them down on paper will give you the chance to look at them and decide what is right and what is wrong. I've seen too many students get so befuddled by trying to work out their ideas just in their heads that they give up all hope of ever sorting out what they really think. Don't let this happen to you.

If you continually write in your Researcher's Notebook as you do your research, you will find that you are actually doing the important groundwork for your final paper. You are discovering what *you* want to say about your subject. When the time comes to start drafting your final paper, you will realize that an important part of the writing process has already occurred.

Once you have purchased your Researcher's Notebook, you are ready to set up your research project.

C. Step 2: Deciding on the Research

Question/Assumption That You Are Going to Test

As you take various courses in college, you will find that the conditions set up for your research projects will vary. In some classes your professors will give you a list of possible areas of investigation. In other classes the professor will outline the type of investigation you should undertake; she may, for example, tell you that your task is to design and carry out a study in which you observe some specific way in which people use nonverbal communication, or she may instruct you to focus on the connection between the rituals of a particular culture and the underlying values of that culture. In other classes the instructor will leave it up to you to choose both the area of investigation and the method of testing your hypothesis/thesis.

In some classes you will feel comfortable selecting a topic for your research because you are familiar with the material. In other classes you may be very ill equipped to choose a topic because you know very little about the course material.

In the next few pages I will provide some strategies for selecting your area of investigation because, as you may well have discovered firsthand, selecting a topic is a critically important part of the research process; it can make all the difference in the quality of the paper you eventually write. But you cannot afford to spend weeks making the decision; every minute you waste flitting from one possible topic to another is a minute you could have spent researching.

One way to take some of the fear and anxiety out of the need to commit yourself to a topic is to see your topic as a "point of departure" rather than an "end point." Many students are in the habit of selecting a topic on the basis of their perception of the amount of information available about the subject. Their thinking goes something like this: "I have to write a ten-page paper. Ten pages is a lot of pages to be filled. I'll write about computers because I know that there are lots of books and articles in the library on computers." Let's consider the basic problem with this line of reasoning. The student who is thinking this way is really saying to herself: "If I had to write a ten-page research paper for this class *today*, I would have a very difficult time filling up ten pages because I do not know much about the material." But every researcher feels this way. If I had to write my conclusions about a subject *before* I researched the subject, before I thought carefully about the