

UNDERGRADUATE WRITING HANDBOOK  
HUMAN DEVELOPMENT AND FAMILY SCIENCES  
OREGON STATE UNIVERSITY

PURPOSE

To help prepare students to:

Read but not write scholarly research

Write as professionals

Translate scholarly writing into the language of the world

Write research papers using a social science perspective

Use writing as a tool to improve thinking

AUTHORS

Patricia Moran, Gerry Olson, Leslie Richards, Alan Sugawara, Alexis Walker, and Anisa  
Zvonkovic

WITH SPECIAL THANKS TO: Vicki Collins, Jean Caspers

## TABLE OF CONTENTS

### Taking an HDFS View of the World (4)

#### Professional ethics (7)

Ensure autonomy (8)

Do no harm (8)

Benefit others (8)

Support fairness and justice (9)

Maintain fidelity or faithfulness (10)

### Writing as a process (11)

#### The library research process (11)

Step One: Identify the information needed (11)

Step Two: Prepare for the search (12)

Step Three: Perform the search (13)

Step Four: Find information cited in the search results (14)

Step Five: Evaluate the sources of information you have retrieved (14)

Step Six: Read your sources (16)

Step Seven: Decide whether you are satisfied with materials obtained (23)

#### Scientific Sources of Information (24)

Interviews (24)

Observations (27)

Surveys (30)

#### Developing an argument (38)

#### Using groups to improve your writing (41)

Working in pairs (43)

Peer review (44)

Taking a scientific approach (47)

References (52)

### **Taking an HDFS View of the World**

Why HDFS? What distinguishes HDFS from other approaches or disciplines? What is the value of having an HDFS world view? Unlike other disciplines, HDFS professionals believe that a fully informed understanding of individuals and families will develop only when considered from a variety of perspectives and approaches. We bring knowledge from many different disciplines to our work with individuals and families, analyze and integrate that knowledge, and use it as a foundation for examining, understanding, and creating new knowledge. Considered another way, our field emerges from a primary interest in people as they develop and form interpersonal relationships in complex ways and in multiple settings.

Human lives and relationships are extremely complex. Studying these lives and relationships in as varied and multifaceted a way as possible enables us to address this complexity. Because so many factors influence individuals and families, we must study them in this fully-informed way to end up with a realistic and useful picture of individual and family life. Ultimately, because we have this complex view, we are in a position to influence individuals and families to optimize both their development and the ways in which individuals relate to each other.

Let's take as an example the developing person or individual. One way to focus on development is to examine the physical changes that happen to a person over time. This would not provide a fully informed view, however. Individuals at exactly the same point of biological development in their lives will have very different experiences depending on the context in which that biological development occurs. This context includes their previous development, their current and past social environment (i.e., their relationships with peers, family members,

friends, acquaintances), their experiences in and with social institutions (i.e., school, the workplace, church, all levels of government), and the sociohistorical context in which they live. For example, late biologically developing adolescents have different experiences from early biologically developing adolescents. Children who are comfortable in their social relationships will have different reactions to and experiences with biological change from children who are socially isolated. Similarly, individuals react differently to the normal vision changes that occur in middle and late adulthood depending on whether they already use eyeglasses, the nature of their occupation (if employed), how they feel about wearing eyeglasses, and how they and others around them feel about their getting older. And these are only biological changes. Changes occur over time cognitively and socially as well. If one examined only one aspect of change, and only a narrow set of influences on and outcomes of that change, one would have a very limited view of development indeed.

How is HDFS unique? Think for a moment how other disciplines might approach the study of an individual:

- Psychology takes a micro perspective, focusing on the physical, cognitive, and psychosocial development of the individual (e.g., How is well-being influenced by entering puberty early rather than later than one's peers?).
- Sociology takes a macro perspective, focusing on how the individual is connected systematically to other individuals in society (e.g., How are individuals in one family structure different from individuals in other family structures?; Do children who grow up in lower social classes enter the paid labor force at an earlier age than children who grow up in the middle classes?).
- Anthropology takes a macro perspective, focusing on the broader culture in which the

individual lives, and how the patterns in this culture are similar to or different from those of other cultures and subcultures in and outside of the United States (e.g., How does the culture prescribe relations across generations and between genders?; How does the individual, as a member of the culture, see the world and her or his position in it?).

- Economics may take a micro or a macro perspective, focusing on factors affecting an individual's resources, and the extent to which resources, especially money, could be employed as a solution to individual or social problems (e.g., On what basis does a family allocate resources toward retirement?).
- History takes a macro, retrospective view, waiting until an individual's life is lived, then looking back, assembling information about that life, developing connections between life experience and the events and perspectives dominant during that life (e.g., How has the purpose of families changed over time in response to changes and events in society?).

These portrayals of other disciplines are necessarily superficial and simplistic. Within any discipline, including HDFS, there is variability in theoretical and methodological approaches, and it would not be hard to find psychologists, sociologists, anthropologists, economists, and historians who are comfortable with the HDFS world view. Indeed, the HDFS Department has faculty with training in several of these disciplines. Generally speaking, however, professionals in these basic disciplines focus on a specific slice of individual or family life experience, and often on entities beyond individuals or families, such as broader social institutions. Each of these approaches has a dominant view about the way development occurs and the influences and outcomes that are important.

Individuals in HDFS draw from these disciplines, based on the theoretical perspectives we use to tell us what is important. We take as much from these perspectives as is possible and

relevant. We study this information, integrate it, actively create new understanding from this integration, and then apply it, using that new knowledge to benefit individual and family well-being. Application is one of the key distinctions of HDFS. We have a focus that ties theory to practice; that uses knowledge, ideas, and information to improve lives.

It takes time and study to develop a perspective that fits within the HDFS worldview. The HDFS curriculum—the courses you take for your major—is designed to help you develop that HDFS perspective, to learn about the different types of knowledge relevant to individuals and families, and to bring those pieces together into a whole. Because we draw from other disciplines to look at a fuller picture, examining micro and macro influences, processes, and outcomes, HDFS can be described as holistic and integrative. As HDFS professionals, we recognize that the problems addressed by social programs serving individuals and families are extremely complex. We believe that, to be effective, the solutions need to match this level of complexity. We are confident that bringing a wide array of information and ideas to bear on social issues and problems positions us to make a difference in the practice of HDFS; we are prepared to develop knowledge, policies, programs, and interventions that matter.

### Professional Ethics

As an HDFS professional, your writing will combine a commitment to both scientific and moral principles. Although you will address issues from the scientific viewpoint of facts, data, and evidence, you will also employ moral and ethical principles in the reasoning process. An ethical perspective involves deciding what action, judgment, or recommendation is right or true. As a student, you are expected to adhere to ethical principles in your academic work. Your chosen profession within HDFS may also have a code of conduct that addresses preparation, keeping up to date in the field, having and maintaining a license, and/or following certain

behavioral guidelines that are agreed upon by the profession and/or enforced by law. In addition, you will develop a personal code of conduct for your professional role. Krager (1985) identified five principles of ethical behavior that may serve as guidelines for you in your academic and professional writing.

1. Ensure autonomy. Ensuring autonomy means acting according to your own needs and values, as long as those actions don't interfere with the lives and choices of others. It is important to remember this principle of self-determination as you attempt to educate and persuade others to behave in a certain way for reasons that seem clear and obvious to you. In your written work, you may raise both science-based and ethical concerns in an attempt to persuade your readers or move them to action, but others, including your clients, have the right to judge those issues for themselves and make their own choices. For example, a written plan or calendar for a client must represent the choices or actions to which your client has agreed.

2. Do no harm. As a professional, you should continually ask whether your recommendations or actions may harm others directly or indirectly? Ethical professionals think through their ideas, avoiding actions that may put others in harm's way. Your recommendations that seem to be a good idea for a specific client may have negative consequences for another family member, perhaps resulting from poor communication within the family unit. For example, if you give a child an assignment to carry out with a parent, you have made a family demand. If family members can not or do not know how to respond, you may create stress for this family. You can avoid such situations by communicating directly with all involved or by supporting alternative strategies from which clients may choose.

3. Benefit others. Most HDFS-related professions have a mission to help others either directly or by improving the social environment for individual action. You may be active in a

group or profession that provides direct service, or you may seek to develop services, improve service networks, and/or help to create new services or laws on behalf of special client groups. In all cases, your goal is to contribute to a better society. Your writing skills will be in demand in all these situations, and will call upon your ability to state clearly how your efforts will benefit others. As an HDFS student, you may have opportunities to help others through internship experiences. Your reflective writing may deal directly with your opportunities to contribute to the well-being of others in society, now or in the future.

4. Support fairness and justice. As a student you will be challenged to relate ethically to other students, or as a volunteer, intern, or professional, to provide services to clients in a fair and just manner. Professionals may not legally discriminate according to race, ethnicity, age, gender, economic background, sexual orientation, religion, or any other criterion that is irrelevant to the service being provided. This principle incorporates elements of both equal treatment and fair treatment. Ethical situations you may face as a student include citing the work of others, being sensitive to ethnic minorities in your choice of words or body language, assuring that everyone in your writing group receives equal or equitable treatment, incorporating ideas from multiple perspectives in your writing, and so forth. Professional questions you may face are how much can and should individuals pay for services, how may the resources of an agency or business be allocated to different people or uses, who should be eligible for services, should some groups of people be treated differently, and so on. Anything you write must display sensitivity to your potential audiences. Your sensitivity, or the lack of it, may be reflected in your choice of words, language pattern, examples, photos, and so on. Asking a few people who represent your potential readers to review your documents for language or pictures that may offend will help you avoid these mistakes.

5. Maintain fidelity or faithfulness. You show fidelity by keeping promises, being loyal, and developing commitments to friends or colleagues, your clients and your organization. If contracts are a part of your profession, then you must adhere to the items specified. Elements of privacy, confidentiality, and truthfulness are components of this ethical principle. If you collect information from a client that is private or confidential, be sure your client knows how this information will be used and stored. Trust in you, as a student or as a professional, stems from you doing what you say you will do when you say you will do it. Good communication — in writing—can help to reinforce this trust. Thus, timely assignments, phone calls, memos, letters, and so forth will help to present you as a trustworthy person.

As you write, keep these ethical principles clear in your mind. You have an obligation to yourself and to all other HDFS professionals to evaluate and determine acceptable moral and ethical behavior in a wide variety of situations. This is not always easy, as principles may sometimes conflict. For example, should you maintain confidentiality of your written records about friends or clients (fidelity) when you suspect others may be hurt (do no harm) if you do so? Or, what should you do when you know that, by providing evidence, perhaps a memo written by yourself or others, about your organization to a board of directors (truthfulness), you will likely be judged as disloyal (fidelity) by a superior in the organization? Although it may be impossible to avoid such moral dilemmas, a clear moral code will help you to find the right answers. Our colleagues and clients have the right to expect that we will maintain high professional and moral standards, adhering to the ethical principles identified above to the extent possible.

In addition to experiencing conflicts among ethical principles, you may also experience conflicts between the demands (often legal demands) made on you by your professional organization and your own moral/ethical code. For example, the law may require you to submit a

written report if you suspect one of your young clients is being physically abused (rights of the child). If you know that your report will result in removal of that child from her or his parents (do no harm), you may experience a real ethical dilemma, at least until an investigation is completed. Your dilemma stems from the uncertainties of the situation. In this case, what you write becomes extremely important, and you will want to be absolutely clear, truthful, and fair about what you report in written form. On occasion you may be asked by a colleague to provide a favor to someone. If you do as asked (loyalty), you may cause someone else to “be left out,” or to receive fewer services (fairness). The way out of your dilemma may require written communication. Documents such as these need to be truthful, but also sensitive to the situations of all who are involved. What you write will likely become part of a permanent, written record.

## **Writing as a Process**

### The Library Research Process

You have been assigned to write a paper for which you must gather information. How do you go about finding and reading the information you need? Finding and reading information is best thought of as a seven-step process. (There is a useful library tutorial related to this process on line at [osu.orst.edu/dept/library/tutorial/library.htm](http://osu.orst.edu/dept/library/tutorial/library.htm))

Step one: Identify the information needed. Step one requires you to define the issue you are addressing, and to think about the key concepts embedded in the issue. For example, let's say your issue is elder abuse. Key concepts in this issue may be (a) the prevalence of elder abuse, (b) the causes of elder abuse, and (c) the situations in which elder abuse occurs, and approaches to reducing the problem of elder abuse. You will find information related to all of your key concepts.

Step two: Prepare for the search. Where should you start looking for the information you need? In the past few years, this step has become easier, because information is now computerized, but also more intimidating, because there are so many different data bases to search. The first question you should ask yourself is what type of information are you hoping to find? It is useful to think about three categories of information.

Scholarly. Scholarly journals and books often have a serious look. They usually contain many graphs and tables but few pictures or glossy pages. They always cite their sources. Scholarly journal articles are written by a scholar in the field or by someone who has done research in the area. The language of scholarly journals is that of the discipline(s) represented by the journal (e.g., psychology). This language or jargon assumes some background on the part of the reader. Journal articles are not always engagingly written, but the content generally meets scientific standards. Journal articles must be peer-reviewed before they are accepted for publication. Generally speaking, texts from peer-reviewed journals and handbooks in the field are seen as more reliable than those from current periodicals (e.g., *Newsweek*). Books are a little harder to evaluate, but certain publishing houses, particularly university presses, have a reputation for upholding the standards in the disciplines. The main purpose of a scholarly journal or book is to report on original research or theory so as to make such information available to the rest of the scholarly community. Examples of scholarly journals are Child Development, Family Relations, and Journal of Marriage and Family.

Substantive news or general interest. News or general interest periodicals may be quite attractive in appearance. Articles may be heavily illustrated, often with photographs. These publications sometimes cite sources, but more often they do not. Articles may be written by a member of the editorial staff or a free lance writer paid to write the article. The language of these

publications is geared to any educated audience, so there is little jargon, if any. The main purpose of periodicals in this category is to provide information in a general manner to a broad audience. Examples of substantive news and general interest periodicals are Economist, National Geographic, and Scientific American.

Popular. Popular periodicals are usually slick looking with many photographs. They rarely, if ever, cite sources. Authors of articles are paid a fee for their work. The information published is often from second- or third-hand sources, and the original source is often obscure. Articles are often short and written in simple language. There is usually little depth to the content. The main purpose of popular periodicals is to entertain the reader or to sell products. Examples of popular periodicals are Reader's Digest, Parents, Time, and Vogue.

Most of the assignments you will be given will ask you to search for information primarily from scholarly sources. Therefore, you should look for information in data bases that include scholarly sources. The trick here is that some data bases contain sources from all three of the above categories, so it is up to you to be able to distinguish among them. In preparing an assignment, you may occasionally use an article from Newsweek or something from Penelope Leach's latest book on parenting, but you will need to bring a more critical perspective to such works than is true of texts generally seen as meeting scientific standards.

Step three: Perform the search. At this point in the process, you may be tempted simply to go to the Web and to search for key words. Although the Web does contain information that may be useful, you are also very likely to run into problems determining the source of the information or distinguishing between information that is appropriate and information that is not appropriate. Therefore, beginning with the Web may be the least efficient approach to finding the kind of information you will be able to use in your paper.

A more efficient approach is to begin at the library. One advantage of beginning with the library is that you can use the skill of reference librarians who are helpful, knowledgeable, and available.

At the OSU library, you may search for books using the library catalog, OASIS, or for journal articles in a periodical index. A periodical index is a computerized data base that provides information on articles from hundreds, sometimes thousands, of journals and magazines. There are two basic types of periodical indexes: (a) General periodical indexes include magazine or journal articles on a wide range of topics. They serve as an excellent starting point for research. One example is the Academic Index. (b) Subject specific periodical indexes provide coverage for articles published in the journals of a specific field. Subject specific indexes related to HDFS can be found on line at <http://osu.orst.edu/dept/library/bulletins/hdfs.htm>.

Step four: Finding information cited in the search results. Sometimes you will find a brief summary of an article, called an abstract, in the data bases that you search. The purpose of an abstract is to help you decide whether the article is likely to be useful to you. Never cite an article in a paper based on reading only the abstract. You must always find and read the full text of the article before using it as a source in a paper. Sometimes the full text is contained in the data base. In that case, you may choose to print the full text. Other times you will need to write down the call number of the journal or book, and retrieve it from the library shelves. If you are unable to find what you are looking for, remember to ask a librarian!

Step five: Evaluate the sources of information you have retrieved. It makes sense to screen sources of information as you retrieved them. In this way you will not have retrieved information from sources that seem inappropriate for your paper. After you have completed the retrieval process, you should evaluate your sources once again. This is especially important if

you have used the Web to find sources! Here is a list of questions you should ask yourself concerning every source of information you use in your paper:

1. Into which of the three categories of information listed above does this source fall? (It may be helpful to assess (a) whether information is always cited and (b) the intended audience.)

2. Who is the author? From what disciplinary (e.g., psychology, sociology) or theoretical (e.g., contextual, feminist, social exchange) perspective does the author write? Individuals in HDFS often come from a variety of academic backgrounds, and these backgrounds sometimes reflect different orientations to individual developmental and family issues and concerns. We do not expect a sociologist to examine an issue in the same way that a psychologist does. This is why it is important to identify an author's background. Biographical information about an author is more readily available in a book than in an article, but a journal can sometimes provide key information about the author and the author's perspective. Some journals publish articles only from a psychological perspective. Others publish articles only from a sociological perspective. Still others publish works from diverse or even interdisciplinary perspectives. You will come to recognize the approach of different journals as you work your way through the HDFS course requirements.

3. How old is the source? Was it published before a key empirical study in the area? Is it informed by the most recent related work? Is there currently some controversy in the field about this area, or is the author raising new questions that have heretofore not been considered? The thinking about or approach to particular HDFS issues changes over time. For example, ideas about toilet training, now called toilet learning, have shifted over time. Preschoolers in the U.S. today become independent from diapers at around age 3, about a year later than 20 years ago and two years later than is the case in many other nations. The change reflects, in part, a change in

thinking and assumptions about development. We no longer think it appropriate to force preschoolers to engage in certain behaviors until they are developmentally ready. The social context in which toileting behavior is learned has changed as well. Sociologists demonstrate how this shift in the age of toilet learning has occurred during a time of major social change: During the 1980s and 1990s, most mothers of preschoolers entered the paid labor force. Prior to that time, the majority of mothers of very young children were full-time homemakers. This example illustrates differences in disciplinary perspectives as well as the kind of shifts in scientific perspectives that occur over time. Placing the issue or area in context is an important dimension in the analysis of the literature.

Step six: Read your sources. Now that you have gathered sources, you are ready to read them in more detail in preparation for writing your paper. One of the goals of reading in preparation for writing is narrowing your focus. The reading process will help you to clarify your thesis or the question you want to answer in your paper. When you first begin to read material on a particular topic, you may feel that you need to write everything down. Soon, however, you will take fewer notes because you will have a better understanding of the area in question. You also will find that you can take fewer notes later in the process because you will have come across some of the same information over and over again.

Unless you are simply summarizing another's work, you must not just read the text, you must ask questions of it; you must evaluate the information to determine its usefulness for your purpose. After reading the work for an overview of the author's focus and approach, read the source again more carefully. In this slower and more careful reading, your goal is to understand the author's argument and the literature used to support that argument. As you read carefully,

mark and summarize the key points. When you finish this second reading, record your answers to the following questions:

1. What is the point of this article? What is the major question the text addresses and how does the author answer this question? What is the author saying? In other words, describe the author's main point(s). This is the "big picture" question; it does not ask you for the details of the text. The answer to the big picture question is likely to appear in the introduction and conclusion of a journal article, and in the first and last chapters of a book. The headings throughout the reading provide clues to the important ideas the source contains. In effect, by answering these questions, you are creating a summary.

2. What explicit or implicit assumptions underlie the author's approach? Authors build their work on assumptions or ideas about people and families, and how they behave. If you do not agree with the author's underlying assumptions, then it is unlikely that you will be persuaded by the author's argument.

3. What evidence does the author bring to bear on the argument, or what method does the author use to answer the question? What information from other sources does the author use to make a point? Is the question important? Is the evidence relevant to the argument the author uses to support the answer to the question? Are there ways in which the argument is not convincing? Does the evidence meet scientific standards? Does the evidence support the author's conclusions? Is the evidence persuasive to you? Are the conclusions supported by other related work you have read? In addressing these questions, you are providing an analysis of the text. To answer these questions, you will need to understand the text fully. The answers to these questions are not in the text; they must come from you. They represent what you think about the

text. Of course, what you think will be more persuasive if you can bring scientific thinking to bear on the text.

The questions above are designed to help you to think about and analyze the text. Other dimensions of the text, dimensions that place the text in context, will also help in this regard.

One useful bit of information from a source is identifying related materials that also will be useful. As you read, pay close attention to other books and articles the author cited that are directly relevant to your thesis. Soon you will find that articles and chapters new to you are citing some of the same works you have already encountered.

#### A Special Note on Reading Scholarly Articles

It isn't always easy to read in preparation for writing in HDFS because the subject matter is complex. In addition, as in most fields, HDFS has a vocabulary (e.g., operationalize, sociohistorical) that may be unfamiliar to you. Furthermore, some words carry with them a history of debate that will not be evident to the naïve reader. For example, when scholars in HDFS write about the influence of mothers' employment on children, they do so with the knowledge that the social context of that employment has changed over the last 30 years, and that researchers' approach to examining that influence has changed as well. With time and experience, this insider's language will become more accessible to you as an HDFS professional, but it will continue to be inaccessible to a non-HDFS audience. As a professional writer, you must guard against using language that doesn't speak to the reader.

In addition to language, the format of professional writing may be unfamiliar and constrained. For example, scholarly journal articles usually follow a precise pattern of organization. Because journal space is at a premium, they are notoriously cryptic; that is, they assume a certain familiarity with and understanding of the related literature. That's partly why

they seem so difficult to understand. Finally, the literature in the field often relies on particular approaches or methods of analysis that are only understood by individuals with advanced training. This is why the methods and results sections of articles, and the accompanying tables and figures, sometimes don't seem to make sense.

Even if these parts of an article are not understood by you, it is still possible to read the article and obtain something valuable from it. In fact, many researchers make good use of articles in which they don't understand some of the methods employed by the author. As a community of scholars, we rely on the editor of the journal to see to it that the different components of the article have been evaluated, and that the article meets scientific standards. This is the foundation of peer-review: We trust our colleagues in the field to screen the work ahead of time. Because it is not possible in the real world to conduct perfect research, we hold to some scientific standards more strongly than others. Once an article is published, readers bring their own perspectives about what is most important in science when they read it. In other words, they engage with the text as they read it, bringing to it their own ideas and knowledge, evaluating it as well as reading what the author says.

As noted, journal articles follow a standard structure. The introduction, the literature review, and the discussion are key components of an article that are understandable to most educated readers. These sections are the heart of a study. They tell the reader what the article is about and why it is important. They should receive your most focused attention and most careful reading. Other sections of an article provide the information you need to determine whether you can have much confidence in the article's conclusions. These include the description of the sample and the strategies used to recruit participants, the measurement, procedures, and sections (i.e., the way variables or concepts were assessed or the procedures the researcher followed to

gather and approach the data), and the results. These parts of an article will be more difficult to follow, relying as they do on shared, scientific understanding. You should read them for the information you are able to get from them. Note that the more you read these sections, and the further you progress in the program, the more understandable they will become to you.

### Taking Notes

A key issue in reading is figuring out how to make the information you gain from reading available to you when you are drafting your document. There are three important reasons for taking notes while reading in preparation for writing: (a) maintaining a record of the sources you used, (b) recording ideas and information that may be used in your paper, and (c) improving your memory of and your thinking about what you have read. A bibliographic record provides all the information needed about the sources you consulted. You will need to record the following information for all the sources you read:

1. Author: Record the first names, middle initials, and last names of every author of the text. For a book chapter, record the names of the book's editor(s) as well.

2. Title: Record the exact title of the article or chapter. The title of the book or the name of the journal will also be needed.

3. Facts of publication: A bibliography must include specific information about the details of publication. For you to include that information, then, it must be recorded in your notes. For journal articles, record the full name of the journal, the year of publication, the volume number, and the page numbers. The issue number of the journal must be cited only when each issue of the journal begins with page one. Most HDFS journals are continuously paginated; that is, the first issue of a volume of the journal begins with page one, but second and later issues within that volume begin where the last issue left off. The issue number is not cited in these

circumstances, but it is a good idea to record the issue number anyway, in case you need to look the article up again. It will be a lot easier to find if you know the volume and the issue number. For books and book chapters, record the name of the publisher, the city in which the publisher is located, and the year of publication.

Recording ideas and the bibliographic information from what you have read will help you to use those ideas and that information when drafting your paper. Summarizing is an effective way to get key information quickly. You should be able to summarize a chapter or article in a paragraph or two, and a section of a chapter or article in a sentence or two. Unless you summarize in some way, you will be faced with the same volume of material when drafting your paper as when you first set out to explore the topic. Summarizing is a way to make the information you have read available to you in a manageable form.

Your notes also should include your analysis of what you have read. One effective strategy is to take notes on your answers to the questions posed in Step Six (pp. ). If you are unable to answer the questions, then you probably need to read the text more carefully.

The final purpose of note taking is to improve your memory of and your thinking about what you have read. Psychologists have demonstrated that we remember information better if we write it down. That's why you take notes during class lectures and while reading your textbook. Students of writing have determined that the very act of writing helps to push one's thinking. So, writing while gathering information also is a useful strategy for enhancing your thinking about a particular topic.

### Structure for Note Taking

There are a variety of ways to take notes, but many people rely on 3" x 5" note cards. Note cards are useful because you can place each idea or bit of information on a different card,

and then arrange and rearrange the cards to develop a plan for organizing your document. Loose leaf paper can function in this way as well. If you have a short writing project, such as a summary of one article or chapter, where the amount of information you have to read is manageable, you may prefer to photocopy the original and highlight key ideas. Photocopying and highlighting has almost no utility in a larger project involving multiple sources, however, because you will be unable to sort the multiple bits of information according to content.

Computer programs may be used for note taking, but they are not necessary. Such programs facilitate sorting information, and then printing that information by category. They also require that you type all of that information into the computer's memory banks. If you have the appropriate hardware and software, you might be able to scan the text into your computer, but then you run the risk of storing too much information to handle easily, as well as the risk of inadvertently plagiarizing from a text. Regardless of the approach you use, no method is effective unless you read the material carefully, analyze it for content specifically related to your topic and/or purpose, and record the information accurately.

To help make sure that your notes are useful, put a subject or topic heading at the beginning of each note and a notation about its source. These headings and notes will be very helpful to you when you begin to organize the material you have available to you when drafting your paper.

#### Avoiding Plagiarism When Taking Notes

Most of the writing you will do involves both your ideas and those of your sources. The only ethical way to include the work of others is to acknowledge the ideas as theirs. The need to acknowledge sources structures note taking in some ways. In your notes, make sure you can distinguish what you have written from words and phrases written by someone else. If language

from the original somehow makes its way into your final draft without documentation you will be guilty of plagiarism. If the ideas you describe are taken from another source and are not your own ideas, even though they may be in your own words, documentation is required as well. One way to avoid inadvertent plagiarism is not to copy information from the source in the first place. Write your summary without looking at the original. Keep it by you so you can check for accuracy, but use your own words in your notes. Using your own words will help you to focus on summarizing rather than copying information.

The ability to shuffle note cards means that you must indicate the source (and topic or subject) on each card, or you will have trouble providing documentation in your paper later on. When reading an article or chapter, you may believe that you will always remember what the author wrote, but, as you read the views of several different authors on the same topic, it will become increasingly difficult to remember exactly who said what and who came up with which idea. A good rule of thumb is to put the author's last name and the year the source was published in the upper- or lower-right-hand corner of every note card. You also will want to be sure to include the exact page number next to your notes so that you will be able to provide appropriate documentation if required.

Step seven: Decide whether you are satisfied with the materials you have obtained.

After you have read your sources, you may find that you need to go back and search some more. Getting into a topic and finding information is a process that takes time and effort. The good news is that it usually gets easier once you have become familiar with your topic and with what is available.

## Scientific Sources of Information

### Interviews

Interviewing is one of the most common data collection strategies used in HDFS, and it is highly likely you will use interviewing techniques in your chosen profession. As a student, you may be asked to interview someone for a class project; as a teacher, you may need to interview parents about the needs of their child; or, as a financial planner, you may need to collect information about family finances. Interviews can be structured, with a fixed set of questions that are asked in exactly the same way for each respondent, or open-ended and vague to allow respondents to explain their experiences with little influence from the interviewer. Knowing the purpose of your interview will help you to decide just how structured or open-ended you would like your interview to be.

Whether your purpose is collecting research data, getting to know the students in your classroom, or collecting client intake data, careful planning is essential before you ever sit down with the person you want to interview. What sort of information are you hoping to get? How can you ask the questions to maximize the likelihood that you will get the information you need? How can you establish trust and rapport with people, especially if you are asking them to divulge highly personal information? The more you plan ahead, think carefully about the interview questions and the interview process, and pilot-test your questions before trying them out “for real,” the greater the likelihood you will be successful.

A good way to pilot-test an interview is to ask a few of your friends to answer your questions. If they don't understand what you are asking, or if they respond with answers that are not very useful, you probably need to do some revising before taking your interview into the field. Pilot-testing your interview with someone who is similar to your intended interviewee also

is helpful. As a general rule, you will want to pay careful attention to literacy levels, avoid the use of jargon, and avoid complex sentence structures.

Your skills as an interviewer will have an impact on your ability to establish trust and rapport with the person you are interviewing, as well as the likelihood that you will be able to get accurate information in the form you need. The sequencing of questions in your interview can contribute to rapport. In general, it is a good idea to start an interview with questions that are less threatening or personal (Who lives in your household? How many children do you have? Where were you born?), and move into more sensitive subjects after the interviewee feels more relaxed (How much money do you make each month? What kind of relationship do you have with your former spouse?). If you can, you should try to end the interview on a positive or upbeat note.

You may find it helpful to go through some sort of debriefing process after the interview is over, to help clarify any details you may not have had time to write down, or to make notes about the process of the interview. It is essential that you make every effort to complete this debriefing process as soon after the interview as you can. You will be amazed at how quickly important details are forgotten, or—if you are conducting multiple interviews—how easy it is to confuse something that was said or done in one interview with something that occurred in another.

You will also need to decide how you will record the information that you obtain in your interviews. Again, the method you use will be determined by the purpose of your interview. On the one hand, if your purpose is to obtain in-depth information for a class or research project, you may want to consider tape-recording the interview (with the permission of the interviewee), and transcribing the interview verbatim. On the other hand, if the purpose of your interview is to determine whether a client might be eligible for services, you may simply want to record factual

information and evidence on a form. The design of that form will need to be planned carefully to make sure it is easy to fill out and that it provides a place to record all of the necessary information. Interview data may become the basis for a recommendation you might make for client services. In this case, you may need a series of interviews so that your recorded data create an historical record that can help you document the client's needs.

Analyzing the information obtained in interviews may be as simple as adding up the number of ways that a client does/does not qualify for a particular service, or as complex as conducting a thematic content analysis for a research paper. The purpose of the interview guides the data analysis process, and the purpose of data analysis is data reduction. Only rarely would you use all of the information obtained in an interview in a report or written document. Rather, your job will be to provide the most critical facts or information. In a research report, for example, your task is deciding what sort of consistent or powerful themes emerged in your interviews, and presenting them in a coherent fashion.

When you use interview data in your writing, you need to follow certain conventions. If you have guaranteed your interviewee confidentiality, never use his or her name in any document. For ease of presentation, assign your interviewee a pseudonym (fake name). Direct quotations are often much more powerful than your paraphrase of the person's remarks. If you use a direct quote that is only a sentence or two, use exactly your interviewer's words and place quotation marks at the beginning and end of the quote. If you use a longer quote (i.e., 40 words or more), set the quote off by putting it in a paragraph that is indented on both the left and right sides, but do not use quotation marks. Finally, never drop a quote into a document without attributing it to someone. Mary Smith noted, "my son has a great deal of difficulty managing to get himself dressed each morning," or "I used to walk five miles to school, even during the

winter,” John explained, are both ways in which quoted interview material can be attributed to your speaker. For a longer quote that will be set off in a separate paragraph, it is typical to start with an attribution before the indented paragraph: Mary Smith described the difficulty her son was having with his fine and large motor skills, noting . . . . You may also need to check the APA style manual for appropriate ways to reference information taken from an interview.

### Observations

Observation is another means of obtaining information about individual and family development for use in your writing. When you conduct an observation, you are intentionally and systematically examining the behavior of an individual or group in a given setting for the purpose of learning something about the behavior, the individual, and/or the group. There are many techniques for conducting observations depending on your purpose. Some of the more common ones include anecdotes, diary records, time sampling, and rating scales. Each of these observational techniques provides you with a different kind of information about an individual or group. For example, an anecdote is a short narrative or vignette describing an incident in an individual's life. It is often used to illustrate an individual's interest, skill, feeling, or knowledge, such as a specific cognitive ability or physical skill. A diary record, is a continuous record of an individual's behavior and development over time, possibly daily. You can use diary records to plot the mood changes of individuals over the course of one a day or from day to day. Time sampling techniques are much more systematic and precise than diary records. They involve recording the occurrence of a select behavior at regularly specified time intervals (e.g., every two or five seconds) within a given time period. You may use time sampling techniques, for example, if you want to find out the number of times a child displays cooperative behavior while playing in the block corner with other children. Finally, rating scales are useful in the assessment of the

intensity of a behavior displayed by individuals or groups. For example, after spending a month observing children in outdoor play, you may be asked to rate how aggressive a child or group of children is in comparison to another child or other groups of children, using a rating scale from 1 (not aggressive at all) to 5 (extremely aggressive). These ratings of intensity also may be used in making comparisons with earlier ratings of a child or a group of children.

You must follow several steps to ensure that your observations will be credible and effective. These steps include:

1. Planning. Before conducting them, it is important for you to plan your observations in advance. Questions such as “Why are you doing the observation?,” “Who are you observing?,” “What are you observing?,” “Where will you observe?,” and “How will you observe?,” are important to answer before you conduct your observations. Having clear answers to these questions will help you achieve the major goals of your observation.

2. Conducting observations. There are several essential tasks that will ensure the credibility of your observations. First, it is important that you note the setting or context in which your observation takes place clearly. Behavior may vary from setting to setting. For example, how children behave at home may be quite different from how they behave at school or among friends. In describing the observational settings, it is important for you to provide detailed information about the physical environment as well as the people who are present and the activities that occur within that environment. Second, your description of the behavior observed should be as factual as possible. If you and another person observing the same situation would make similar observations, your observations will be seen as more credible. Third, avoid value judgments in your descriptions of behavior. Value judgments are beliefs that you may have about a person that are difficult to verify. They are often based on stereotypes and involve subjective

attitudes that vary from person to person. Instead of describing a child's behavior as very aggressive, it would be more accurate to say, "During outdoor play time, the amount of hitting behavior displayed by Johnny appeared to increase." Finally, be as detailed as possible in describing the behavior you are observing. Specific details will provide you with information about the interests and/or abilities of the individual you are observing. For example, Details such as a three-year-old child's ability to climb the stairs of a slide using alternating feet provide you with more information about gross motor skills than simply saying that the child was climbed the slide.

3. Interpreting observations. Once you have conducted them, your next task will be to interpret the information gained from your observations. Interpretations serve several important functions, depending upon the purpose of your observations. First, interpretations involve relating information obtained from observations to available theory and research. It is important, therefore, that you have a firm grasp of related research and theory before interpretations are made. Second, interpretations have the potential to generate new ideas and knowledge about behavior and development. Distinguishing between what is already known and what we need to know is an important endeavor that contributes to the complex body of HDFS knowledge. Finally, your interpretations may serve as a foundation for implementation suggestions to help people develop skills they might not already have. When applying knowledge, it is important that your observations be credible, and based on a thorough and realistic understanding of the abilities of the individual or groups being observed, as well as the best available research and theory in the field.

4. Implementation Suggestions. Often you will be asked to do something about or with the results of your observations, such as making program recommendations to benefit children in

a classroom. For example, you might suggest that the physical environment of the classroom be modified because a number of children cannot play with blocks placed too high on shelves for them to reach. Or, if James has difficulty interacting with others because he mispronounces specific words, you might suggest group activities in which James and other children work together on pronunciation skills to facilitate learning and positive interactions. In making implementation suggestions, however, always be aware of the generalizability of your observations. Information obtained from children's behavior in the public school classroom may not be generalized to the same child's behavior at home or on a public playground, or to other children's behaviors. The clarity with which you describe the context of the behaviors, as well as the factual basis of your observations will be key factors in generalizability. In addition, before making implementation suggestions, you should always consider the developmental level of the person or group for whom the suggestions are made, and the most up-to-date theory and research knowledge available in the field.

When you conduct observations, systematically following the steps described, and with carefully applying the principles embedded within them, you will obtain information about the behavior and development of individuals and groups that can be used effectively in your writing endeavors.

### Surveys

The survey method is perhaps the most frequently used research technique in the social sciences. Surveys obtain responses to questions from many individuals, and they are particularly useful in describing the characteristics of a population. For example, if you wanted to know the average age at which women become mothers in the U.S., you would rely on survey research for the answer. Surveys can be conducted through in-person interviews, telephone interviews, or

mailed questionnaires. Surveys can be administered by a researcher, or they can be constructed to be self-administered by study participants. All mailed surveys are self-administered.

Large-scale surveys are conducted primarily to help us learn something about a population. One can survey a small group of people from the population, and use statistics about that sample or small group to draw inferences about or to describe that population. Researchers and HDFS professionals may also use the survey approach to conduct a needs assessment, which isn't focused on describing a larger population. Let's say you work for an agency trying to decide if there is a need for a program to serve for the children of the agency's clients. One need only do a survey of the agency's clients to determine if the need is there. The population of interest in this case is small, but survey methods are still employed.

Surveys often are carried out at the national level—across the country. When you read about Gallup or Harris polls, you are reading about nationally representative surveys. These are surveys that represent the specified population at the national level (e.g., all registered U.S. voters; all registered U.S. voters who are likely to vote in the next election). There are also national surveys useful for HDFS. Two examples are the National Survey of Families and Households (NSFH) and the National Longitudinal Survey of Youth (NLSY). Because these surveys were supported by funds from the federal government, the data in them are available to researchers across the country through data archives. These data are accompanied by manuals providing all of the details about who was sampled, who responded, and how each variable was measured.

Researchers who use NSFH, NLSY, and other such survey data are conducting secondary analyses. They must still be aware of and able to defend the decisions made in gathering the data initially. Surveys such as the NSFH and the NLSY are valued primarily because of their very

careful sampling procedures and their longitudinal nature; that is, both surveys have studied their respondents over a period of years. The information in them comes from participants who closely approximate the population in which the researchers were interested. This is an important strength. It means that the information obtained from these surveys is generalizable to the population that the samples represent.

Surveys have weaknesses, however. National surveys rarely achieve anything near even an 80% response rate. If 2 of every 10 people contacted did not participate, the response rate is 80%. In addition, if the survey is longitudinal, more and more people are lost to the survey over time either through death, because of disinterest, or because they could no longer be located by the researchers. This attrition of the sample is problematic because people who die at early ages, people who are no longer interested in participating, and people who relocate tend to have been different all along in systematic ways from those who remain living, continue to participate, or move. These differences, particularly in HDFS, are often tied to the research question of interest. They include such things as social class, marital status, and health status, among other variables. When the characteristics of the population are known, attrition may not be a serious problem because statistical techniques may make it possible to compensate for losses to the sample tied to known characteristics.

There is another way in which surveys can be problematic, however. Long-distance telephone interviews are very expensive, so researchers who use this approach try to keep the length of the interview well below 30 minutes. In-person interviews also are expensive in terms of interviewer time and the cost of travel to the interview sites. Refusal rates are higher if interviews are expected to take a long time. Similarly, mailed surveys are less likely to be completed and returned if the questions go on for too many pages. The bottom line is that

surveys must measure a small number of variables rather quickly. In the NSFH, for example, marital quality is measured with a single item. This is an acceptable, reliable way to measure marital quality, but it may not be the most valid measure, and it certainly is not the only way to measure marital quality.

Another weakness comes not from surveys themselves, but from how they are used. Scientists sometimes value the ability to generalize to the population so highly, that they minimize issues of whether the data are appropriate for addressing a specific research question. They may try to study a variable that wasn't measured in the survey, because the sample is such a good one. Just as it is inappropriate to generalize results beyond the population represented by the sample, it is problematic to study something that cannot be studied adequately given the available data.

Surveys tend to be highly structured. As compared to other types of research, and because they are highly structured, surveys can seem to be easy to carry out. This apparent ease can lead individuals to conduct surveys without careful thought. Done properly, surveys take time and money. There are important conventions that surveys should follow related to sampling (i.e., who is included in your survey) and measurement (i.e., how do you frame and phrase the questions you wish the respondents to answer).

Sampling. Sampling is the process of selecting the individuals who will be recruited into your survey. A sample is chosen on the basis of certain characteristics. In the example of the mothers identified above, the population of interest is all women who have ever had children. You would never be able to ask every mother alive how old she was when she first gave birth. Sampling is a strategy for getting the a of people who reflect the composition of your population. A sample is selected from the population in which you are interested, but it is much smaller.

A sample is problematic if it includes people who don't match the characteristics of the population of interest. It is also problematic if it has a disproportionate number of people who are unique in some way. For example, over the past 10 years, people have been getting the impression that many women are having their first child after the age of 40. If true, this would reflect a major social change, as, over this century, most mothers have had their first child when they were in their 20s or younger. The idea that, today, many first-time mothers are older women, comes from popular magazines, television talk shows, and the cousin, coworker, or neighbor you know who became a mother at age 41. Recent data suggest that there has been an increase in the number of women who become mothers for the first time in their 40s, but the numbers are much smaller than had been believed. We had been forming conclusions about the age of first-time motherhood based on improper or nonrepresentative sampling. When all living mothers in the population were represented in the sample, the actual change ended up to be relatively small.

In other words, improper sampling can skew information or distort it so that we end up thinking something about the population is true when it isn't. We take something that we know to be true for a sample, and we assume it is also true for the population. This only works if the sample represents the population accurately. If you ask parents whose children are home schooled or in private school about the public school system, you will get different responses from those of parents whose children are currently enrolled in the public schools. Sampling is crucial. In determining the value of a survey, one of the most important questions is whether the right people have been sampled to address the research question.

As noted, all samples need to represent a larger population. Researchers often draw samples that don't represent the population. These are known as purposive or convenience

samples. They are described in this way because they are sampled for a specific purpose or are available to the researcher. Such samples are appropriate when the researcher is interested in a very specialized group. For example, because the population of bisexuals is not known, it is not possible to draw a representative sample of bisexuals. Instead, a researcher interested in studying the relationships of individuals who self-identify as bisexuals would have to draw a purposive or convenience sample .

Response rate. The response rate is the proportion of people contacted who participated in the survey. In a telephone survey, for example, if 100 people were called, and 33 both answered the call and responded to the survey questions, the response rate would be 33%. A low response rate raises questions about whether the respondents truly can be used to learn something about the population at large. A low response rate is especially problematic when the people who choose not to respond are different in some systematic way from the people who agree to participate. Women and middle-income people are more likely to agree to participate in a survey than are men and either wealthy or poor people. A low response rate that is skewed toward specific segments of the population (e.g., women, middle-income people) raises questions about whether the information obtained from the survey is useful for the population, or whether it will be useful only for that segment of the population represented in the sample.

Lack of reliable and valid measurement. Most surveys measure variables. A variable is something that varies. Income is a variable because some people have no income, some have very little, some have a great amount, and so on. Measuring a variable is a lot more difficult than it might seem. Take income. Let's say you know of a household with a mother, a 17-year old daughter, and a 14-year old son. Both the mother and the daughter have jobs. Are the earnings of both to be included in the box labeled household income? What if the mother gets child support

from the children's father? Is that included in household income? Is income measured before or after taxes and other withholding? Is a generous holiday gift of cash from the mother's parents counted as income? What about the interest the mother earns on her savings account? If it is so difficult to measure something as straightforward as income, which can easily be counted, imagine the problems researchers face measuring something like psychological well-being, style of parenting, attitude toward mothers' employment, and so on.

Measures must be both reliable and valid. To be reliable, they must produce the same score under identical circumstances. That is, unless something unusual happens, your attitude toward mothers' employment should be the same today as it was last week and as it will be next week.

To be valid, measures must measure what they claim to measure. For example, attitudes toward mothers' employment should not be confused with attitudes toward paid work or with attitudes toward women in general. There are many ways to measure variables. Some measurement instruments come to be seen as so reliable and valid for a specific age group, that they are widely used. This is the case for many measures in HDFS, such as psychological well-being and certain types of attitudes. When there is no agreement on the way to measure a variable, researchers must defend their measurement decisions by reporting statistics that help make the case that their measures are reliable and valid. And, they must provide information about how the measure was developed so that readers can bring their critical thinking skills to bear in evaluating the measure.

To summarize, there are many questions to raise when reading an article describing the findings from a study using survey data:

1. Is the population represented in the survey appropriate to the research question? How

were potential respondents identified? Was the process of selecting and recruiting respondents clearly described? Were respondents selected randomly; that is, did each member of the population have an equal chance of being contacted by the survey researchers? In other words, does the sample represent the population?

2. What was the response rate? Is there evidence that the people who decided not to participate are different in some systematic way from those who did participate? For example, did the respondents have a higher income, on average, than those who refused? If those who participated were different from those who refused, the study's conclusions would be suspect, especially if the characteristic on which they differed is related in some way to the research question. In a study about children who grew up in single parent households, did the author report on the income levels of the children, for example? If low-income households were not well represented in the sample, or, conversely, if higher-income households were not well represented, the conclusions could be biased. They might apply only to the specific income group included in the sample.

3. If they are included in the research report, look over the questions the author used to measure the study's variables. Do the questions make sense to you? Do they seem fair and unbiased? Pay particular attention to how the variables of interest to you were measured. Do the questions reflect what the author says they do? Do the questions represent the concept that the researcher set out to measure?

### Developing an argument

Few topics evoke stronger feelings than families. Such strong feelings often may be based on our own family experiences or on observations of families we know. For example, you have probably talked with someone who insists that children should be reared in a particular

way, saying, "this is how my family did it." You also have probably listened to politicians refer to the importance of families when they want to be certain that a point sparks an emotional reaction in the audience.

Because most people have such strong feelings, arguments concerning families can easily lose perspective. It is not uncommon for people to take a more extreme stance than is reasonable, to be tempted to generalize from one situation to all families, or to exaggerate the negative or positive consequences of a particular family situation. In both academic and professional writing in HDFS, it is very important that students take a reasoned and rational approach to constructing arguments concerning families.

The field of HDFS is based on research and theory about families that goes beyond personal opinions and experiences. As a student in this field, you learn a scientific perspective in the classes you take. You will come to understand how to use this approach, and the information generated through it, to develop thoughtful arguments concerning families. A scientific perspective is essential in academic writing when you are asked to evaluate and integrate research and theory in a reasoned and rational way. This reasoned, rational, scientific approach is also critical in professional writing, such as when you advocate for a specific position in a letter or memo, or when you develop a program with a particular approach to addressing a problem.

The first step in developing an argument is to find sources of information on which to base your argument. In academic writing, these sources are almost always scholarly research or theory. Professional writing may draw not only from scholarly research and theory, but also from government agencies or program records. Regardless of the type of information you use, it is essential that you:

1. Evaluate whether the source is reliable and accurate. For instance, can you find obvious flaws in the way the study was conducted? Are you confident that the information from a program reflects what actually occurred in the program? Even if the information you find supports your argument perfectly, if you are not confident of the accuracy of the information, don't use it to support your point!

2. Consider the weight of the evidence for a particular point of view. For example, are there 15 studies that say one thing and 1 study that says the opposite? It is possible (although not probable) that the 1 study is superior to the 15. In such a case, however, you should be able to say why that study is better than all the others combined.

3. Consider the importance of information that contradicts your argument. For example, let's say you want to argue that day care is bad for children, but your search for information to support your argument reveals numerous sources suggesting that day care has many positive influences on children. Rather than discarding this information, you should challenge yourself to evaluate its relevance and importance. Furthermore, when you encounter reasoned, rational, and scientific evidence that contradicts your view, you should reconsider your position. This is what HDFS professionals do: They inform their views and positions with scientific evidence.

Once you have explored sources of information, you should begin to work on stating your position on the issue clearly, the reasons for your position, and your conclusions. In both academic and professional writing, your reasoning and conclusions should be both apparent and well supported by evidence. Below is a list of some things to avoid in developing an argument.

- Being tenacious in holding on to a position because you have always known it to be true. (I don't care what you say or what you have read. I know I am right because this is the way it was always done in my family.)

- Using a highly emotional anecdote to make a point without other supporting evidence.  
(That child was abused by a foster parent. We should do away with foster care!)
- Basing your entire argument on intuition or what feels right. (That's what I concluded because it seemed obvious to me!)
- Using only personal experience alone to justify your position. (I know for a fact that children from low socioeconomic families are less socially competent, because I worked with them last summer.)
- Ignoring evidence that is contrary to your position. (No matter what other people say about families, my own research into this indicates that all families solve their problems in this manner.)
- Using either/or reasoning; that is reducing a complex issue to just two positions: yes/nor or for/against. (Child care is bad for children.)
- Reporting evidence inaccurately. (Susie is an aggressive child versus Susie hit Brian when Brian took a block from her.)
- Playing on audience fears. (If you don't use spanking, your child will turn out to be a delinquent, and you will be responsible.)
- Appealing to false authority. (Hillary Clinton believes this, therefore, it must be true!)
- Basing your argument on false assumptions. (Boys have more natural ability for using computers than girls have.)
- Drawing conclusions that don't stem from reasoning or evidence. (Gifted children need help in developing their social skills because they almost always turn out to be social outcasts.)

- Drawing conclusions that go beyond what your evidence supports. (Most children from single parent families develop psychosocial problems.)

### Using Groups to Improve Your Writing

Although we think of writing as a solitary activity, most successful writers—including HDFS professionals who write for an academic or a lay audience—involve others in the writing process. Involving others in one's writing is particularly helpful in HDFS. In part, this is because the subject matter is complex, sometimes even technical, and it is the rare individual who has sufficient expertise to understand the entire domain very well (Ramage & Bean, 1997). This writing manual is a good example of a group-writing effort! We have learned that our individual writing is better after peer review, because it helps us to pay attention to the reader's perspective, rather than to focus only on the point of view of the writer. We also have learned that serving as a peer reviewer helps us to improve our own writing. This is one of the reasons why peer review is so useful: It helps both the reviewer and the writer.

During your tenure as an HDFS major, you may involve other students in your writing in two ways. First, it is likely that you will be assigned to work in pairs or with a group of other students. In some courses, you may be asked to produce a group project, rather than several individual ones. In others, pairs or groups will be formed so other students will be able to receive peer feedback on writing ideas and actual drafts. Second, once you come to discover how valuable giving and receiving feedback on writing can be, you may choose to work with other students on your own.

Let's begin by focusing on group projects. As you probably know, not all group experiences are optimal. A number of things will contribute to a successful group product:

1. Begin with a discussion of the assignment so that each member of the group has a

similar understanding of what is expected. This will save you and other group members the frustration of carrying out a task that turns out to be unrelated to or not helpful for the assignment.

2. Use your group to stimulate and push your thinking. On the one hand, groups that pursue the first idea presented don't have the opportunity to develop their ideas into something really useful, that reflects the complexity of most HDFS issues. On the other hand, groups whose members simply assert their own views don't benefit from the interaction process. Ideally, group interaction helps you to sound out and elaborate your position, reflect the complexity of the issue, or just recognize that alternative positions are possible (Ramage & Bean, 1997).

3. Make sure all members of your group have the opportunity to speak and to articulate their positions fully. Your job, while others speak, is to listen, and to be flexible in considering what others have to say. Look for strengths in the positions of others, and take note of any weaknesses your peers identify in your view. In other words, use the group interaction process to evaluate your position fully.

4. Try to conduct a discussion rather than simply air different views. Relate new ideas to those that have already been expressed. Relate ideas to each other. This is how you will flesh out your position. Don't be afraid of conflict or disagreement. Airing differences is an important part of identifying alternative views. More than likely, these differences reflect disagreements in the field or in society more generally (Ramage & Bean, 1997). To make the best case for your own position, you will have to deal directly with these alternate positions.

Problems are likely to develop when working in groups, and it helps to anticipate them. For example, it is not uncommon for groups to have an "impossible" participant. There are many different ways to be obstructionist in a group. Problematic group members may dominate the

discussion, be rude or intimidating, challenge what each group member says, refuse to participate, come to the group unprepared, or not carry out the assigned work (Ramage & Bean, 1997). At extreme levels, groups with an obstructionist member probably need to call on the instructor to intervene. Most problem participants, however, can be handled by the group. The best way to do so is to discuss the problem directly, as a group. It is most effective to focus on your feelings rather than on the problem member's failures. Statements such as, "When you do \_\_\_\_\_, I feel \_\_\_\_\_," are far more effective than accusations directed toward the problem party. Effective statements draw attention to the outcomes of the problem member's behavior, without assigning blame.

### Working in Pairs

Supplemental to your group work, or when working on an individual project, you may choose to pair up with another student to improve your writing. Working with another person is a good way to generate and clarify ideas for a writing project (Ramage & Bean, 1997). One way to do this is to take turns interviewing each other.

Let's say you have an assignment to write a paper, and you are having trouble deciding on the topic you want to investigate. Work with another student in the class to narrow your focus. Ask each other questions such as, What particular problem or issue in adolescence interests you? Why do you care about that issue? Why might others think this topic was important? How much information do you think you'll be able to find on this topic? What position will you take in your paper; that is, what is your thesis?

When it's your turn to help narrow your partner's topic, do what you can to help get your partner to talk through thoughts and issues. Offer suggestions, bring up related ideas, suggest problems your partner might encounter, and so on (Ramage & Bean, 1997). Take turns talking

through your thesis and its supporting argument. In this way, the two of you can help each other “practice” your paper, and, in the process, generate ideas, supporting arguments, and helpful details. If you work in pairs, focusing for 15 to 20 minutes on each person’s topic, you will be well on your way toward drafting your paper.

### Peer Review of Writing

You can work in pairs, triads, or even groups of four to six persons to review drafts of each other’s work (Ramage & Bean, 1997). Peer review has been shown to be very helpful, but only if comments are specific and focused. Although it’s nice to say, “I really liked your paper,” it is not nearly as helpful as saying, “I couldn’t figure out how the information in the second-to-the-last paragraph was related to the rest of the paper.” The goal is to give the kind of careful feedback you would appreciate from others. To be most effective as a peer reviewer:

1. Read the assignment carefully. Unless you know what is required, you will be unable to provide feedback that will be very helpful.
2. Identify sections in the draft where you became confused. This helps the writer know that different, additional, or more focused information is needed.
3. Identify areas where more support is needed. Let the writer know if sections of the draft would be stronger with supporting evidence or with additional details.
4. Raise questions about the text. Ask the writer, “Are you saying \_\_\_\_\_?” Bring other information to bear. Ask, “What would the author of our text say about this passage or in response to this statement?”

You can help your peer reviewer by providing a legible, double-spaced draft of your paper—with lots of room for questions or comments. Also, read your draft to yourself first, out loud, identifying and correcting any problems that are obvious to you. It is best to have peer

reviewers read your work after you have corrected your paper's most noticeable problems.

Determine the type of feedback you or your peer would like to receive. Peers can provide two types of feedback: response-centered feedback and advice-centered feedback (Ramage & Bean, 1997). Response-centered feedback gives you, the writer, nearly full responsibility about what to change in the paper. Reviewers simply note good passages, areas that are confusing, and areas where they want to raise questions. Essentially, peer reviewers give you their reactions.

The ideas below are helpful strategies for providing response-centered feedback (Ramage & Bean, 1997):

1. Read the manuscript at normal speed. Place a note in the margin, such as good, to identify passages you see as effective. Place a wavy line under sentences or sections that are confusing or where something doesn't seem to fit. Place a ? alongside areas where you have questions about the text or about the author's point.

2. Read the manuscript again, more slowly this time. Describe why passages are good (e.g., "I like the way this paragraph started because . . .") and any problems you identify (e.g., "I got confused when . . ."). For example, note where you think the writer may have misunderstood something from a source, and write what you think the source intended. Say where you think the paper would benefit from additional information. Indicate whether the author has convinced you that the issue is important. State whether you think the writer has supported the thesis adequately in the draft. Which is the least supported and the most supported claim the author makes? Which do you think is the least important or most important idea? Are the weakest and strongest points located where they are most effective? Identify places where the transition between paragraphs or between ideas is not smooth.

Advice-centered feedback is more directive. It takes longer to give advice-centered feedback, but advice is more likely than reactions to benefit the writer. Advice-centered feedback includes suggestions for improving your paper. The reviewer gives you ideas about your paper's thesis, organization, and effectiveness. The very last things for peers to comment on are general editing and mechanics. There just isn't much point in fixing grammar and formatting errors when the content and structure of the paper may change.

If you want to give or receive more help, then you need to use advice-centered feedback in addition to response-centered feedback. Each reviewer should add the following step to the first two strategies above:

3. Provide specific recommendations for improving the draft. For example, note where the writer could use more effective language. Show how the title might be clearer, or how it might generate reader interest. Specify if you had to read too far into the document to get to the point of the paper, or how the introduction might more effectively capture your interest, provide background material, or present the author's thesis. Identify any points or evidence that would strengthen the writer's ideas. Give information that would help the writer add examples. Note any challenges or arguments that could be brought to bear on the writer's position. How might the writer use evidence more effectively to support the thesis? Specify something that could be added to the analysis, or suggest a different way of framing an argument. Show where the support the writer offers is adequate or inadequate. Focus on the structure of the paper. Can you identify its main parts: introduction, background (as needed), supporting points, summary, section refuting opposing views, and conclusion? How might the structure be improved? Are opposing arguments treated fairly? What opposing arguments were not considered?

4. Conclude by summarizing the key strengths and any problem areas of the paper.

Advice-centered feedback, provided by one, two, or even three or more reviewers, could make the difference between a merely adequate paper that would earn a grade of C and one that is thorough and effective that would receive an A.

What happens if you have more than one peer reviewer, and you receive conflicting advice from them? This is a very common occurrence in professional and in scholarly writing. In fact, it is not unusual for authors to get journal manuscripts back from an editor with very different ideas about what needs to be done to improve the paper. Only sometimes does the editor provide direction to help the author. In your case, focusing on the specifics of the assignment may help you to make a decision, particularly if the reviewers are not also in your class. Ultimately, you are the writer and you must make the decisions about how to resolve conflicting advice. You may find that it makes the most sense to take the advice of the person whose criticism is clearest and who offers suggestions about how to resolve issues in your draft (Ramage & Bean, 1997).

After you have read all of the peer reviews, read your draft again, slowly, preferably out loud. Think about the issues raised by your reviewers when you encounter the problematic sections of your text. When you have finished reading, draft a plan for making changes. Then make them!

### **Taking a Scientific Approach**

What is a scientific approach? Scholars in HDFS are motivated to use scientific inquiry for many reasons. Included may be such reasons as personal curiosity and reflection, personal commitment to find meaningful solutions to people's problems, policy needs for social programs, and/or professional or academic interest in knowing the causes of particular outcomes or in predicting the results of selected behaviors. As a student in HDFS, your writing will often

involve topics and tissues that rely on scientific information for meaning and credibility. You will rely on science as a method of discovering or understanding what is true. In this way you become part of the community of scholars in HDFS.

What is science? According to Schutt (1996) science is a set of logical, systematic, documented methods with which to investigate nature and natural processes. It is also the knowledge produced by using scientific procedures. "So, social science is the use of these methods to investigate individuals, societies, and social processes; it is also the knowledge produced by these investigations" (Schutt, 1996, p. 7).

Researchers and writers rely on certain principles of science when seeking to understand. These principles have developed over time. They have grown out of an understanding of the procedures necessary to arrive at honest, meaningful, and reliable results. You will be well served in your academic and professional writing if you pay attention to these scientific principles as a way to evaluate your work and the work of others.

Scientific principles. If you adhere to the following principles, or use them as criteria to analyze and critique the work of others, you will approach the level of scientific thinking exemplified by respected others in the social sciences. These principles are presented as ideals. In the abstract, there is uniform agreement on the standards of science. In reality, things are a little fuzzier, and full compliance with scientific principles is probably impossible. Instead, as scientists we come as close to these ideals as we can. Then, we are explicit about our procedures and decisions, so that others know where we have fallen short.

1. Agreement by key scientists. Authorities, or the community of scholars recognized in your field as having expertise on an issue, have reached agreement on the content and process relevant to topics and issues in their purview. As a scholar you enter into peer review, scholarly

dialogue, and so on, to work toward agreement. In an academic community this may include peer exchange of written work, presentations and discussions at professional meetings, ongoing dialogue through personal correspondence or letters to journals, and so on.

2. Systematic thought. All parts of the process are specified, clear, and linked in a logical manner toward an identified purpose. For example, as you work through a writing assignment, you select a presentation order based on chronological development, increasing complexity of ideas, or some other organizing principle that makes sense for your topic.

3. Context. All variables related to the specific problem, situation, topic, or issue are identified, controlled, and/or specified in a meaningful way. You take into consideration any unique aspects of your work (or of someone else's work), and identify or account for them as you analyze information. For example, you decide to observe people using food stamps to buy groceries. In one case you observe a woman buying t-bone steak, an item that you consider too expensive for your budget. What would you conclude? Would your conclusion change if you knew that tomorrow was her 16-year-old son's birthday? What other information would you need to be able to put this situation in context?

4. Replication. Other social scientists may follow your specific scientific process, and expect to reach the same results. This implies that you clearly specify methods, identify and define all variables, and use a process that others may repeat or replicate. Results of replications should be similar if all procedures are the same. Rarely are any two studies identical, however. Scientists sometimes deliberately change one key feature (age of participants, for example) or measure as a way to clarify, understand, or further examine results. Furthermore, the same study carried out a number of years later, may produce different results after broader societal changes.

5. Parsimony. Relates to the beauty of using the simplest possible procedure necessary to reach the desired end goal. Any information or measure that is unrelated or only tangentially related to your topic of interest is eliminated. Only the key or important elements are included as you move from point A to point B. This implies that you know exactly what you want to investigate, and you select a manageable topic to study and examine.

6. Generalizability. Exists when a conclusion you (or others) draw holds true for a population, group, or subgroup, given the conditions that you specify. You must not assume that what is true of one group is necessarily true of another, especially if the second group was not included or represented in your study.

7. Supporting evidence. Evidence, such as reports of research results, used to justify an approach to a problem, a certain perspective on a situation, and so on. You must apply all of the standards of scientific inquiry to such evidence before using it to support a point of view. When no direct or full evidence can be found, you may use closely related studies to support one aspect of a problem or your perspective. Any evidence you employ must be given full scrutiny using scientific principles.

8. Value-neutral or objective. The work is free of personal bias or value judgments to the extent possible. Complete objectivity in social science research is impossible to attain and is generally not the primary goal of most research. Complete objectivity is not possible because of the absence of good theory or prior research to explain phenomena; limitations on available money, time, or other resources needed to include or control variables; unanticipated factors that pop up during the research process to influence results; inability to obtain all desired information, perhaps because of issues of privacy or fairness; and/or gaps in the knowledge of researchers. Furthermore, our choice of research question, no doubt, reflects our values and

experiences. For example, people often study divorce or family violence because of passionate beliefs and/or feelings about the subject. We can learn much from scientific inquiry, however. As a reader of research, your task is to be alert to any identified or unidentified biases that exist. Try to analyze information from the perspective of the scientific ideals, so that biases or errors become more obvious and can be used to qualify any results, conclusions, or recommendations the author makes.

## References

Krager, L. (1985). A new model for defining ethical behavior. In H. J. Canon & R. D. Brown (Eds.), Applied ethics in human services: New directions for students services (No. 30, pp. 32 – 34). San Francisco: Jossey-Bass.

Ramage, J. D., & Bean, J. C. (1997). The Allyn and Bacon guide to writing. Boston: Allyn and Bacon.

Schutt, R. K. (1996). Investigating the social world. Thousand Oaks, CA: Pine Forge Press.