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Methods of Discovery: A Guide to Research W

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Chapter 6: Research Writing in The Academic Disciplines

Posted April 16th, 2008 by pz

Introduction

Regardless of the academic discipline in which you conduct research and write, and the heart of the research and writing processes lie the same principles. These principles are critical reading and writing, active and creative interpretation of research sources and data, and writing rhetorically. At the same time, as a college writer, you probably know that research and writing assignment differ from one academic discipline to another. For example, different academic disciplines require researchers to use different research methods and techniques. Writers in different disciplines are also often required to discuss the results of their research differently. Finally, as you probably know, the finished texts look different in different disciplines. They often use different format and organizational structure and use different citation and documentation systems to acknowledge research sources.

All these differences are rhetorical in nature. Researchers and writers in different academic disciplines do what they do because they have a certain rhetorical purpose to fulfill and a certain audience to reach. In order to make their research understood and to enable others in their intellectual community to follow their ideas and theories, academic writers conform to the expectations of their readers. They follow the research methods and procedures as well as the conventions of presenting that research established by their academic community.

As a college student, you have probably noticed that your professors in different classes will give you different assignments and expect different things from you as a researcher and a writer. Researching this chapter, I looked for the types of writing and research assignments that professors of different academic disciplines assign to students at the university where I work, by browsing websites of its different departments. As I expected, there was a considerable variety of purposes, audience, and research methods. I saw assignments ranging from annual accounting reports assigned in a business class, to studies of various countries' political systems in a political science course, to a web search for information on cystic fibrosis in a cell biology class. All these assignments had different parameters and expected writers to do different things because they reflected the peculiarities of research and writing in the disciplines in which they were assigned.

This variety of assignments, methods, and approaches is universal. A study by Daniel Melzer examined the kinds of research and writing assignments students in various colleges and universities across the nation receive in different disciplines. Melzer's shows that students in various academic disciplines are asked to conduct research for a variety of purposes, which ranged from informing and persuading to exploration and self-expression (91). Also, according to Melzer's study, students in different disciplines researched and wrote for a variety of

audience which included not only the instructor of their class, but also their classmates and for wider audiences outside of their classes (95).

Despite this variety of goals, methods, and approaches, there are several key principles of source-based writing which span different academic disciplines and professions. These principles are:

- The purpose of academic writing is to generate and communicate new knowledge and new ideas.
- Academic writers write "from sources." This means that new ideas, conclusions, and theories are created on the basis of existing ideas and existing research
- Academic writers examine their sources carefully for their credibility and appropriateness for the writer's goals and objectives.
- Academic writers carefully acknowledge all their research sources using source citation and documentation systems accepted in their disciplines.

So, while one chapter or even a whole book cannot cover all the nuances and conventions of research and writing in every academic discipline. My purpose in this chapter is different. I would like to explore, together with you, the fundamental rhetorical and other principles and approaches that govern research writing across all academic disciplines. This chapter also offers activities and projects which, I hope, will make you more aware of the peculiar aspects of researching and writing in different academic disciplines. My ultimate goal in this chapter is to enable my readers to become active and critical investigators of the disciplinary differences in research and writing. Such an active approach will enable you to find out what I cannot cover here by reading outside of this book, by talking to your professors, and by practicing research and writing across disciplines.

Intellectual and Discourse Communities

My contention throughout this book has been that, in order to become better researchers and writers, we need to know not only the “how’s” of these two activities but also the “why’s.” In other words, it is not sufficient to acquire practical skills of research and writing. It is also necessary to understand why you do what you do as you research and what results you can expect to achieve as a results of your research. And this is where rhetorical theory comes in.

Writing and reading are interactive, social processes. Ideas presented in written texts are born as a result of long and intense dialog between authors and others interested in the same topic or issue. Gone is the image of the medieval scholar and thinker sitting alone in his turret, surrounded by his books and scientific instruments as the primary maker and advancer of knowledge. Instead, the knowledge-making process in modern society is a collaborative, effort to which many parties contribute. Knowledge is not a product of individual thinking, but of collective work, and many people contribute to its creation.

Academic and professional readers and writers function within groups known as discourse communities. The word “discourse” means the language that a group uses to talk what interests its members. For example, as a student, you belong to the community of your academic discipline. Together with other members of your academic discipline’s intellectual community, you read the same literature, discuss and write about the same subjects, and are interested in solving the same problems. The language or discourse used by you and your

fellow-intellectuals in professional conversations (both oral and written) is discipline-specific. This explains, among other things, why the texts you read and write in different academic disciplines are often radically different from one another and even why they are often evaluated differently.

Writing Activity: Analyzing Intellectual and Discourse Communities

List all intellectual and discourse communities to which you belong. Examples of such communities are your academic major, any clubs or other academic or non-academic groups you belong to, your sorority or fraternity, and so on. Do not limit yourself to the groups with which you interact while in school. If you are a member of any virtual communities on the Internet, such as discussion groups, etc., include them in this list as well.

One you have listed all the intellectual and discourse communities to which you belong, consider the following questions:

- What topics of discussion, issues, problems, or concerns keep these communities together? And what constitutes new knowledge for your group? Is it created experimentally, through discussion, or through a combination of these two and other methods?
- How would you characterize the kinds of language which each of these communities use? Is it formal, informal, complex, simple, and so on? How are the community's reasons for existence you listed in the first question reflected in their language?
- When you entered into the community, did you have to change your discourse, both oral and written, in any way, to be accepted and to participate in the discussions of the community? This might be a good time to consider all the linguistic adjustments you had to make becoming a college student or entering your academic major.
- Think of several classes you are currently taking. How do the discourses used in them differ from one another? Think about topics discussed, ways of making knowledge accepted in them, the degree of formality of the language used, and so on.
- Does your community or group produce any written documents? These may include books, professional journals, newsletters, and other documents. Don't forget the papers that you write as a student in your classes. Those papers are also examples of your intellectual community's discourse.
- What is the purpose of those documents, their intended audience, and the language that they use? How different are these documents from one community to the next? Compare, for example, a paper you wrote for your psychology class and one for a literature class.
- How often does a community you belong to come into contact with other intellectual and discourse groups? What kinds of conversations take place? How are conflicts and disagreements negotiated and resolved? How does each group adjust its discourse to hear the other side and be heard by it?

After completing this activity, you will begin to see knowledge making as a social process. I also hope that you will begin to notice the differences that exist in ways that different groups of people use language, reading, and writing. As persuasive and rhetorical mechanisms, reading and writing are supposed to reach between people and groups.

The term community does not necessarily mean that all members of these intellectual and discourse groups agree on everything. Nor does it mean that they have to be geographically close to one another to form such a community. Quite the opposite is often true. Debates and

discussions among scientists and other academics who see things differently allows knowledge to advance. These debates in discussions are taking place in professional books, journals, and other publications, as well as at professional meetings.

Writing Activity: Rhetorical Analysis of Academic Texts

In consultation with your instructor, select two or three leading journals or other professional publications in your academic major or any other academic discipline in which you are interested. Next, conduct a rhetorical analysis of the writing which appears in them. Consider the following questions:

- What is the purpose of the articles and other materials that appear in the journals? Talk about this purpose as a whole; then select one or two articles and discuss their purpose in detail. Be sure to give concrete examples and details.
- Who are the intended audience of these publications? What specific elements in the writing which appears there can help us decide?
- Consider the structure and format of the writings in the journals. How do they connect with the purpose of the writing and the intended audience? For instance, what kinds of evidence or citation systems do their authors' use?
- Discuss your results with your classmates and your instructor, or prepare a formal paper reporting and analyzing the results of your research.

The Making of Knowledge in Academic Disciplines

In the preceding section of this chapter, I made a claim that the making of new knowledge is a social process, undertaken by intellectual communities. In this section, we will look at one influential theory that has tried to explain how exactly this knowledge-making process happens. The theory of knowledge-making which I am talking about was proposed by Thomas Kuhn in his much-cited 1962 book *The Structure of Scientific Revolutions*. Although, as the book's title suggests, Kuhn was writing about sciences, Kuhn's theory has now been accepted as relevant and useful not only by academic disciplines outside of natural sciences.

According to Kuhn, the change in human knowledge about any subject takes place in the following steps. At first, an academic discipline or any other intellectual community works within the confines of an accepted theory or theories. The members of the community use it systematically and methodically. Kuhn calls this theory or theories the accepted paradigm, or standard of the discipline. Once the majority of an intellectual community accepts a new paradigm, the community's members work on expanding this paradigm, but not on changing it. While working within an established paradigm, all members of an intellectual community have the same assumptions about what they study and discuss, use the same research methods and approaches, and use the same methods to present and compare the results of their investigation. Such uniformity allows them to share their work with one another easily. More importantly, though, staying within an accepted paradigm allows researchers to create a certain version of reality that is based on the paradigm that is being used and which is accepted by all members of the community. For example, if a group of scientists studies something using a common theory and common research methods, the results that such investigation yields are accepted by this group as a kind of truth or fact that had been experimentally verified.

Changes in scientific paradigms happen, according to Kuhn, when scientists begin to observe unusual phenomena or unexpected results in their research. Kuhn calls such phenomena anomalies. When anomalies happen, the current paradigm or system of research and thinking that a community employs fails to explain them. Eventually, these anomalies become so great that they are impossible to ignore. Then, a shift in paradigm becomes necessary. Gradually, then, existing paradigms are re-examined and revised, and new ones are established. When this happens, old knowledge gets discarded and substituted by new knowledge. In other words, an older version of reality is replaced by a newer version.

To illustrate his theory, Kuhn uses the paradigm shift started by the astronomer Copernicus and his theory that the Earth revolves around the Sun. I have also used this example in the chapter of this book dedicated to rhetoric to show that even scientific truths that seem constant and unshakable are subject to revision and change. To an untrained eye it may seem that all scientists and other researchers do is explain and describe reality which is unchangeable and stable. However, when an intellectual community is working within the confines of the current paradigm, such as a scientific theory or a set of research methods, their interpretations of this reality are limited by the capabilities and limitations of that paradigm. In other words, the results of their research are only as good as the system they use to obtain those results. Once the paradigm use for researching and discussing the subjects of investigation changes, the results of that investigation may change, too. This, in turn, will result in a different interpretation of reality.

Application of the Concept of Discourse Communities to Research Writing

Kuhn’s theory of knowledge making is useful for us as researchers and writers because it highlights the instability and changeability of the terms “fact” and “opinion.” As I have mentioned throughout this book, the popular perception of these two terms is that they are complete opposites. According to this view, facts can be verified by empirical, or experimental methods, while opinions are usually purely personal and cannot be verified or proven since they vary from one person to another. Facts are also objective while opinions are subjective. This ways of thinking about facts and opinions is especially popular among beginning writers and researchers. When I discuss with my students their assumptions about research writing, I often hear that research papers are supposed to be completely objective because they are based on facts, and that creative writing is subjective because it is based on opinion. Moreover, such writers say, it is impossible to argue with facts, but it is almost equally impossible to argue with opinions since every person is entitled to one and since we can’t really tell anyone that their opinions are wrong.

In college writing, such a theory of fact and opinion has very tangible consequences. It often results in writing in which the author is either too afraid to commit to a theory or points of view because he or she is afraid of being labeled subjective or biased. Consequently, such writers create little more than summaries of available sources. Other inexperienced writers may take the opposite route, writing exclusively or almost exclusively from their current understanding of their topics, or from their current opinions. Since “everyone is entitled to their own opinion,” they reason, no one can question what they have written even if that writing is completely unpersuasive. In either case, such writing fails to fulfill the main purpose of research, which is to learn.

What later becomes an accepted theory in an academic discipline begins as someone's opinion. Enough people have to be persuaded by a theory in order for it to approach the status of accepted knowledge. All theories are subject to revision and change, and who is to say some time down the road, a better research paradigm will not be invented that would overturn what we now consider a solid fact. Thus, research and the making of knowledge are not only social processes but also rhetorical ones. Change in human understanding of difficult problems and issues takes place over time. By researching those problems and issues and by discussing what they find with others, writers advance their community's understanding and knowledge.

Writing Activity: Investigating Histories of Academic Discussions.

The subjects of academic research, debates, and disagreements develop over time. To you as a student, it may seem that when you read textbooks and other professional literature in your major or other classes you are taking, you are taking in permanent and stable truths. Yet, as we have seen from the previous two sections of this chapter, members of academic communities decide what topics and questions are important and worth researching and discussing before these discussions make it to the textbook of the pages of an academic journal.

In this activity, you are invited to examine the history and development of an issue, problem, or question in your major or other academic discipline that interests you. In other words, you will be a historian of an academic discipline whose job will be to trace the development of a topic, question, or issue important to one academic community. How far you will take this project will depend on the time you have, the structure of your class, and the advice of your instructor. For example, you may be limited to conducting a simple series of searches and preparing an oral presentation for your classmates. Or, you may decide to make a full-length writing project out of this assignment, at the end creating an I-search paper or some other written document presenting and discussing the results of your research.

In either case, try to follow the following steps during this project. Depending on the instructions from your teacher, you may work by yourself or with others.

In order to select an important issue or question that is actively discussed in your academic or professional community, first look through the textbooks in your major or any other academic discipline you are interested in. Next, conduct a library search for journals in the field and briefly looks over what topics, issues, or questions they are concerned with. Conduct a web search for reliable sites where these professional discussions are taking place. If you are taking a class or classes in the discipline you are studying, discuss this assignment and the emerging topic of your investigation with your professor. Try to find out how this topic is explained to the general public in popular magazines and newspapers. Remembers that your goal in this project not to learn and report on the current state of this discussion (although such reporting may be a part of your project), but to investigate its historical development as an issue or a problem in the academic discipline of your interest.

Develop a general understanding of the current state of the issue or topic you are interested in. Be sure to include to the following elements:

- What is the topic of discussion?
- What evidence of the topic's importance for your academic discipline have you found?

- What is being said about the issue and by whom?
- Are there opposing sides in the discussion and on what ground do they oppose each other?
- What arguments do all the sides in the discussion use?

Conduct research into the origin and the history of your topic. The time range of your investigation will depend on the topic you choose. Some academic discussions go back centuries while others may have started only several years ago. Your research sources may include older textbooks, academic journals and conference procedures from years past, ever articles about your subject written for popular magazines and newspapers and designed to reach non-specialized audience. As a historian, you will need to cover the following areas:

- The first time the topic or issue gets significant attention from the professional community. Keep in mind that your job is not necessarily to pinpoint the exact date when the first publication on the topic appeared or the first discussion about it took place, although finding that out certainly will not hurt. Rather, try to find out the general time period when the discussion originated or the topic was attracting attention from academic professionals.
- What events in the academic world and society as a whole may have triggered the discussion of this topic? Since the academic world is a part of society as a whole, academic interests and discussions are usually somehow connected with what society as a whole is interested in and concerned about.
- Name a few key figures and events that contributed to the prominence of the topic or issue you are investigating.
- Identify times of paradigm shift for your subject. What event, both in the academic discipline and in society at large, may have caused significant shifts in people's thinking about the issue?
- Try to predict the future development of the discussion. Will it remain an important issue in your discipline or will the discussion end? Why or why not? What factors, events, and people, both in the academic worlds and in society as a whole may contribute to this. How do you suppose the discussion of the topic will evolve in the future? For example, will the questions and issues at stake be revised and redefined?
- Chances are that during your research, your saw some significant developments and shifts in the ways in which your academic discipline has understood and talked about the issues and topic that interest its members.

To illustrate the process of historical investigation of an academic subject, let us look at the hot issue of cloning. What began as a scientific debate years ago has transcended the boundaries of the academic world and is not interesting to various people from various walks of life, and for various reasons. The issue of cloning is debated not only from the scientific, but also from the ethical and legal points of view, to name just a few.

Cloning: Current Perspectives and Discussions

Since I am not a scientist, my interest in the subject of cloning is triggered by an article on stem cell research that I read recently in the popular magazine Scientific American. I know that stem cell research is a controversial subject, related to the subject of human cloning. My interest in stem cell research was further provoked by the impassioned speech made by Ron Regan, the son of the late President Ronald Regan, at the Democratic Party's National Convention in the summer of 2004. Regan was trying to make a case for more stem cell research by arguing that it could have helped hid father who had died of Alzheimer's disease.

I conducted a quick search of my university library using the key words “human cloning.” The search turned up eighty-seven book titles that told me that the topic is fairly important for the academic community as well as for the general public. I noticed that the most recent book on cloning in my library’s collection was published this year while the oldest one appeared in 1978. There seemed to be an explosion of interest in the topic beginning in the 1990s with the majority of the titles appearing between then and 2004.

Next, I decided to search two online databases, which are also accessible from my university library’s website. I was interested in both scientific and legal aspects of cloning, so I searched the health science database PubMed (my search turns up 2549 results). Next, I search the database LexisNexis Congressional that gave me access to legislative documents related to human cloning. This search left me with over a hundred documents.
I was able to find many more articles on human cloning in popular magazines and newspapers. By reading across these publications, I would probably be able to get a decent idea about the current state of the debate on cloning.

Cloning: A Historical Investigation

Dolly the sheep was cloned in 1996 by British scientists and died in 2003. According to the website Science Museum (www.sciencemuseum.org.uk), “Dolly the sheep became a scientific sensation when her birth was announced in 1997. Her relatively early death in February 2003 fuels the debate about the ethics of cloning research and the long-term health of clones.”

I am tempted to start my search with Dolly because it was her birth that brought the issue of cloning to broad public’s attention. But then I recall the homunculus—a “test tube” human being that medieval alchemists often claimed to have created. It appears that my search into the history of cloning debate will have to go back much further than 1996 when Dolly was cloned.

Cloning: Signs of Paradigm Shifts

Living in the 21st century, I am skeptical towards alchemists’ claims about creating a homunculus out of a bad of bones, skin, and hair. Their stories may have been believable in the middle-ages, though, and may have represented the current paradigm of thinking about the possibility of creating living organisms is a lab. So, I turned to Dolly in an attempt to investigate what the paradigm of thinking about cloning was in the second half of the 1990s and how the scientific community and the general public received the news of Dolly’s birth. Therefore, I went back to my university library’s web page and searched the databases for articles on Dolly and cloning published within two years of Dolly’s birth in 1996.

After looking through several publications, both from scientific and popular periodicals, I sense excitement, surprise, skepticism, and a little concern about the future implications of our ability to close living creatures. Writing for *The Sunday Times*, in 1998, Steve Connor says that Dolly would undergo texts to prove that she is, indeed, the clone of her mother. In his article, Connor uses such words as “reportedly” which indicates skepticism (*The Sunday Times*, Feb 8, 1998, p. 9).

In a *New Scientist* article published in January 1998, Philip Cohen writes that in the future scientists are likely to establish human cloning techniques. Cohen is worried that human cloning would create numerous scientific, ethical, and legal problems. (*New Scientist*, Jan 17, 1998 v157 n2117 p. 4(2))

Let's now fast-forward to 2003 and 2004. Surprisingly, at the top of the page of search results are the news that the British biotech company whose employees cloned Dolly. Does this mean that cloning is dead, though? Far from it! My research shows debates about legal and ethical aspects of cloning. The ability of scientists to clone living organisms is not in doubt anymore. By now, political and ideological groups have added their agendas and their voices to the cloning and stem cell research debate, and the US Congress has enacted legislation regulating stem cell research in the US. The current paradigm of discussions of human cloning and the related subject of stem cell research is not only scientific but also political, ethical, legal, and ideological in nature.

The historical study project as well as my illustration of how such an investigation could be completed should illustrate two things. Firstly, if you believe that something about human cloning or any other topic worth investigating is an undisputable fact, chances are that some years ago in was "only" someone's opinion, or, in Kuhn's words, an "anomaly" which the current system of beliefs and the available research methods could not explain. Secondly, academic and social attitudes towards any subject of discussion and debate are formed and changed gradually over time. Both internal, discipline specific factors, and external, social ones, contribute to this change. Such internal factors include the availability of new, more accurate research techniques or equipment. The external factors include, but are not limited to, the general cultural and political climate in the country and in the world. Academic research and academic discussions are, therefore, rhetorical phenomena which are tightly connected not only to the state of an academic discipline at any given time, but also to the state of society as a whole and to the interests, beliefs, and convictions of its members.

Research Activity: Interviewing Academic Professionals

In order to learn more about the conventions of academic discourse, interview a professor at your college. You may wish to talk to one of the teachers whose classes you are currently taking. Or, you may choose to interview a teacher whom you do not yet know personally, but who teaches a course that interests you or who works in an academic major that you are considering. In either case, the purpose of your interview will be to learn about the conventions of research and writing in your interlocutor's academic discipline. You can design your own interview questions. To learn about designing interviews, read the appropriate section in Chapter 7 of this book. To get you started, here are three suggestions:

- Ask to describe, in general, the kinds of research and writing that professionals in that academic field conduct. Focus on research goals, methods, and ways in which research results are discussed in the field's literature.
- Discuss how a specific text from the academic discipline, such as a book or a journal article reflects the principles and approaches covered in the first question.
- Ask for insights on learning the discourse of the discipline.

Establishing Authority in Academic Writing by Taking Control of Your Research Sources

Good writing is authoritative. It shows that the author is in control and that he or she is leading the readers along the argument by skillfully using research sources, interpreting them actively and creatively, and placing the necessary signposts to help the readers anticipate where the discussion will go next. Authoritative writing has its writing and its writer's voice present at all times. Readers of such writing do not have to guess which parts of the paper they are reading come from an external source and which come from the author him or herself.

The task of conveying authority through writing faces any writer since it is one of the major components of the rhetorical approach to composing. However, it is especially relevant to academic writing because of the context in which we learn it and in which it is read and evaluated.

We come to academic writing as apprentices not only in the art of composing but also in the academic discipline which are studying. We face two challenges at the same time. On the one hand, we try to learn to become better writers. On the other, we study the content of our chosen academic disciplines that will become the content of our academic writing itself. Anyone entering college, either as an undergraduate or a graduate student, has to navigate the numerous discourse conventions of their academic discipline. We often have too little time for such navigation as reading, writing, and research assignments are handed to us soon after our college careers begin. In these circumstances, we may feel insecure and unsure of our previous knowledge, research, and writing expertise.

In the words of writing teacher and writer David Bartholomae, every beginning academic writer has to "invent the university." What Bartholomae means by this is, when becoming a member of an academic community, such as a college or a university, each student has to understand what functioning in that community will mean personally for him or her and what conventions of academic reading, writing, and learning he or she will be expected to fulfill and follow. Thus, for every beginning academic writing, the process of learning its conventions is akin to inventing his or her own idea of what university intellectual life is like and how to join the university community.

Beginning research and academic writers let their sources control their writing too often. I think that the cause of this is the old idea, inherent in the traditional research paper assignment, that researched writing is supposed to be a compilation of external sources first and a means for the writer to create and advance new knowledge second, if at all. As a result, passages, and sometimes whole papers written in this way lack the writer's presence and, as a consequence, they lack authority because all they do is re-tell the information presented in sources. Consider, for example, the following passage from a researched argument in favor of curbing video game violence. In the paper, the author is trying to make a case that a connection exists between violence on the video game screen and in real life. The passage below summarizes some of the literature

> The link between violence in video games and violence in real life has been shown many times (Abrams 54). Studies show that children who play violent video games for more than two hours each day are more likely to engage in violent behavior than their

> counterparts who do not (Smith 3). Axelson states that some video games manufacturers have recognized the problems by reducing the violence in some of their titles and by rating their games for different age groups (157). The government has instituted a rating system for videogames similar to the one used by the movie industry in an effort to protect your children from violence on the screen (Johnson 73). Alberts and Cohen say that we will have to wait and see whether this rating system will prove to be effective in curbing violence (258).

This passage lacks authority because every sentence in it is taken from an external source. Where is the writer in this paragraph? Where are the writer's voice and interpretations of the research data? What new insights about the possible connection between video game and real life violence do we get from this author? Is there anything in this passage that we could not have learned by reading the sources mentioned in this paper? This writer has let external sources control the writing by composing an entire paragraph (and the rest of the paper is written in the same way) out of external source segments and nowhere in this passage do we see the author's own voice, persona, or authority.

So, how can the problem of writing without authority and without voice be solved? There are several ways, and the checklist below provides you with some suggestions.

- Always remember to use research for a rhetorical purpose—to create new knowledge and convey it to your readers. Except in rare cases, writers are not compilers of existing information. Resist the urge to limit your research to simply summarizing and quoting external sources. Therefore, your ultimate purpose is to create and express your own theories and opinions about your topic
- Talk to academics or professionals to find out what constitutes authoritative writing in their field. It could be the presence of a strong voice, or the use f particular research methods and techniques, or a certain way to present the results of your research. Later on in the chapter, you are offered an interview project designed to help you do that.
- Create annotated bibliographies to make sense of your research and make the ideas and theories you read about, your own. Try the annotated bibliography activity later on in the chapter.
- Use only reliable sources. For advice on locating such sources, see Chapter 11 of this book.

Integrating Sources into Your Own Writing

One of the most difficult tasks facing students of research writing is learning how to seamlessly integrate the information they find in the research sources into their own writing. In order to create a rhetorically effective researched text, a writer needs to work out a way of combining the research data, the voices and theories of research sources' authors on the one hand and his or her ideas, voice, and tone on the other. The following techniques of integrating source material into your own writing are, of course, relevant not only for academic research. However, it is when faced with academic research papers that many beginning researchers face problems with the integration of sources. Therefore, I am placing the discussion of these methods into the chapter of the book dedicated to academic research. Typically, researching writers use the following methods of integrating information from research sources into their writing:

Direct quoting

Quoting from a source directly allows you to convey not only the information contained in the research source, but also the voice, tone, and "feel" of the original text. By reading direct quotes, your readers gain first-hand access to the language and the spirit of the original source.

How Much to Quote

Students often ask me how much of their sources they should quote directly in their papers. While there is no hard and fast rule about it, I usually reply that they should quote only when they feel it necessary to put their readers in direct contact with the text of the source. Quote if you encounter a striking word, sentence, or passage, one that you would be hard pressed to convey the same information and the same emotions and voice better than the original source. Consider, for example the following passage from a paper written by a student. In the paper, the writer analyzes a 19th-century slave narrative written by a man named J. D. Green:

> The most important event of Green's early life was the sale of his mother to another owner at the young age of twelve years old. In response to this Green dropped to his knees and [shouted] at the heavens, "Oh! How dreadful it is to be black! Why was I born black? It would have been better had I not been born at all" (Green 5). It is this statement that communicates the message of Green's story. [None of] the atrocities told in the later portions of the narrative…elicit the same level of emotion and feeling from Green. For the remainder of the story, [he] is very reserved and treats each increasingly horrendous crime as if it was of no particular importance.

The direct quote works well here because it conveys the emotion and the voice of the original better than a paraphrase or summary would. Notice also the author of the paper quotes sparingly and that the borrowed material does not take over his own ideas, voice, and tone. Out of roughly ten lines in this passage, only about two are quoted, and the rest is the author's own interpretation of the quote or explanation for why the quote is necessary here.

If, after writing a preliminary draft of a paper, you feel that you have too many quotes and not enough of your own material, try the following simple trouble-shooting method. This activity was suggested to me by my colleague Michael Moghtader. Both my students and I have found it effective.

Take a pen or a highlighter and mark all direct quotes in your paper. Make sure that the amount of quoted material does not exceed, or even equal the amount of your own writing. A good ratio of your own writing to quoted material would be 70% to 30% or even 80% to 20%. By keeping to these numbers, you will ensure that you work is not merely a regurgitation of writing done by others, but that it makes a new and original contribution to the treatment of your topic.

Summarizing

A summary is a shortened version of the original passage, expressed in the writer's own words. The key to creating a good and useful summary of a source is preserving all the information and arguments contained in the original while condensing original to a small size. According to Bruce Ballenger, the author of the book The Curious Researcher (2001), summarizing "…requires careful thought , since you are the one doing the distilling [of the original], especially if you are trying to capture the essence of the whole movie, article, or chapter, that's fairly complex" (128). Purely and simply, then, a good summary manages to capture the essence of the original passage without losing any important information.

Consider the following example. The original passage comes from an article exploring manifestation of the attention deficit/hyperactivity disorder (ADHD) not only in children but also in adults

Original passage:

> Perhaps the clearest picture of adult ADHD comes from studies of people originally diagnosed with ADHD in grade school and followed by researchers through adolescence and young adulthood. These studies vary widely in their estimates of ADHD prevalence, remission rates, and relationship to other psychiatric disorders. But over all, they show a high percentage -- 80% in several studies --of ADHD children growing into ADHD adolescents. Such individuals have continual trouble in school, at home, on the job, with the law in general, and with substance abuse in particular. Compared with control groups, ADHD adolescents are more likely to smoke, to drop out of school, to get fired, to have bad driving records, and to have difficulties with sexual relationships. "There's a great deal of continuity from the child to the adult form," says Russell Barkley, a researcher at the Medical University of South Carolina. "We're not seeing anything that suggests a qualitative change in the disorder. What's changing for adults is the broadening scope of impact. Adults have more things they've got to do. We're especially seeing problems with time, with self-control, and with planning for the future and being able to persist toward goals. In adults, these are major problems." Poor time management is a particularly treacherous area. As Barkley observes, "With a five-year-old, time management isn't relevant. With a 30-year-old, it's highly relevant. You can lose your job over that. You can lose a relationship over it."

Summary:

> According to the authors of the article "A Lifetime of Distraction," studies show that about 80% of children with ADHD grown into ADHD adolescents. Such people may have trouble in school, at work, and even with the law. Poor time management by adults with ADHD is of particular concern (1).
> When summarizing the lengthy original passage, I looked for information struck me as new, interesting, and unusual and that might help me with my own research project. After reading the original text, I discovered that ADHD can transfer into adulthood—something I had not known before. That claim is the main focus of the passage and I tried to reflect it in my summary.

Paraphrasing

Paraphrasing means rewriting original passages in your own words and in roughly the same length. Skillful paraphrasing of your sources can go a long way in helping you achieve two goals. Firstly, when you paraphrase you are making sense of your sources, increasing your "ownership" of the ideas expressed in them. This allows you to move a little closer to creating your own viewpoint, your own theory about the subject of your research. Paraphrasing is a great alternative to direct quoting (especially excessive quoting) because it allows you to recast the ideas of the original into your own language and voice. Secondly, by carefully paraphrasing source material, you are helping yourself to avoid unintentionally plagiarizing your sources. There is more discussion on how to avoid plagiarism in Chapter 12. For now, consider this passage, taken from the article "Fighting the Images Wars", by Steven Heller.

Original:

> Such is the political power of negative imagery that, during World War II, American newspapers and magazines were prohibited from publishing scenes of excessively bloody battles, and drawings done by official "war artists" (at least those that were made public) eschewed overly graphic depictions. It wasn't easy, but U.S. military propaganda experts sanitized the war images, with little complaint from the media. While it was acceptable to show barbaric adversaries, dead enemy soldiers, and even bedraggled allies, rare were any alarming representations of our own troops in physical peril, such as the orgy of brutal violence during the D-Day landings.

Paraphrase:

> In his article "Fighting the Image Wars," writer Steven Heller argues that the US government tries to limit the power of the media to publish disturbing images of war and conflict. According to Heller, during World War II and during the Korean War, American media were not allowed to publish images of disturbing war scenes (176). Heller further states that while it was often OK to show the enemies of the US as "barbaric" by displaying images of the atrocities committed by them, media rarely showed our own killed or wounded troops (176).

While the paraphrase is slightly shorter than the original, it captures the main information presented in the original. Notice the use in the paraphrase of the so-called "signal phrases." The paraphrase opens with the indication that what is about to come is taken from a source. The first sentence of the paraphrased passage also indicates the title of that source and the name of its author. Later on in the paragraph, the signal phrase "According to Heller" is used in order to continue to tell the reader that what he or she is reading is the author's rendering of external source material.

How to Quote, Paraphrase, and Summarize Effectively

One of the reasons why so many of us do not like the traditional research paper assignment is because we often feel that it requires us to collect and compile information without much thought about why we do it. In such assignments, there is often not enough space for the writer to express and explore his or her own purpose, ideas, and theories. Direct quoting is supposed to help you make your case, explain or illustrate something. The quote in the passage above also works well because it is framed by the author's own commentary and because it is clear from why the author needs it. He needs it in order to show the utter horror of J.D. Green at the sale of his mother and his anguish at being black in a slave-holding society. The quote is preceded by statement claiming that the loss of his mother was a terrible event for Green (something that the quote eloquently illustrates). After quoting from the source, the writer of the paper prepares his readers for what is to come later in the paper. Therefore, the quote in the passage above fulfills a rhetorical purpose. It illustrates a key concept that will be seen throughout the rest of the work and sets up the remaining portion of the argument.

Every direct quotation from a source should be accompanied by your own commentary. Incorporating source material into your writing effectively is similar to weaving a thread of one color into a carpet or blanket of another. In combination, the two colors can create a beautiful pattern. Try to follow this sequence:

- Introduce the source and explain why you are using it
- Quote
- Comment on the source material and set up the next use of a source
- Quote
- Continue using the steps in the same or similar order for each source.

Such variation of your own ideas, commentary, and interpretation on the one hand and source material on the other creates a smooth flow of the text and can be used not only for work with direct quotes but also with source summaries and paraphrases.

Quick Reference: Using Signal Phrases

When using external source material, whether by direct quoting, summarizing or paraphrasing, it is important to guide your readers through it in such a way that they always understand clearly where it is you, the author of the paper speaking and where you are working with external sources. To indicate this, signal phrases are used. Signal phrases introduce quoted, paraphrased, or summarized material to the reader. Here are some popular signal phrases:

"According to [author's name or work's title]…"
"[Author's name] argues that…"
"[Author's name] states that…"
"[Author's name] writes that…"
"[Author's name] contends that…"

There are many other variations of these. When writing your own papers, play with these phrases, modify them to suit your needs, and see how that does to your writing. Remember that your readers need to be prepared for every quote, summary, or paraphrase. They need to know what is coming and why. Using signal phrases will help you prepare them.

Writing Activity: Putting The Writer Back into Writing

If you suspect that you might have passages like the one above in your own academic writing, try to locate them. Then, make them your own by using sources for your rhetorical purpose rather than letting your sources control you. Follow the following suggestions:

- Do something with every source and every external reference. Sources, no matter how authoritative, do not speak for themselves. It is up to you as a writer to explain their significance for your paper and to comment on them. Therefore, every time you need to use an external source in your writing, explain to your readers what that source does for your argument and why you are using it.
- Establish and assert your authority over the subject of your writing and over your sources. It is your paper, and therefore it your voice, your opinions, and your theories that really count in it. External sources are useful learning and argument tools, but it is still you who does the learning and the arguing.
- If you summarize and paraphrase your sources, make sure your readers know where a reference to one source ends and a reference to the next one begins.
- Make sure your readers know whether it is your source speaking or you. If you summarize or paraphrase your sources, rather then quoting them directly, do so in such a way that your audience knows where the summary or paraphrase ends and your own commentary on it begins.
- Carefully analyze what information about your sources your readers need. For example, if most of your readers have not studied your sources in detail, provide them with enough information about the sources.
- Apply the conventions of working with sources that exist in your academic discipline.

Writing Activity: Creating an Annotated Bibliography

Purpose

Creating an annotated bibliography of your research sources can help you take control of them and put your own voice and personality back into your research writing. Unlike conventional bibliographies that simply provide information about the work's author, title, publisher, and so on, each entry of an annotated bibliography briefly summarizes an entry and then evaluates its possible application to research and writing.

According to Owen Williams, a librarian at the library of the University of Minnesota, annotated bibliographies are created with the following purposes:

- To review literature on a particular subject.
- To illustrate the quality of research that you have done
- To provide examples of the types of sources available
- To describe other items on the topic that might be of interest to the reader.

Williams then provides an example of an entry from an annotated bibliography:

> "Sewell, W. (1989). Weaving a program: Literate programming in WEB. New York: Van Nostrand Reinhold.
>
> Sewell explains the code language within these pages including certain lines of code as examples. One useful idea that Sewell uses is to explain characters and how they work in the programming of a Web Page. He also goes through and describes how to make lists and a title section. This will be very useful because all Web Pages have a title section. This author also introduces Pascal which I am not sure if I will include in my manual but after I read more about it I can decide whether this will be helpful to future users. This book will not be the basis of my manual but will add some key points, which are described above."

Note that the author of this entry not only summarizes the content of a source, but also evaluates the usefulness of this source a specific research project. Annotated bibliographies are not just exercises in the rules of citation. Instead, they help writers to begin the transition from reading sources into writing about them. By combining evaluation with description, annotated bibliographies help writers approach their research actively by beginning to make sense of their sources early on in the research process.

Process

Begin a research project by collecting and annotating possible sources. Remember that not all the sources which your annotated bibliography will include may end up in your final paper. This is normal since researchers cast their nets much wider in the beginning of a project than the range of sources which they eventually include in their writing. The purpose of creating an annotated bibliography is to learn about the available resources on your subject and to get an idea how these resources might be useful for your particular writing project. As you collect your sources, write short summaries of each of them. Also try to apply the content of these sources to the project you are working on Don't worry about fitting each source exactly into what you think your project will be like. Remember that, in the process of research, you are learning about your subject, and that you never really know where this learning process takes you.

Conclusions

As a college student, you are probably taking four, five, or even six classes simultaneously. In many, if not all of those classes you are probably required to conduct research and produce research-based writing. So far in this chapter, we have discussed some general principles of academic research and writing which, I hope, will help you improve as an academic researcher and writer regardless of your major or academic discipline in which you work. In this segment of the chapter, I would like to offer a practical checklist of approaches, strategies, and methods that you can use for academic research and writing.

- Approach each research writing assignment rhetorically. Learn to recognize its purpose, intended audience, the context in which you are writing and the limitations that this

context will impose on you as a writer. Also treat the format and structural requirements, such as the requirement to cite external sources, as rhetorical devices which will help you to make a bigger impact on your readers.

- Try to understand each research and writing assignment as best as you can. If you receive a written description of the assignment, read it several times and discuss it with your classmates and your instructor. If in doubt about some aspect of the assignment, ask your instructor.
- Develop and use a strong and authoritative voice. Make your sources work for you, not control you. When you write, it is your theories and your voice that counts. Research helps you form and express those opinions.
- Becoming a good academic researcher and writer takes time, practice, and rhetorical sensitivity. It takes talking to professionals in academic fields, such as your college professors, reading a lot of professional literature, and learning to understand the research and writing conventions of each academic discipline. To learn to function as a researcher and writer in your chosen academic discipline or profession, it is necessary to understand that research and writing are governed by discourse and community conventions and not by rigid and artificial rules.

Sources

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