WRITING THE RESEARCH PAPER

In between the choosing of a topic and the final typing of the last revision lie a series of skills which, if learned thoroughly, might well be the most important and most permanent academic possession acquired in four years of college. Specifically, you need to learn how to: delve deeply into a topic; find and select raw data; reflect, speculate, and mediate upon implications and relationships; glimpse and follow insights; establish logical categories; organize an outline; think and write with clarity and precision; and **revise**.

Make the writing of every paper an exercise to develop these skills.

Steps In Writing The Research Paper

- 1. Choose your subject
- 2. Narrow your subject
- 3. Provide a focus for narrowing material
- 4. Find references and select bibliography
- 5. Gather notes
- 6. Categorize notes
- 7. Decide upon an approach and point of view to gain control over your material
- 8. Draw up a detailed outline
- 9. Write a detailed outline
- 10. Make a clear copy
- 11. Leave for a day
- 12. Edit your work-go over you paper four times
 - a. First, reposition paragraphs and sentences
 - b. Second, add and delete material to achieve balance and to advance the stated objective of your paper
 - c. Third, look to insert transitional words and phrases
 - d. Fourth, read the paper aloud
- 13. Make a copy
- 14. Know rules for using quotations
- 15. Know rules for using footnotes
- 16. Know how to make a bibliography

Choosing Your Subject

Choose a subject which **interests** you. The outstanding American expert on Tibet spends half of her time in Washington as advisor to governmental agencies, yet she has never traveled beyond the boundaries of the United States. when asked how she became so well versed on Tibet, she answered, "I'm simply fascinated by the subject, and have read everything I could get my hands on."

A research paper, then, is an opportunity to further your interest in some subject or area.

Narrowing Your Subject

The most common criticism of research papers is , "topic too broad." You may well wonder, "Well, how can I be sure that I have sufficiently narrowed my topic?" A Cornell English professor has this sure-fire method: put your subject through three significant narrowings, i.e., moving from one category to a class within a category, each time.

For example, here are some sample narrowings for papers of 10 to 12 pages:

- 1. Public opinion polls: accuracy of polls: the accuracy of such polls in national elections: factors which determine the accuracy of public opinion polls in national elections.
- 2. The climate of opinion between World War I and World War II: the **moral** climate, etc.: the **particular** arguments involved in the debate over Prohibition: the arguments for Prohibition used by the "Drys" in support of the 18th Amendment and their arguments in the late 1920's and early 1930's to prevent repeal.
- 3. Discrimination against African-Americans: Northern attitudes vs. Southern attitudes: the particular **geographical** distinction: how Mason and Dixon's Line became a line of demarcation.

- 4. The Civil War: crucial battles: **one** battle: Napoleonic strategy and the battle of Fredricksburg.
- 5. Comparative religion-two religions; Judaism and Christianity; "salvation" in Judaism.

Provide A Focus For Gathering Material

To avoid the gross error of making your paper a mere accumulation of facts, you must crystallize a genuine question, and your facts must then be used to answer this question. Whether it can be **definitely** answered or not is unimportant.

A detailed outline at this stage is not usually possible since you are not sure of the material that you will uncover. Nevertheless, the specific question in mind will give you the needed focus for gathering pertinent material.

Select A Bibliography

College libraries, or any good library for that matter, contain many valuable sources of reference material. It will pay you in the long run to find out just what these sources are and how you can learn to use them with the maximum efficiency. Don't make the mistake of waiting until just a few days before your paper is due to make your first acquaintance with the many reference books your library contains. A few minutes spent in the library at the beginning of the term, when you are not under pressure to finish a paper, will help you in the future.

The "backbone" of all libraries is the card catalogue system, which tells you not only what books the library possesses, but also where you can find them. Look, therefore, through the library's card file and record all pertinent references on separate 3×5 slips of paper.

Efficiency will be increased if all the information is systematically recorded in the following ways:

- A. Record the name of the library where the reference is located. Many universities have special libraries located in separate schools on campus.
- B. Record the short title of your subject. This will be important when working on current and subsequent papers.

- C. Record the library call number. You will not have to refer to the card catalogue whenever you want to use the same book again.
- D. Record accurately the full reference in exactly the same form that you plan to use in the bibliographic portion of your paper. This insures your including all the essential parts of the reference; also, the correct form will make easier the mechanics of typing.
- E. Record briefly your opinion of the reference; e.g., "not useful-does not discuss principles"; "excellent for case studies of poor readers at the secondary-school level."

Another valuable source of reference material which is somewhat like the card catalogue system is the periodical indexes, such as the Reader's Guide and Poole's Index To Periodical Literature. Often, there will be special indexes which list new books and articles for one field; for example, the Psychological Abstracts for the field of psychology, and the Educational Index for the field of education. Of course, do not overlook the general encyclopedias, such as the Britannica Americana and the New International, nor the more specialized works like the Encyclopedia of Banking and Finance and Who's Who In America. Finally, there are the yearbooks, of which the World Almanac and the Book of Facts are notable examples.

One frequently overlooked source of information is the personal interview. Every campus and town has its share of experts and authorities. If possible, arrange for an interview and be prepared to take notes.

Gathering Notes

- 1. Use note paper of uniform size. The 3x5 slips of paper are suggested because they are uniform, less bulky, and less expensive than cards.
- 2. Use only one side of the slip, and then record only one topic on each slip.
- 3. Identify the reference information on the note slips by writing the author's last name, or the title of the reference in the top left corner of the note slip. The page number or numbers should appear in parentheses at the end of the item of information. This system will enable you to find quickly again the exact page if further information is needed.
- 4. Write notes in your own words. This will help insure that you understand what you are reading. Furthermore, you will be putting the information into a form which can be used in your paper. Always distinguish clearly between your words and the author's. Failure to do so might lead you unwittingly into plagiarism.
- 5. Just as in taking notes on a textbook, always skim the article or chapter you are reading before writing the notes.
- 6. Notations should be concise, yet sufficiently detailed to provide an accurate meaning.
- 7. Taking time to write notations neatly will avoid the time and frustration of later deciphering.
- 8. Use ink. Notes written in pencil will become blurred through handling and sorting.
- 9. If you need direct quotations, use only a few of the outstanding phrases or sentences. Most students tend to quote too much and too often.
- 10. Abbreviate only the common words, otherwise much time will be lost in "figuring out" unfamiliar "shorthand."
- 11. When ideas and insights occur, write them on separate note slips under the caption "my own."

Categorizing Notes

Having recorded only one topic on each slip mow permits you to arrange your slips into separate topic stacks. Also, having written on only one side of the slip enables you to see your full notes without turning slips back and forth. Now you will appreciate that you really were not "wasting"paper when you left the reverse side of each slip blank.

Deciding On An Approach

To gain control over your material the crux of some matter must be dug out and presented in a way that illuminates the issue; some analysis or appraisal ought to be given. A reader who is presented with an assortment of facts-no matter how neatly arranged-asks, "So what?" and rightly so. You ought to have clearly in mind before you begin writing what you want this material to add up to. Remember, the predication is as important as the "subject."

Drawing Up A Detailed Outline

Only by working out a detailed outline can you order and control your data so that it can be marshaled to support your stated objective. Worked into the outline, also, should be your approach, point of view, and strategy.

In the process of writing an outline, you will acquire the prerequisite of all good writing-you will be forced to "think through" your material. This "thinking through" is what the professional writers call "digesting" your random facts. Once you do this, then you will quite naturally, as you write, draw from a reservoir of facts rather than stringing together a compartmentalized series of "snippets" which are usually someone else's paraphrased words. As a final "bonus" effect, the detailed outline will save you time during the revision stage since your facts will be in the right order from the beginning.

Writing The First Draft

With the outline before you, write as rapidly and spontaneously as possible. Recording your thoughts as they go through your mind will help to insure continuity. It is when you stop to ponder alternatives that gaps in continuity occur. Though this manner of writing often results in too much material, don't be concerned because it is easier to cut than to add.

Make A Clear Copy

The first draft is usually rough-full of deletions, additions, and directions which are understandable only to the writer. If left in this state for even a day, much time might be lost in trying to recall exactly how you meant to blend in some of the hastily written interlineation. Furthermore, if you retype or rewrite while the material is still very fresh, some spontaneous revision may take place. The result, of course, will be a clear copy which will be ready for revision after a "cooling off" period of a day or so.

Leave For A Day

The "cooling off" period is important. During the writing stage, your mind is so full of associations with the words which you have written that you are liable to impose clarity and step-by-step sequences where these do not, in fact, exist; that is, your mind can fill in and bridge the gaps.

After your mind has dropped some of these associations, then when you read your manuscript, you will have to "read" the words to gain meaning. You can now easily spot the glaring errors-you can be critically objective.

The Importance of Editing Your Own Work

The editing function is one of the few really important big things that you can learn in college-the ability to view your own production with enough courage to anticipate (and be concerned about) the potential reader's reaction. This means polishing, boiling down ideas, struggling to say things clearer and clearer, perhaps starting over, or writing even 3 or 4 drafts.

Your Final Copy

- 1. In preparing the finished draft of your research paper, use only one side of white paper. Although a few instructors will specify precisely what size paper to use, the most commonly used paper measures $81/2 \times 11$ inches.
- 2. Type your paper without any strike-overs (erase errors thoroughly and neatly) and be sure to double space.
- 3. Leave generous margins at the top, bottom and about a one and one-half inch margin on both sides to provide room for the instructor's comments.
- 4. Put your dictionary to good use by checking spellings and divisions of words you are not sure of.
- 5. Hand in the paper on time. It is not uncommon for instructors to deduct points for late papers.
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