

General Considerations for Writing

1. Don't feel that every word you write must be graded. Writing can be a way of learning things, not merely a road to being evaluated. We (all of us) often don't know what we know or what we want to say until we begin to write.

Therefore, when working on a paper, write for yourself from time to time. Try out a new idea and see how it looks on paper. Evaluate some of the sources you are looking at; you may not know exactly what you think of them until you have written down your thoughts.

- 2. Consider the idea that your paper is not an end in itself, but the high point in a process, a dialog between you and your instructor. This means that you must pay attention to the marginal and end comments your instructor makes; don't read them quickly and dismiss them. Study them; where suggestions or criticisms appear, turn the paper over and correct mistakes, try out suggestions, heed criticisms, or counter the criticisms in writing. Only by actively grappling with your instructor's comments will you learn from your mistakes.
- 3. Revise, revise, revise. Don't confuse revision with the simpler process of correcting spelling and punctuation. After composing a draft, look at the paper again. Learn to see where new material is needed, where material should be deleted and where reorganization is required.
- 4. Always assume that whoever reads your paper will be evaluating your grammar, sentence structure, and style, as well as the content. Don't fall back on the myth that only English teachers should be judges of writing. Every teacher who assigns you writing will be a judge of your writing. Content—what you say—cannot really be divorced from form—how you say it.
- 5. Adjust your writing style to your audience, your topic, and the demands of the field.
- 6. Writing is by nature argumentative. In every piece of writing you are trying to convince a reader of something, even if it is to convince the reader that the writer's description of a rock is exactly the way that rock appears.
- 7. A term paper is more than a compilation of research. From your reading and research you need to distill a central argument—a thesis statement. Then you can organize and synthesize your materials into units of evidence for your argument.
- 8. A cardinal rule of writing: the more abstract and intellectual your topic, the more concrete your language should be.
- 9. Good writing in any field can rely on metaphors, similes, analogies, implications, and connotations—these are not for socalled "creative writing" alone. Use them to clarify a point, not to impress your audience.
- 10. When in doubt, consult your teaching assistant or professor in office hours. They want to help.



Hints for Writing Research Reports

(adapted from Geology 107; this material is used by permission of Professor Walter Alvarez)

The signs of a professional manuscript are strong organization, clarity, good grammar and perfect spelling, neatness, and adherence to the format of the particular journal. Well-written manuscripts get reviewed faster, are more likely to be accepted for publication, and require less rewriting later. Finally, your own pride and self-esteem should motivate you to produce the best work you can.

Evaluating the Material You Cite

- Re-evaluate other people's data wherever possible—do you agree with their interpretation?
- Each time you cite someone's work, think about what evidence the author used, and whether you accept the conclusions reached.
- Just because a statement is in the literature, it is not necessarily correct. If you uncritically repeat an incorrect conclusion, you help to embed an untruth deeper in the literature, making it harder for someone else to correct later.

Organizing the Manuscript

Use headings as signposts to clarify the structure of the paper. A long paper without headings drags and is difficult to follow.

Good Scholarship

- When you copy or modify a figure from another paper, cite the original source in your figure caption. (Make your figure captions as clear and informative as you can.)
- Make it quite clear which data, ideas, and conclusions are your own, and which ones you got from the literature. If the reader cannot easily tell the difference, your scholarship is deficient.

Use the format of the journal to which the manuscript will be sent.

- Examine back issues of the journal. Write your headings, figure captions, and references in exactly the same way.
- Especially check the reference format; almost every journal has a slightly different style. Be sure you understand

where to put commas and colons, what titles are underlined, where to put the date, etc.

• There are two kinds of references:

1) You can use the authors' names in the sentence proper: "Jones and Smith (1981) state that..."

2) You can place the authors' names in parentheses: "The discovery of trilobites in this formation (Jones and Smith, 1981) showed that..."

Grammar

- Bad grammar distracts the reader from what you are trying to say. (Would you dribble a basketball while you were trying to explain a difficult concept to someone?)
- Good technical writing avoids possessives ("the sandstone's matrix") and contractions ("olivine isn't present").
- Good technical writing does not overuse the passive construction ("fossils were collected").

Proofreading

- Once you have spent enormous effort on the research and writing, proofread your manuscript two or three times—typing errors can escape a casual proofread-ing. Seriously hunt them down.
- Keep looking for unclear passages, format errors, poor reasoning, etc., right down to the moment you submit the paper.
- Check that all references cited are in the bibliography and vice versa.
- A good trick for checking that quotations are exactly accurate is to read word by word backward.

A final word: This probably seems like a lot of rules. But after you have systematically applied them to two or three manuscripts, they become second nature. Turning out a firstclass manuscript is extremely satisfying!



Reviewer's Appraisal Form

Title of Paper:

Author(s):

Reviewed By:

Checkpoints:	Yes	No	Comments
1. Is the subject or problem clearly stated?			
2. Are opposing viewpoints, if any, given proper consideration?			
3. Are the conclusions based on sound evidence?			
4. Are the style and tone appropriate for the topic?			
5. Are the grammar and sentence structure correct?			
6. Are the sources properly cited?			
7. Is the organization clear and helpful?			
Commentary:			
8. What did you learn from this paper?			

- 9. What questions do you have for the author?
- 10. What, if anything, has the author overlooked?

11. What is the greatest weakness of this paper?



From Subject to Thesis

Usually your instructor will assign a broad subject for a term paper or essay. For example:

The role of mitochondria in obesity

Discrimination against Japanese Americans during World War II

The uses of horror in the short stories of Nathaniel Hawthorne and Edgar Allen Poe

Within this broad subject, you need to define a specific topic. Obviously, the narrowness or breadth of this topic will depend on the length of the essay or paper you are expected to write. As Professor Frederick Crews points out in *The Random House Handbook*, one way to define a topic is to pose a question about the general subject. But not any question will do. For this purpose, questions headed by How or Why are preferable to yes-no questions or questions headed by Who, What, Where, or When. The logic here is that How and Why questions are more likely to lead you to an integrated and coherent answer; the other questions are more likely to prompt you to merely recite a list of discrete items.

Your answer to your topic question will provide the thesis statement for your essay. For example:

Subject

The role of mitochondria in obesity

Topic question

How do mitochondria control weight?

Thesis

By regulating the rate at which cells metabolize fats, mitochondria play an important role in controlling body weight.

Subject

Discrimination against Japanese Americans during World War II

Topic question

Why did government officials allow discrimination against Japanese Americans?

Thesis

Government officials allowed discrimination against Japanese Americans not because it was in the nation's interest but because it provided a concrete enemy for people to focus on.

Subject

The uses of horror in the short stories of Nathaniel Hawthorne and Edgar Allen Poe

Topic question

How do Hawthorne and Poe achieve similar Gothic effects in spite of using radically different subjects?

Thesis

Although their subjects are different, Hawthorne and Poe achieve similar Gothic effects by delving into the psyches of the characters rather than relying on cheap horror tricks.

In general, a thesis should be written in the active voice (not the passive) and should contain concrete nouns (rather than abstract concepts). In drafting your thesis, you may find it helpful to construct a phrase that includes the word because. Whether or not this because phrase appears in your final thesis, writing such a phrase will encourage you to summarize your reasoning while you are working on your essay.



Tip Sheet for Writers # 5

Guidelines for Introductions

- 1. Use the introduction to set the tone for your essay or paper. Appear to be interested in the topic; make it seem to be of vital concern to you, at least for the time you are writing the paper. Develop an assured tone. Phrases such as "I hope to prove" or "I would like to show" only make you appear insecure, which then casts doubt on what you say.
- 2. Catch the reader's attention. You want the reader to want to read your paper. Start with an example, a quotation, a statistic, a question, or a complaint and use it as a theme that you refer to throughout the paper.
- 3. State your thesis and provide a subtle blueprint for the paper. Without giving away all your wonderful points, let the reader know where your paper is headed. But don't say, "First I will talk about X, then I will talk about Y." Be careful, too, of confusing your method of organization with your thesis. To say, "I will compare *Huckleberry Finn* and *Moby Dick*" only tells us what you will do—but why are you comparing them? What is the purpose? What is your thesis statement?
- 4. Don't be afraid to break up your introduction into several paragraphs. One huge paragraph at the outset of a paper most likely will put readers off.
- 5. Unless they are specifically called for by your instructor or your discipline, avoid such phrases as "I will discuss" or "This paper will examine." Better to just dive right in.

Here are some introductions and suggestions on how to improve them:

From History

The McCarthy Hearings of the 1950s were made a black comedy by the circumstances surrounding the hearings. Behind this façade lay issues that were deeply disturbing to the Americans of the fifties. By an examination of the McCarthy Hearings, some of the issues can begin to be perceived and analyzed and perhaps they can reveal a better understanding of the decade.

The major problem here is that there is no thesis. The last sentence, "By an examination...," seems like it will be a thesis, but turns out instead to be a discussion of the method of the paper ("perceived and analyzed"). Every paper aims to present a better understanding of something; that is a given, not a thesis.

From History of Art

This paper's intent is to compare Georgia O'Keefe's giant flower paintings with Judy Chicago's "The Dinner Party." Comparison will be made between the two artists' methods of depicting feminine sexuality and possible reasons for the two conceptions.

This is a statement of purpose and method, but comparison is a method of organization and development—not an end in itself. Note that there is no thesis; this paper seems to be a comparison for comparison's sake. "Possible reasons for the two conceptions" suggests that the writer might have a thesis in mind, but the reader can't be sure.

From Anthropology

While the various authors/compilers of fables accurately portray the story's attitudes towards unnecessary conflict and violence, each author/compiler has some opportunity to advocate or excuse some acts that seem just as violent or unacceptable as others. The culture the fable comes from, and the time it comes from, have a great deal to do with the differentiation between "needless" and "justified." However, some clearly similar themes do emerge when one examines in detail the function of violence in several fables.

A well-written introduction, this paragraph presents a good overview of the subject. But at the very last line, we see that there is no thesis: an overview through time is a summary. The writer needs an argumentative edge here—a point to be made.

From Botany

In this paper, the growth rate of Sequoia sempervirens (Coast Redwoods) will be compared with the growth rate of Sequoiadendron giganteum (Giant Sequoias). Environmental as well as genetic influences will be examined.

This introduction should be rewritten in the active voice and should include at least a hint about why this study is being conducted.



Active and Passive Voice

1. In English any action may be expressed in the active voice or in the passive voice. That is, sometimes the subject of the sentence performs the action indicated by the verb; other times, the subject is being acted on. Some examples will help clarify this:

Active

We conducted this study at Sage Hen Creek. (subject "we" doing the conducting)

Passive

This study was conducted at Sage Hen Creek. (subject "study" being acted on, being conducted, by someone else)

Active

The AXYC Company fired forty employees.

Passive

Forty employees were fired by the AXYC Company.

Active

Smith first observed this phenomenon in 1987.

Passive

This phenomenon was first observed in 1987.

2. The passive voice is useful when the agent (doer) of the activity is indefinite or unimportant:

Computers are used in many industries.

The topics covered by this guide include...

Shots were fired.

3. The passive is also appropriate when the result or the activity is more important than the agent who performed it:

These statistics are drawn from twelve regional studies.

This configuration is commonly called a figure eight.

4. In most other situations, however, you should rewrite your sentences in the active voice. Do not allow an overabundance of passive constructions to rob your writing of directness and clarity, or to turn actions into spontaneous events that unfold without any agent or actor. Notice how the following passive constructions only invite questions about what actually happened:

A change in policy was authorized. [Who authorized it?]

It has been determined that... [Who determined it?]



Predication

A predication is the core assertion of a sentence—the statement being made about the person, place, object, or event that is the subject of the sentence. In general, the emphasis of a sentence should fall on the subject, and the predication should be as strong and clear as possible.

Weak Predication

One type of weak predication results from the use of impersonal constructions: there is, there are, it is. These constructions fill the key opening slot of the sentence without saying anything, and they are wordy as well.

Weak

It is worthwhile to reexamine Smith's results.

Stronger

We can profitably reexamine Smith's results.

Smith's results are worth reexamining.

Deferring the main point of a sentence by making something else the subject also produces a weak predication.

Weak

I think that Lamarck is underrated as a force in scientific thought.

Stronger

Lamarck is underrated as a force in scientific thought.

The scientific community still underrates Lamarck's contributions.

A final type of weak predication arises from the overuse of the verb "to be." Whenever possible, substitute a more vivid verb for am, is, are, or were.

Weak

I am in receipt of the new information, and it is very interesting.

Stronger

I have received the new information, and it greatly interests me.

The new information I received greatly interests me.

Predication Errors

Predication errors arise from faulty logic or conceptualization. Think carefully about the following examples.

Incorrect

In the cerebellum is where we find two cerebral hemispheres.

The Unified Field Theory is an example of hard work.

A legal holiday is when you don't have to work.

Correct

The cerebellum consists of two cerebral hemispheres. The Unified Field Theory is the result of hard work. A legal holiday is a day when most people don't work.

From Encouraging Student Writing by Steve Tollefson, Office of Educational Development, University of California, Berkeley, 2002



Marking Symbols

AGR (subject-verb or noun-pronoun agreement)

Theories of cosmology suggests that the universe must have more than three dimensions. ("Theories . . . suggest" not "suggests")

Each of the reservations throughout the United States have problems. ("Each . . . has" not "have")

F. COMP (faulty comparison—either incomplete or mixing apples and oranges)

Thin metal strands deposited in a silicon wafer make it better. ("better" than what?)

The marriage laws in Massachusetts are more explicit than Pennsylvania. (You can't compare laws with a state. So say "than those of Pennsylvania" or "than Pennsylvania's.")

FRAG (sentence fragment)

The Island of Sicily, during the heyday of the Greeks, with its temples some of the finest outside Greece itself. (needs a verb—perhaps change the last part to "has some of the finest temples outside Greece itself.")

The virus may be handled in the laboratory. But only with care. (The second part is a fragment. Just connect it to the first part with a comma.)

GR (grammar—misuse of tenses and confusion of parts of speech)

Some historians react too quick to new information. ("too quickly")

Ever since Quagmire Chemical Company requested a heat exchanger, we investigated several options. (with "ever since" you need to say "have investigated")

ID (idiom—usually a misuse of prepositions)

The Human Subjects Committee insisted to do it their way. ("insisted on doing it")

MOD (modification—usually a word or a phrase in the wrong place)

Traveling up the river, the jungle looked black to Kurtz. (Dangling modifier. "Traveling" here refers to "jungle." It should refer to "Kurtz": "As Kurtz traveled up the river, the jungle looked black to him.")

Incinerating industrial wastes can produce compounds toxic to humans such as dioxins. (Misplaced. Sounds like the humans are dioxins. Should be "can produce compounds, such as dioxins, toxic to humans.")

// STR (parallel structure)

The vaccinia virus may be used to vaccinate against small pox and as a carrier of genetic material from one organism to another. (All items in a series must be in the same form: "...to vaccinate...and to carry")

Writers reveal themselves through their characters and using certain locales. ("through their characters and locales")

PASS (passive voice—not always bad, but overused)

Short stature and low IQ can be caused by an extra chromosome. ("Short stature and low IQ" is the subject, but is not "doing" the verb. Something else is acting on them. That's why it's called passive. Make the subject do the acting: "An extra chromosome causes...."

The "Madonna" was painted by Munch in one of his dark periods. ("Munch painted the Madonna...")

REF (reference—faulty or vague)

Some people wrongly consider Leonardo da Vinci to be greater than Michelangelo, but he was very talented. (Which one does "he" refer to?)

RTS (run-together sentence)

The meteor impact site in the Indian Ocean is the best possibility at the moment, however, other sites do exist. (semicolon or period needed before "however")

This doesn't refer to World War I, it refers to World War II. (semicolon or period before "it")



How to Develop an Idea

One of the most common (and probably unhelpful) comments on student papers is something like the following: "This is an important point, but you need to develop this idea." What exactly this statement means is often a mystery. It helps if we remember that the reader does not share our thought processes; often we simply need to make those thoughts explicit, laying out the details and ramifications of our statement. Below are two versions of a statement from a paper, one not developed at all, one more fully developed.

ORIGINAL

In this section of Oliver Sacks' Seeing Voices, we learn that the Deaf actually have a culture of their own.

REVISION

In this section of Oliver Sacks' *Seeing Voices*, we learn that the Deaf actually have a culture of their own. They are not simply a group of unrelated people who happen to have in common just one thing: that they cannot hear. That is, they are not, perhaps, like paraplegics, who beyond their disability and the attitudes and struggles connected with it (which of course may be a great deal in common), have little in common as individuals. Rather, those who are deaf, because they use a language different from ours, and one that is not shared by many outside their group, are effectively a separate cultural group as surely as African Americans or Asian Americans. The culture of the Deaf comes with a separate language, with customs, with social norms and rules, and most important, with a sense of its own separateness.

The first version assumes that the reader knows what it means to have a unique culture. The second one lays out the elements clearly. In fact, the first statement has now become the topic sentence for the whole paragraph. In order to expand on the idea, the writer has done several things:

- 1. Contrasted the Deaf with other, seemingly similar, groups that do not constitute a culture (that is, paraplegics).
- 2. Compared the Deaf with other, seemingly dissimilar, groups that do constitute a culture (that is, African Americans or Asian Americans).
- 3. Explained what some of the elements of a culture are (that is, customs, language, and so on).

It is important to note that the revision contrasts, compares, and explains without using phrases such as "They can be compared to..." or "The elements of a culture are...." Such phrases are OK, but they hit the reader over the head, and as we see, we can often eliminate them.

This revision has not exhausted the possibilities for expansion of the idea. Contrasting, comparing, and explaining are just some of the ways to expand. Providing an example, telling a short anecdote, and giving a definition are a few other ways. Here, more could be said about language as the key element. Or perhaps the paragraph could lead to discussions in further paragraphs about the civil rights struggles of the Deaf and its similarities to other civil rights struggles.

These are just a few of the ways you can take a little idea and expand it into something that will satisfy the reader's greatest desire—to learn something.



What to Do When You Get a Paper Back

If you're like most students, you skip to the end of the paper when the instructor returns it. You look at the grade: a B or higher, and you read through the comments happily. Anything lower than a B, and you look through them with a chip on your shoulder. And in either case, you usually ignore the comments in the margin. If you look at them at all, you may notice such things as "wrong word," and so on. But you don't really take the time to figure them out. For your own sake (that is, to learn something), you might take a new approach to this subject. After all, the instructor must have had a reason for putting those marks there.

THE GENERAL RULE: Consider the instructor's comments to be part of a dialog and respond in writing to those comments. Respond on the paper itself, right next to the comments themselves, but if you can't tarnish your work this way, do them on a separate sheet.

Examples of Marginal Comments and What to Do with Them

- Awkward. Don't say to yourself, "Oh, awkward, huh? Well, that's not so bad." Often the sentence will contain an error of some kind, in diction, or grammar, or structure. Try on the spot to rewrite the sentence or phrase. On rare occasions, it may be just that—awkward; but assume otherwise.
- Wrong Word/Word Choice. Try to figure out what word might have worked better, and write it down above the incorrect one.
- Do You Mean...? Isn't This...? Why? Such questions are attempts to get you to think about what you've said or to explain more fully. Your first response (a huffy one) may be, "No. I didn't mean that," or "No, this isn't...." Try to write out a reply assuming at first that you need to examine the issue more thoroughly. Only after you've made this attempt, and failed, should you go to the instructor for clarification.
- Grammar Errors. Simply try to correct them when they occur.

Responding to marginal comments will not only help you learn the ropes, but also help you focus any questions or comments if you go over the paper with the instructor.

End Comments

Usually end comments often involve larger issues—development and organization—and do not lend themselves to making changes on the paper. You'll use them when you revise the paper. However, you can do some work with them. Examples: "In your introduction, you might do x and y." Go ahead and try to revise the introduction. "The middle section of the paper seems confused." Go to the middle section and outline your points to see if all related points are in the same paragraph and if the paragraphs fit together properly.

Once you've given yourself 24 hours to study and attempt to respond to the comments, you can go to the instructor with specific questions, and not as a fire-breathing beast who demands to know why this isn't a perfect paper. You'll already know how to improve.