# **Chapter 1 Introduction**

### 1.1 Writing

### 1. What is writing?

Writing is a medium of communication that represents language through the inscription of signs and symbols. In most languages, writing is a complement to speech or spoken language. Within a language system, writing relies on many of the same structures as speech, such as vocabulary, grammar and semantics.

#### 2. What to write?

Motivations for writing include publication, storytelling, correspondence and diary. Writing has been instrumental in keeping history, dissemination of knowledge through the media and the formation of legal systems.

#### 3. Types of writing

Writing can be divided into fiction writing and non-fiction writing. Non-fiction can be split into two sub-categories: popular writing and professional writing. Popular writing is often read for entertainment, whereas professional writing is read for a specific work-related purpose. The difference between the two is not always clear cut.

Professional writing can be divided into two sub-categories: technical writing and academic writing. Technical writing is always pragmatic (application oriented) while academic writing may or may not be.

Examples of technical writing are user manuals and instructions, status reports, sales literature for technical products, technical memos, in short nearly anything of a technical nature excluding academic papers. Another view of technical writing is that it deals with an established and accepted body of information. It is not breaking new ground (i.e, in general it does not contain new theoretical information), but consolidating and explaining established non-theoretical information for the use of readers without extensive training or learning. Textbooks also are of this type.

As stated above, academic writing describes the original research a researcher has completed

or is currently working on. It presents previously unknown information for the first time. It is detailed enough to allow the reader to assess the author's results and, if necessary, repeat his research. When we assess results we determine if the results are accurate and new.

You will notice that academic writing is split into two sub-categories. Literary writing deals with literary analysis, while scientific writing, also known as engineering writing or research writing, deals with science and technology. As a general rule, an academic paper contains five descriptive parts: background (or introduction), method, materials, results, and discussion. Literary writing and scientific writing differ in the extent to which each uses these parts (which will be defined and explored more fully later). Literary writing has far greater freedom in the extent to which the five sections are used. It does not, for example, have the requirement that an experiment must be repeatable.

Note should also be made of the differences between a thesis paper and a paper for publication. The following figure 1-1 is a summary which helps to clarify how an academic paper relates to other kinds of non-fiction writing.

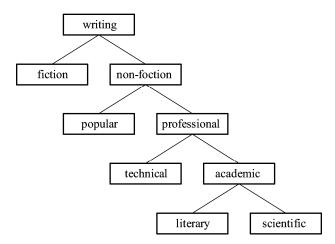


Figure 1-1 Relationships between kinds of non-fiction writing

## 1.2 Research Paper Writing

### 1. What is research paper?

A research paper may be a term paper for a university course, a published article in a journal, and a thesis or a dissertation as a partial requirement for a university degree. It is usually a lengthy documented report that focuses upon an academic topic and it is intended to inform the audience in the relevant field about the research topic, purpose, methods, results(findings), conclusions, and recommendations.

A research paper expresses the author's understanding of the topic based on experiments, facts,

data and analysis. It is objective rather than subjective although the author's personal values, insights, and experiences have a great influence on the whole process.

A research paper is usually made up of the following parts:

- 1) Title page;
- 2) Acknowledgements (optional);
- 3) Outline (optional);
- 4) Abstract;
- 5) The text of the paper (introduction, body, and conclusion);
- 6) Notes (optional);
- 7) Works cited (reference, bibliography);
- 8) Appendix (optional).

### 2. Why to write research paper?

Writing research paper is the final comprehensive test of college students' knowledge and a general test of students' mastery and improvement of basic knowledge, basic theory and basic skills, which is the main purpose of writing research paper.

For English majors, one of the goals of research paper writing is to cultivate students' English reading and writing abilities and their abilities to analyze and solve problems with professional knowledge, so as to achieve the goal of applying what they have learned.

The second is mainly to check the students' mastery of the professional theoretical knowledge and basic skills, and take the achievement of the thesis as one of the main bases for students' graduation.

The third is to train students in the skills of collecting and using data, and at the same time to train students in integrating theory with practice and to enhance their ability to think and solve problems independently.

# 1.3 Steps to Write a Research Paper

Like any good job of workmanship, the secret of a good research paper lies in the preparation done before actually writing the paper. The creation of a research paper can be divided into eight stages as shown in figure 1-2.

Topic selection is the obvious first stage. At this point the research question and hypothesis are in general determined. There is an arrow in the diagram coming into this stage from the right, because the research question and hypothesis may need to be changed as more information (data) become available.

The next stage, explore data, determines if there is enough or too much data available to undertake the project. Also it may be determined that the research question or the hypothesis should

be modified. An arrow both leaves and enters this stage in the diagram to indicate that the topic selected may need to be changed or perhaps more data exploration is necessary and data is gathered in stage 3. One of the goals of this stage is to prevent the researcher from duplicating work previously accomplished. Data exploration is usually accomplished using the resources of a good library.

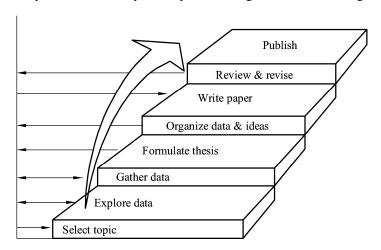


Figure 1-2 Steps to write a research paper

Data is gathered in the third stage. Any tests, experiments, or surveys which need to be performed to gather data are done here. Again a two-headed arrow indicates that there maybe a need to change the topic or to do further data exploration.

The thesis is formulated in stage 4. The thesis statement is a brief answer (one or two sentences) to the research question. If a hypothesis is used, the thesis statement is a rewording of it.

Depending upon the type of data gathered, how they are to be analyzed, and the ideas to be presented, the paper will be organized differently. Although not shown in the diagram, it maybe necessary to return to the previous stage to gather more information.

With all the information now before the author, he/she can begin writing the paper in stage 6. We say "begin writing" because of stage 7, review and revise. The first draft of a paper is very rarely in good enough condition for publication. The author, if a scientist, will seek comments by colleagues on the paper. If a student, he may ask another student to read the paper and comment.

Finally the eighth and last stage is publication. In the case of a student, it refers to handing the paper to an instructor. In the case of a scientist, it refers to actual publication in a journal. If a thesis or dissertation student, it refers to submission to a review committee.

The fact that the researcher can loop among steps one through five, implies that the early stages at least of developing an academic paper are evolutionary. As more information becomes available, a clearer picture of the topic becomes available. The researcher's understanding of the area of research becomes deeper as his understanding increases. Occasional "blind alleys" will be encountered. These too are valuable since it is as useful to know what is not useful as it is to know what is useful.

There are generally eight steps involved in preparing a paper:

- 1) Topic selection and exploratory reading;
- 2) Thesis proposal;
- 3) Data gathering and analysis;
- 4) Thesis formulation;
- 5) Organization of data and ideas;
- 6) Writing the first draft;
- 7) Revising the paper;
- 8) Finalizing the paper.

These steps are somewhat arbitrarily ordered and defined, since they can be combined or performed in parallel. Nonetheless, all of them are necessary.

Topic selection is necessary even if you are a researcher preparing to publish the results of your previous work. You must decide on the scope of your presentation, what to leave out and what to include.

The preparation of a thesis proposal is obviously necessary if you are a candidate for a degree. Even a researcher will occasionally need to propose a paper to a conference, for example.

Data gathering and analysis is vital, even to the researcher, who will need to explore and analyze the existing literature for the previous work by others bearing on his area of interest.

Thesis formulation leads to the creation of a thesis statement, a succinct statement of what the paper is to accomplish.

The organization of data and ideas is of obvious importance, regardless of the objective of the paper.

Good writing is evolutionary; the first version of the paper is done for its author's benefit, to get his rough ideas down on paper.

Revisions are done to benefit the reader, to increase the clarity of the paper.

Finally, after the paper body is written, a few finishing touches are necessary to make it attractive to the reader, an editor or a thesis committee.

