

高等学校英语专业规划教材



# 英语专业学术论文

# 写作教程

● 文 斌 编著

*Writing Research Papers  
in English*



华中科技大学出版社  
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# 英语专业学术论文写作教程

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# 前 言

学术论文写作是英语专业学生的一门重要课程。本书主要是针对英语专业本科高年级学生和研究生编写的。本书主要围绕三条主线展开。这三条主线分别是本书题目中的三个关键词：学术、论文、写作。掌握基本的英语写作技巧是提高学术论文写作能力的基础，熟悉英语论文框架结构和写作步骤是提高英语学术论文写作能力的核心，而了解学术性写作特点是提高英语学术论文写作能力的必备条件。

本书的第一、二单元主要介绍了学术研究和学术论文的本质与特点。第三单元探讨了写作作为交际手段的基本要求。第四单元对学术性写作的七大特点进行了讨论。第五、六、七三个单元介绍了论文写作的基本步骤，如何列提纲和进行段落写作。第八到十一单元对摘要、引言、文献回顾、结语等学术论文的主要组成部分的写作方法进行了详细介绍。第十二到十七单元主要分析了如何将收集的资料进行加工整理并以正确的方式在论文中进行表述。第十八单元介绍了文中引用和参考文献的格式。

本书具有如下特点。

第一，学术论文是对学术研究内容的总结，是和其他研究工作者进行交流的手段。所以本书首先介绍的是学术研究的特点，以便读者能更清楚地了解学术论文的本质和特点。

第二，内容齐全，涵盖面广。包括论文写作的主要方面，如选题、材料收集及评估、提纲、段落写作、衔接与连贯、文献引用及其标注等。

第三，切合实际，针对性强。主要针对英语专业本科高年级学生和研究生编写。本书对论文写作的主要组成部分分单元进行了详细介绍，有利于学生理解和模仿。

第四，作者编写本书时考虑到了不同层次学生的水平和上课的实际学时，在安排本书内容时尽量做到内容丰富，重点突出，便于老师和学生根据实际需要教材内容进行增补、删减或调整。本科生学习的重点可放在第二、五、六、七、八、九、十、十一、十八单元。而研究生则可有选择地对其他单元进行学习。

第五，本书配有大量的和论文写作有关的练习并提供了参考答案，便于老师进行教学，也便于学生自学。

由于作者水平有限，在编写过程中难免有漏误之处，欢迎使用本书的师生和其他读者批评指正。

编 者

2010年7月

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# **Unit 1 What is research ?**

## **1.1 Definition of research**

A research paper is to report what you have done in your research, so before we look at how to write a research paper, we need to investigate into the nature of research.

Generally speaking, research is the systematic process of collecting and analyzing information ( data) in order to increase our understanding of the phenomenon which we are concerned with or interested in. In order to avoid some misconceptions of the nature of research, we should keep in mind that research is not mere information gathering, nor mere transportation of facts from one place to another.

## **1.2 Characteristics of research**

Research is a process through which we attempt to achieve systematically and with the support of data the answer to a question, the solution to a problem, or a greater understanding of a phenomenon. This process has seven distinct characteristics.

### **1.2.1 Research originates with a question or problem**

The world is filled with unanswered questions, unresolved problems. Everywhere we look, we observe things that cause us to ask questions. An inquisitive mind is the beginning of research.

Look around you. Consider the unresolved situations that evoke these questions: Why? What's the cause of that? What does it all mean? These are everyday questions. With questions like these, research begins.

### **1.2.2 Research requires a clear expression of a goal**

A clear statement of the problem is of great importance. The statement asks the researcher, "What exactly do you intend to do?" This is basic and is required for the success of any research work. Without it, the research is on shaky ground.

### **1.2.3 Research requires a specific plan of procedure**

Research is a search-and-discover task explicitly planned in advance. Researchers plan their overall research design and specific research methods in a purposeful way — that is, to yield data relevant to their particular research problem. Depending on the specific research question, different designs and methods will be more or less appropriate.

### **1.2.4 Research usually divides the principal problem into more manageable subproblems**

The whole is composed of the sum of its parts. That is a universal natural law; that is

also a good principle to follow in thinking about one's principal goal in research.

### 1.2.5 Research is guided by the specific research problem, question, or hypothesis

Having stated the problem and the subproblems, each subproblem is then viewed through a hypothesis. A hypothesis is a reasonable guess. It may direct your thinking to the possible source of information that will aid in resolving the research problem.

We must remember hypotheses are never proved nor disproved; they are either supported or not supported (rejected).

### 1.2.6 Research requires the collection and interpretation of data

Having now isolated the problem, divided it into subproblems, the next step is to collect data and to organize them in meaningful ways so that they can be interpreted.

Data, events, happenings, and observations are of themselves only data, events, happenings, and observations — nothing more. But all these are potentially meaningful. The significance of the data depends on the way the human brain extracts meaning from those data. In research, data unprocessed by the human brain are worthless.

Data demand interpretation. But no rule or no formula will lead the researcher precisely to the correct interpretation. Interpretation is subjective: It depends entirely on the logical mind, inductive reasoning skill, and objectivity of the researcher.

### 1.2.7 Research is, by its nature, cyclical

Research is never conclusive. In exploring an area, one comes across additional problems that need resolving. One research leads to another research. Every researcher soon learns that genuine research creates more problems than it resolves. Such is the nature of the discovery of knowledge.

## 1.3 Research process

### 1.3.1 Identify the research problem

You will most likely start doing research because you have a particular interest in a particular field. To find out more about this interest of yours, you must identify an approach that you will take in order to undertake this research. You may find, in thinking about your area further, that there is something which is not working, or which is unknown, or perhaps which is hypothesised, but that needs to be tested. This is the context for your research — your research problem. The next thing that you need to do is to turn that problem into a question or a statement — which you will use to address this problem.

### 1.3.2 Asking a research question

Your research question (or questions) should be your tool(s) for addressing the issue

that you have identified as being of interest to you. The way you ask the question is vital to determining what kind of research you will conduct.

The question you ask will also generate a number of other questions, or subquestions. Things to bear in mind in forming questions to ask is to be realistic in what you can answer (with the time/resources you have available), and also in how many questions you are answering.

### 1.3.3 Doing literature review

Research cannot exist in a vacuum. In order to be scientific and exact, your research must itself be based within the context of “the literature” (i. e. books, journals, newspaper articles). Your research should show that you have read around both your subject and the methodologies that you have chosen – your questions, methodologies and methods will also largely be shaped or influenced by what you have read.

### 1.3.4 Identify methodologies and methods

There are a wide array of research methodologies and methods. Research methodologies can take the form of experiment, case study, and/or survey, can be either, or a mixture of, qualitative (based on words and meanings) or quantitative (based on statistics and their meanings), and can incorporate a variety methods to generate data (e. g. observations, questionnaires), as well as varieties of ways of analysing this data. The following are some common ways of designing a methodology that answers your research question(s), and methods of generating data.

#### 1.3.4.1 Methodologies

**Experiment:** An experiment-based methodology is where, simply speaking, a stimulus is applied (e. g. a new system of teaching science to primary school students) and its response is measured (e. g. by analysing exam results). Such a methodology is most often linked with a quantitative (i. e. statistical) approach, but this is not necessarily the case. To maximise the validity of such studies, there are usually some elements of controlling of/for variables (such as by having a group of students who are taught differently to normal, and another group who are taught the same as normal). It can be linked with methods such as observation, interview etc.

**Survey:** A survey is a study of a phenomenon over/within a geographic region. This could involve, say, a survey of the crime rates of every major city in a certain country, or a survey of a sample of bloggers’ political motivations.

**Case study:** A case study, as the name implies, is a study of a specific “case”, or group of “cases” – a “case” being an individual person, an organisation, a school etc. Some research will focus on one single case and attempt to generate “rich” data; and some research will focus on a number of cases, either which are significantly different from one another, or which are similar, or which are clustered or spread in a geographic/socio-political spread. Focussing on a number of cases can approach a survey design – or

sometimes large-scale surveys can be used in order to identify specific cases which might be of interest to the researcher.

In order to address a complex question, you will need to identify what methodologies and methods — or, more likely, combinations of methodologies and methods — are most likely to address your particular question to your satisfaction.

#### 1.3.4.2 Methods

Research methods can be various, the following are the most frequently used.

**Questionnaires:** Sometimes a questionnaire can contain a number of questions with a number of options to choose from (i. e. where you have to “tick a box, or number of boxes”). Other questionnaires may be questions with space in which to write more free-form or detailed answers. Some questionnaires will have a mixture of both types of questions. Both types of questions can have their strengths and weaknesses.

**Observations:** Observation is paying close attention to an environment, its context, and its social dynamics. It can be systematic (where the researcher will be recording, for example, how many times a person scratches his/her head), or more free-form where the researcher watches everything and records as much detail as they can or that they feel is appropriate.

**Interviews:** Interviews can be between one person and another, or in a group setting. They can be “structured” (where the interviewer will ask a predetermined set of questions), “semi-structured” (where the interviewer will ask a number of questions based on an outline of topics to be covered), or “unstructured” (where the interviewer will ask questions based on whatever emerges during the interview itself — or, often, will not seem to ask questions, but rather facilitate or participate in a conversation).

**Eliciting:** Eliciting is a way of getting people to talk about something, based on a prompt, such as a photograph, or piece of music. For example, in research done with young children, an interview might be intimidating, but a photograph (for example) gives the child or children something to talk about, while giving the researcher an opportunity to observe reactions to the photograph.

#### 1.3.5 Analysis

Once you have collected your data (e. g. filled-in questionnaires, interviews recorded and transcribed), you must now do something with it! Your data is of no use to anyone else if it is not interpreted.

#### 1.3.6 Writing

Writing up your research into a report, paper, essay or thesis.

### Exercise 1

Answer the following questions.

1. What is research?

2. What are the features of research?
3. What do we mean by the statement “research is cyclical”?
4. What methods do we often use in doing research?

### **Exercise 2**

**Study the following situation carefully and then write down as many reasonable guesses as possible to explain what has happened. A sample guess is offered.**

You come home after dark, open the front door, and reach inside to turn on the lamp that stands on a nearby table. Your fingers find the switch. You turn it. No light.

In this situation what reasonable guesses — hypotheses — can you offer for the cause of the lamp failure?

A sample guess: The bulb has burned out.

## Unit 2 What is a research paper ?

### 2.1 Definition of a research paper

Many people are likely to associate a research paper with working with piles of books, and searching for other people's ideas. Yet a research paper is more than the sum of your sources, more than a collection of different pieces of information about a topic, and more than a review of the literature in a field. A research paper analyzes a perspective or argues a point. A research paper should present your own thinking backed up by others' ideas and information.

A research paper is a general term. It may be a term paper for a university course, a published article in an academic journal, or a thesis or a dissertation for a university degree. In this book, a research paper will be defined as **a documented report that focuses on an academic topic, and it is intended to inform the audience of the research topic, purpose, method, results, findings, conclusions, and recommendations.**

Then what factors will determine the nature of a research paper? From the term itself we can conclude that it should have two distinctive features. First it is the report of your research, thus should reflect the nature of research; identifying problems, asking questions, reading for other people's ideas, designing methodologies to work out the answers to the questions, and discussing the results of your findings.

Second, a research paper is a piece of academic writing, therefore, it should follow the rules for academic writing. For example, the topic should be well-chosen, the central idea clearly stated, the argument sufficiently supported and the sources acknowledged and properly documented.

### 2.2 The basic criteria of a research paper

There are some basic criteria that make up a research paper:

A research paper is a piece of academic writing. It has some definite requirements to be completed. First of all, a research paper has to have a precise and clear topic, which is related with some academic science. Secondly, a research paper has to be structured according to the academic requirements. It means that the first part of the research paper has to introduce the readers into the topic of the paper and present the research's background. The second part of the paper should explain the methods of research and describe the research process. The last part should sum up and conclude the research. It is also necessary to mention all the additional sources which were used as the research's background.

A research paper is argumentative in nature. Therefore you need to support your stand on an issue and use information as evidence to support your point, much as a lawyer uses evidence to make his case.

A research paper is an argument in which different parts are logically related and all centre around research questions. It is neither a simple recording of what has been done in your research nor a description of what has been found in your study. Writing a research paper involves more than just searching for information from books, articles, internet, artwork or people. It involves your thinking ability and your intellectual skills.

A research paper is based on logical arguments and findings. If you are doing an empirical research you must defend your arguments in terms of a sound model, a methodology to test that model, and findings which either do or do not support your model. If you are doing conceptual research, you must defend your arguments in terms of applying logic to explain the weaknesses or limitations you found in the previous research, either through a model or a well-structured narrative.

A research paper is based on your exploration of other people's ideas, rather than simply an analysis of your own thoughts. A research paper is finding out and interpreting the ideas of other people in the relevant field. This process is often referred to as literature review. When you write a research paper you build upon what you know about the subject and make a deliberate attempt to find out what experts know. A research paper involves surveying a field of knowledge in order to find the best possible information in that field.

As soon as you decide on the research paper topic you need to start working on the literature review. The collected information should then be summarized and paraphrased. Review of literature helps to evaluate the extent of your knowledge and understanding of the large amount of data available in your field.

Writing a research paper also includes synthesis and analysis. First you have to synthesize information from several sources. Then the information that you have gathered needs to be separated into its component parts and each part has to be analyzed and restructured. Then you will have to give your thoughts on each of these parts.

A research paper expresses the author's understanding of the topic based on experiments, facts, data and analyses. It should show your originality. The paper that results from your personal processes of evaluation, study, and synthesis will be a totally new creation. Although it is true that you use several and varied sources, your originality will be evident in your carefully crafted research paper.

While writing a research paper, you do not concentrate on just the literature review but also your own opinions and thoughts on the research paper topic. Whatever be the research paper topic, you need to do your own thinking and back it up with ideas and information that you have collected from other sources.

A research paper should provide its writer and its reader with new knowledge and a new understanding of a specific topic. The success of your research paper depends primarily on your critical judgment in selecting sources and on the originality and thoughtfulness of your treatment of the topic.

A research paper is properly and systematically documented. All the sources used need to be acknowledged. To prevent a reader from believing that the intellectual property

of somebody else is, instead, yours, the words, ideas, and visuals of others must be recognized and documented. Thus, even though your research paper is a new and original work, none of it would have been possible without the various sources you consulted to prepare it.

### **2.3 Misconceptions to avoid**

A research paper is not simply a generalized discussion of an issue. It should have a thesis — a clear point of view.

A summary of a source material, such as a book or an article, is not a research paper. There are two reasons that a summary doesn't fit with the definition of a research paper. First, a single source does not allow you to choose materials or to exercise your own judgment. Second, the organization cannot be your own since a summary has to follow the structure of the original source.

Repeating the ideas of others uncritically does not make a research paper. The research paper, by definition, has to reflect something about yourself. This could be an interpretation, a synthesis, or some other personal involvement.

Unproven personal opinion does not make a research paper. Despite the expectation to put some personal thinking into a research paper, you must have reasons for your beliefs and make them evident to readers. This means that even though individual thoughts and attitudes are important in some types of writing assignments, the research paper is not usually one of them. The exception to this is if you can support your ideas and attitudes.

To sum up we can say:

- (1) A research paper is not “about” a subject.
- (2) A research paper is not a summary of an article or a book (or other source material).
- (3) A research paper is not repeating the ideas of others uncritically.
- (4) A research paper is not putting together a series of quotations.
- (5) A research paper is not expressing unsupported personal opinions.
- (6) A research paper is not copying or accepting another person's work without acknowledging it.

### **2.4 The importance of writing a research paper**

Why is learning to write research papers so important? There are several reasons for this practice. The first one is very practical and self-obvious: in most universities, a research paper is a partial requirement to get a degree. Thus writing a good research paper provides you with a decent grade to pass the class and earn credit.

Secondly, the skills you practise in writing a research paper are crucial to academic success. If you attain these skills while preparing your research for your paper, most likely you will put these skills to use again and again in differing ways in and out of school.



These skills are used in decisions about job assignments and promotions. These same skills are also used by physicians, engineers, accountants, and teachers.

Thirdly, even if you never become a professional writer you will follow the same procedure for various future assignments. It is likely you will become a better reader, for, as you go through the process of preparing the research paper you will practise critical thinking.

Fourthly, academic research papers can reveal something that you did not suspect about yourself. And that is your talent in scholarly research. Most of the students possessing strong analytical skills are usually the last ones to find out about it. Academic research papers develop abilities to investigate, evaluate, and summarize. They also teach to look for important data and manage it.

Last but not the least, academic research papers open new horizons and offer a lot of new information you had no idea about before writing one. This might lead you to do more investigations to satisfy your curiosity.

## **2.5 Structure of a research paper**

To create a good research paper it is very necessary to understand the research paper structure, also known as the research paper layout.

The basic research paper requirements are: title page, table of contents, abstract, introduction, body ( literature review, materials and method, results, discussion ), conclusion, list of references and appendix.

### **2.5.1 The “title” of the research paper**

The title page of the research paper should serve as an overview of the most important practical information related to the paper. Most of the time, it includes the title, name of the author(s), date, name of department and school, and name of the supervisor. It is very necessary to ensure that the title of the research paper should clearly identify the content and the subject matter of the report.

### **2.5.2 The table of contents ( optional in short papers )**

The purpose of the table of contents is to give the reader an idea of the extent and the structure of the paper so that to provide a navigator for the reader. In a long research paper, a table of contents should go on a separate page titled TABLE OF CONTENTS. It should contain, with the page number, the title of each chapter or division, followed by the title of each important subdivision, the appendix, if the paper has it and the bibliography.

### **2.5.3 Abstract**

The abstract section is a short summary of the entire work. It should include: the