



西安交通大学

研究生创新教育系列教材

学术交流英语书面表达

Academic Written English

主编 王宏俐 副主编 史文霞 白 鸽



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总序

创新是一个民族的灵魂,也是高层次人才水平的集中体现。因此,创新能力的培养应贯穿于研究生培养的各个环节,包括课程学习、文献阅读、课题研究等。文献阅读与课题研究无疑是培养研究生创新能力的重要手段,同样,课程学习也是培养研究生创新能力的重要环节。通过课程学习,使研究生在教师指导下,获取知识的同时理解知识创新过程与创新方法,对培养研究生创新能力具有极其重要的意义。

西安交通大学研究生院围绕研究生创新意识与创新能力改革研究生课程体系的同时,开设了一批研究型课程,支持编写了一批研究型课程的教材,目的是为了推动在课程教学环节加强研究生创新意识与创新能力的培养,进一步提高研究生培养质量。

研究型课程是指以激发研究生批判性思维、创新意识为主要目标,由具有高学术水平的教授作为任课教师参与指导,以本学科领域最新研究和前沿知识为内容,以探索式的教学方式为主导,适合于师生互动,使学生有更大的思维空间的课程。研究型教材应使学生在在学习过程中可以掌握最新的科学知识,了解最新的前沿动态,激发研究生科学研究的兴趣,掌握基本的科学方法;把教师为中心的教学模式转变为以学生为中心教师为主导的教学模式;把学生被动接受知识转变为在探索研究与自主学习中掌握知识和培养能力。

出版研究型课程系列教材,是一项探索性的工作,也是一项艰苦的工作。虽然已出版的教材凝聚了作者的大量心血,但毕竟是一项在实践中不断完善的工作。我们深信,通过研究型系列教材的出版与完善,必定能够促进研究生创新能力的培养。

西安交通大学研究生院



前言

随着科学技术的飞速发展和经济日益全球化,我国高校对人才培养提出了更高的要求,高校学生尤其是研究生应该具备较强的用英语进行科研工作和学术交流的能力。同时,国际权威期刊的论文发表数量日益成为一个国家科技竞争力的重要评价指标之一。因此,为了提高学生的学术英语书面表达能力,帮助他们克服参加国际学术交流合作、进行科学研究中的语言障碍,我们精心编写了《学术交流英语书面表达》。

本教材以功能教学法、语类理论、跨文化交际理论及语篇衔接和连贯理论为支撑,以语篇为切入点,采用理论和实际相结合的方式系统介绍了常见学术语类的写作技巧及语言表达,从而帮助学生从思维、语言与文化的角度解决学术英语书面表达中存在的实际问题。教材按照学术活动的不同阶段安排内容:即提出研究问题或提出研究申请阶段、研究阶段、学术交流阶段、知识与技术传播阶段和知识与技术的应用推广阶段来安排相应内容体系,全书共为四篇、十一章。编写中我们力求简洁、合理、规范,内容上充分体现实用性:教材中提供大量的例文和训练材料,或拓展视野,或引发兴趣,或启迪思维,既便于教师采取灵活多变的教学方法组织教学,又便于学生在教师的指导下自学、研讨、练习,从而调动学生自主学习的积极性,培养学生的创新思维能力。

《学术交流英语书面表达》主要供高等院校的研究生课堂使用,同时也可供具备一定英语基础的学者自学或参考。由于编写人员水平有限,不当之处在所难免,希望广大师生和读者提出批评和建议。

编者

2015年8月



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Part I

Preliminaries for Academic Writing



Chapter 1 A Conceptual Overview of Academic English

⇒ Learning Objectives

In this chapter, you will learn:

- to have a better theoretical understanding of the academic writing.
- to know the differences between a speech and an article.
- to distinguish writer-oriented writing from reader-oriented writing.

I . Overview of English for Academic Purposes

From humble beginnings as a relatively fringe branch of English for Specific Purposes (ESP) in the early 1980s, English for Academic Purposes (EAP) is today a major force in English language teaching and research around the world. Drawing its strength from a variety of theories and a commitment to research-based language education, EAP has expanded with the growth of university places in many countries and increasing numbers of international students undertaking tertiary studies in English. As a result, EAP is now situated at the front line of both theory development and innovative practice in teaching English as a foreign language.



The term ‘English for Academic Purposes’ seems to have been coined by Tim Johns in 1974 and made its first published appearance in a collection of papers edited by Cowie and Heaton in 1977 (Jordan, 2002). By the time the journal *English for Specific Purposes* began in 1980, EAP was established as one of the two main branches of ESP, together with the use of language in professional and workplace settings (sometimes referred to as EOP or English for Occupational Purposes). Since then EAP has grown steadily as English has expanded with the increasing reach of global markets. For many countries this has meant that producing an annual crop of graduates able to function in employment through English has become an economic imperative. Similarly, the parallel growth of English as the leading language for the dissemination of academic knowledge has had a major impact in binding the careers of thousands of scholars to their competence in English.

These changes have been accompanied by a greater internationalization and globalization of higher education. Together with domestic policies advocating enhancing numbers of eligible university entrants in the UK, Australia, US and elsewhere, these factors have had a dramatic impact on universities. Student populations have become increasingly diverse, particularly in terms of their ethnic and linguistic backgrounds and educational experiences, and this presents significant challenges to university academic staff. There have also been other major changes in student demographics. With the rapid rise in refugee populations around the world, and a consequent increase in international migration, it is common for teachers to find non-native users of English in their high-school classrooms for whom the concept of ‘academic language’ in any language is an unfamiliar one.

The learning needs of all these student groups have a particular focus in the challenges to communicative competence presented by disciplinary-specific study, by modes of teaching and learning, and by changing communicative practices within and outside the academy. In this context, diversity takes on a particular importance. The distinctiveness of disciplinary communication, for example, presents considerable challenges to students, especially as such disciplines themselves change and develop. There is now compelling evidence across the academic spectrum that disciplines present characteristic and changing forms of



communication which students must learn to master in order to succeed. At the same time, employers and professional bodies seek evidence of graduates' general workplace-relevant communication skills—skills which need increasingly to be adaptable to new, often unpredictable contexts of communication. Further, while in the past the main vehicles of academic communication were written texts, now a broad range of modalities and presentational forms confront and challenge students' communicative competence. They must learn rapidly to negotiate a complex web of disciplinary-specific text types, assessment tasks and presentational modes (both face-to-face and online) in order first to graduate, and then to operate effectively in the workplace.

Another development pushing the expansion and increasing complexity of EAP is a concern with the English-language skills of non-native English-speaking academics, especially those working in non-English-language countries or regions where English is used as the medium of university instruction, such as Hong Kong and Singapore. The professional and institutional expectations of these academics are closely aligned with those in the 'metropolitan' English-language-speaking countries and whether the academic is a native or non-native user of English is seen as immaterial to the roles they play and the jobs they perform. The ability to deliver lectures in English, to carry out administrative work, to participate in meetings, to present at international conferences, and, above all, to conduct and publish research in English, are all demanded as part of such lecturers' competence as academics. This group's needs and concerns are now beginning to be noticed and analyzed and programs are emerging which cater to their particular requirements.

English for Academic Purposes is the language teaching profession's response to these developments, with the expansion of students studying in English leading to parallel increases in the number of EAP courses and teachers. Central to this response is the acknowledgement that the complexity and immediacy of the challenges outlined above cannot be addressed by some piecemeal remediation of individual error. Instead, EAP attempts to offer systematic, locally managed, solution-oriented approaches that address the pervasive and endemic challenges posed by academic study to a diverse student body by focusing on student needs and discipline-specific communication skills.



Course providers have recognized that teaching those who are using English for their studies differs from teaching those who are learning English for other purposes, and programs designed to prepare non-native users of English for English-medium academic settings have grown into a multi-million-dollar enterprise around the world. For many learners, their first taste of academic study is through an EAP pre-session course, either in their home or in an overseas country. These courses are designed to improve students' academic communication skills in English to the level required for entry into an English-medium university or college, but there are similar developments at the other end of the educational ladder. It is increasingly understood, for instance, that children entering schooling can be helped to learn more effectively and to integrate better into the educational structure if they are taught specific academic skills and appropriate language use for such contexts.

These developments have together helped reshape the ways that English-language teaching and research are conducted in higher education, with a huge growth in research into the genres and practices of different academic contexts. This has had the result that the concept of a single, monolithic academic English has been seriously undermined and disciplinary variations are acknowledged. Understanding the contributions that disciplinary cultures make to the construction, interpretation and use of academic discourses has become a central EAP enterprise.

II . Stylistic Features of Academic English

Just as all writers have distinct personalities, they also display distinct features in their writing. An eternal truth that emerges from any class in English composition is that "writing is the man himself." Writing style can be defined in this way:

Style: the features of one's writing that show its individuality—separating from the writing of others and shaping it to fit the needs of particular situations. Style results from the conscious and subconscious decision each writer makes in matters like word choice, word order, sentence length, and active and passive voice. These decisions are different from the "right and wrong" matters of



grammar and mechanics. Instead, they comprise choices writers make in deciding how to transmit ideas.

Style is largely a series of personal decisions you make when you write. However, much writing is being done these days by teams of writers. Collaborative writing requires individual writers to combine their efforts to produce a consensus style, usually a compromise of stylistic preferences of the individuals involved. Thus personal style becomes absorbed into a jointly produced product.

There are no set guidelines that clearly define the difference between academic writing and nonacademic writing. But we can offer a checklist of stylistic characteristics common to all good academic writing. If your academic writing does not have all these qualities, it probably will not serve its intended purpose as well as it should.

A. Clarity

In fiction, and other nonacademic writing, clarity is not necessarily the key to good style. Obscurity has its place in some forms of literature, but obscurity has no play in academic literature, where comprehension is the chief concern. Academic writers are successful if their work can be readily understood by the intended audience. Here are the principles that underlie everything we will tell you in this section.

Principles of Achieving a Clear Style

- Write as honestly and objectively as you can. Objectivity comes from facts correctly reported and honest inferences drawn from them.
- Do not be mysterious. Tell your readers as clearly as you can what you want them to understand, know, or do.
- Remember that you have invited your readers to come to you. The burden of being clear rests upon you.
- Do not strike a pose when you write. You are not trying to impress readers with your superiority. You are trying to get ideas from your brain to theirs by the shortest, clearest route.



Under the guidance of the principles, we have broken our subject into three parts for simplicity's sake: favor of active voice, sentence order, and sentence complexity and density.

Traditionally, passive voice is the prominent feature of syntax in academic writing. But with the further development of academic English, the general readers have developed a strong appetite for easily comprehended writings by using active voice. In an active voice sentence the subject performs the action and the object receives the action. In a passive voice sentence, the subject receives the action. Here are some examples of the same thoughts being expressed in first the active and then the passive voice:

Examples: Active-voice Sentences	Examples: Passive-voice Sentences
1. We received aerial photographs in our initial assessment of possible fault activity at the site.	1. Aerial photographs were received in our initial assessment of possible fault activity at the site.
2. The study revealed that three underground storage tanks had leaked unleaded gasoline into the soil.	2. The fact that three underground storage tanks had been leaking unleaded gasoline into the soil was revealed in the study.
3. We recommend that you use a minimum concrete thickness of 6 inch. for residential subdivision streets.	3. It was recommended that you use a minimum concrete thickness of 6 inch. for residential subdivision streets.

Just reading through these examples gives the sense that passive constructions are wordier than active ones. Active voice is clearer and easier to read and understand, because active voice makes explicit the action and the actor. The general rule of thumb in academic writing is to use active voice whenever possible. We urge you to use the active voice more than the passive, but we do not wish to imply that you should ignore the passive altogether. Both the active and passive voices have a place in your writing. Knowing when to use each is the key. Here are a few guidelines that will help:



Active voice	Passive Voice
1. Emphasize who is responsible for an action ("We recommend that you consider...")	1. Emphasize the receiver of the action or the action itself rather than the person performing the action ("Sample will be sent directly from the site to our laboratory in Sacramento")
2. Stress the name of a company, whether yours or the reader's ("PineBluff Contracting has expressed interest in receiving bids to perform work at...")	2. Avoid the kind of egocentric tone that results from repetitious use of "I," "we," and the name of your company ("The project will be directed by two programmers from our Boston office")
3. Rewrite a top-heavy sentence so that the person or thing doing the action is up front ("Figure 1 shows the approximate location of...")	3. Break the monotony of writing that relies too heavily on active-voice sentences
4. Pare down the verbiage in your writing, since the active voice is usually a shorter construction	

While the passive voice has its uses, most editors feel that too much of it produces lifeless and wordy writing. The general rule of thumb in academic writing is to use active voice whenever possible.

What is the best way to order a sentence? Is a great deal of variety in sentence structure the mark of a good writer? It has found that professionals depend on mostly on basic sentence patterns. They write 75.5 percent of their sentences in plain subject-verb-object (SVO) or subject-verb-complement (SVC) order, as in these two samples:

Examples: Sentence Order

Doppler radar increases capability greatly over conventional radar. (SVO)

Doppler radar can be tuned more rapidly than conventional radar. (SVC)

Another 23 percent of their sentences begin with a short adverbial opener. These adverbial openers are most often simple prepositional phrases or single words such as *however*, *therefore*, *nevertheless*, and the other conjunctive



adverbs. Generally they provide the reader with a transition between thoughts. Following the opening, the writer usually continues with a basic SVO or SVC sentence. Professionals write 1.2 percent of sentences using verbal clauses as the sentence opener such as participles and infinitives. The verbal opener is again followed most often with an SVO or SVC sentence, as in this example:

Example: Sentence with a Verbal Opener

Looking at it this way, we see the radar set as basically a sophisticated stopwatch that sends out a high energy electromagnetic pulse and measures the time it takes for part of that energy to be reflected back to the antenna.

The remaining 0.3 percent of the sentences are inverted constructions in which the subject is delayed until after the verb, as in this sentence:

Example: Inverted Sentence

No less important to the radar operator are the problems caused by certain inherent characteristics of radar sets.

What can we conclude from the above analysis? Simply this: the professionals are interested in getting their content across, not in tricky word order. They conveyed their thoughts in a clear container, not clouded by extra words.

Besides sentence order, sentence complexity and density should be considered. The complexity and density of a sentence are closely related to sentence length and sentence order. Research indicates that sentences that are too complex in structure or too dense with content are difficult for many readers to understand. Basing our observations on this research, we wish to discuss two particular problem areas: too many words in front of the subject, and too many words between the subject and the verb.

Professional writers open with something before their subjects about 25 percent of the time. When these openers are held to a reasonable length, they create no problems for readers. The problems occur when the writer stretches such openers beyond a reasonable length. What is reasonable is somewhat open to question and depends on the reading ability of the reader. However, most would agree that the 27 words and 5 commas before the subject in the following



first sentence make the first sentence difficult for many readers:

Example: Sentence Complexity and Density

1. Because of their ready adaptability, ease of machining, and aesthetic qualities that make them suitable for use in landscape structures such as decks, fences, and retaining walls, preservative-treated timbers are becoming increasingly popular for use in landscape construction.
2. Preservative-treated timbers are becoming increasingly popular for use in landscape construction. Their ready adaptability, ease of machining, and aesthetic qualities that make them suitable for use in landscape structures such as decks, fences, and retaining walls.

The ideas contained in the first too dense sentence become more accessible when spreading over two sentences as in the second version. The second version has the additional advantage of putting the central idea in the sequence before the supporting information.

In the following first sentence the conditional sentence is a particularly difficult version of the sentence with the subject too long delayed. You can recognize the conditional by its *if* beginning. To clarify the first sentence, we move the subject to the front and the conditions to the rear. Consider the use of a list when you have more conditions.

Example: Sentence Complexity and Density

1. If heat (20°–35°C or 68°–95°F optimum), moisture (20% + moisture content in wood), oxygen, and food (cellulose and wood sugars) are present spores will germinate and grow.
2. Spores will germinate and grow when the following elements are present:
 - heat (20°–35°C or 68°–95°F optimum)
 - Moisture (20% + moisture content in wood)
 - Oxygen
 - Food (cellulose and wood sugars)

In the following first sentence, too many words between the subject and the verb cause difficulty. This sentence becomes much easier to read when it is broken into three sentences and first things are put first just as in the second sentence. You might wish to break down the first sentence into only two sentences if you had an audience who could handle denser sentences just as the third sentence.