大学专业英语系列教材

管理学专业英语教程

A COURSE IN MANAGEMENT-BASED ENGLISH

高等学校文科教材

主编　邱东林　华宏鸣

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中国人民大学出版社

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第 三 册

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前　言

《大学专业英语系列教材》是根据教育部最新颁布的《大学英语教学大纲》的基本要求，为大学英语学习四年不断线而编写的一套教材。该套教材的编写得到教育部高等教育司的大力支持。

本套教材分法学专业英语、经济学专业英语、管理学专业英语、人文科学专业英语四个系列，每一系列包含三个分册，每一分册供一个学期使用。全套教材由复旦大学、中国人民大学、南京大学、对外经济贸易大学联合编写，南京大学杨治中教授担任总主编。法学专业英语教程由赵建、夏国佐教授主编；管理学专业英语教程由邱东林、华宏鸣教授主编；经济学专业英语教程由翟象俊教授主编，参加编写的有张勇先、王学文教授等；人文科学专业英语教程由谌馨荪教授主编，参加编写的有郭庆民、章安祺教授。全套教材由专业英语教师和公共英语教师共同编写。

本系列教材具有如下特点：

一、考虑到我国大学生学完两年后的实际水平，课文的选材、注解和练习以《大学英语教学大纲》所要求的四级为基础。

二、教材在内容和语言上贯彻循序渐进的原则。在内容上，第一册主要涉及本专业的原理和基础知识，第二、三册主要涉及本专业的历史及专家论点；其要旨在于帮助学生完成从基础英语到专业英语的过渡。在语言上，选材在难度、可读性等方面，贯穿了由浅入深的原则。

三、考虑到《大纲》对专业英语学时和阅读量的要求，我们采用了“主、副”课文制，对主课文从注解和练习两方面进行了重点处理，用作教师课内重点讲解的内容，副课文主要供学生课后自学，以便对主课文从语言和知识两方面起到巩固作用。

四、本教材强调理解的准确性和学生的应用能力，因此，练习针对这两方面进行了重点编写，配有理解、语言应用（包括词汇应用、语篇应用）练习，理解题强调准确理解、思考、分析、评价、讨论，每课练习中所采用的例句从知识和语言上均与主课文或已学过的课文有关。

五、为方便自学，书后提供了主课文的参考译文和练习答案。

六、全套四种教材在遵循总的编写原则的同时，又根据各自课程的知识特点自成体系。

由于本书编写仓促，不足之处在所难免，敬请读者指正是幸。

编　者

1999年6月

使 用 说 明

本书是根据教育部“专业教学指导委员会”对管理类学科专业英语教学的要求，由复旦大学管理学院和外语系教师组成的编写组编写而成。

本书可供各类大专院校中的企业管理、经济管理、科技管理、生产经营管理、财务金融管理等专业高年级学生作为教材使用。也可以作为管理类学科各专业的研究生和教师自学用书或教学参考书使用。

本书课文的选择原则：(1) 尽量选择各管理专业的基础内容或核心内容，为各个专业所共需；(2) 课文之间有一定的层次联系，但不强调管理专业内容的全面性和系统性，而是根据语言教学的特点和需要，注重对管理专业内容的英语词汇、术语和语法现象的覆盖面；(3) 课文取自最近几年欧美国家出版的管理类书籍英文原著，选择在内容上具有代表性、新颖性和先进性的，在语言上具有可读性和可学性的材料。

编者认为开设专业英语的目的应为：(1) 进一步提高学生英语听说能力，(2) 提高学生阅读英文版专业书籍的能力，(3) 提高学生英译中的技能和技巧。

为了达到上述目的，在使用本教材时建议采取如下做法：(1) 课文的内容由教师在课堂上用英语讲授，配以课堂讨论，并要求学生以英语发言。(2) 阅读材料布置学生自学，教师给予适当检查，或让学生在课堂上讲解。(3) 将部分阅读材料布置学生作为英译中的课外练习，经老师批改后，在课堂上讨论学生作业中的错误和翻译技巧问题。

本教材共有三个分册，供三个学期（大学三年级上下两学期和四年级上学期）使用，每学期一册。每学期上课 18 周，每周 2 学时。

第一分册以管理科学和工程管理为主要内容；

第二分册以公共管理为主要内容；

第三分册以工商管理为主要内容。

每分册有 10 个单元，每个单元有一篇课文和两篇阅读材料。课文和阅读材料后面都配有词汇注释、课文难点和语言知识注释，以及多种类型的练习，便于教学安排，也适合于自学。

目　录

Unit One

Text: Product Design

In today's fiercely competitive environment, no company can rest on the successful introduction of any one new product. Product life cycles are growing increasingly shorter, and the more successful firms are reducing new product development times to a fraction of what they once were. Consequently, competition has the ability to react more quickly to changes in the marketplace, thereby substantially reducing the advantages of any one new product introduction, regardless of how innovative it is. George Stalk, Jr. pointed out that the speed with which a company can introduce a new product can, therefore, significantly affect both its profit margins and market share.

With the trend toward shorter product life cycles, the successful manufacturer must consistently be able to: (1) generate new product ideas; (2) convert these ideas into good, functional designs that are user-friendly; (3) ensure that these designs are readily manufacturable; and (4) select the appropriate production process that is most compatible with the market's requirements.[1] In addition, all of this must be accomplished in an increasingly shorter time frame.

A recent review of successful product designs, ranging from razors and laptop computers to power tools and outdoor grills, identified several factors that these products and their manufacturers shared, including:

- Design from the outside in: Make the customer's use of the product the focus of all product development.[2]
- Partner deeply: Involve all of the relevant functional areas (e.g. marketing, engineering, purchasing, and manufacturing) early in the design process to assist in defining the new product.
- Partner widely: With the emergence of the virtual enterprise, organizational boundaries are becoming unclear. Designers must therefore partner with all stakeholders-both internal and external.

- Design the product upfront: Match the right product for the right market niche. Upfront design analysis will eliminate faulty concepts early.
- Get physical fast: Use prototypes to visualize a concept and to obtain quick feedback from both users and managers.
- Design for manufacturability: Always design a product that will meet established quality, cost, and delivery parameters. Manufacturing issues are as important to success as ergonomics, aesthetics, and function.
- Surprise the user: Always build something extra into the product that will unexpectedly delight the customer. This creates customer loyalty and increases the chances of having a truly "hot" product.

The three phases to designing a product are the functional design, industrial (aesthetics and user-oriented design), and design for manufacturability (cost, materials, process choices, etc.).

Functional Design

The use of the term breadboard as slang for functional design most likely originated in the electronics field when electronic components were assembled and connected to terminals attached to flat boards. These were reminiscent of boards used by grandmothers and great-grandmothers in making bread. The major intent of a functional design is to develop a functional working model of the product, without regard for what it will finally look like.

Industrial Design

Designing for aesthetics and for the end user is generally termed industrial design. Industrial design is probably the area most abused by manufacturers. When frustrated with products-setting the VCR, working on the car, or operating a credit card telephone at the airport-most of us have said to ourselves, "The blankety blank person who designed this should be made to work on it!" Often, parts are inaccessible, operation is overly complicated, and/or there is no logic to setting or controlling the unit. Sometimes even worse conditions exist: metal edges are sharp and consumers cut their hands trying to reach in to make adjustments or repairs.

Many products on the market today have too many technological features-far more than necessary. The fact is that most purchasers of electronic products cannot fully operate them and consequently only use a small number of the available

features. This proliferation of features has occurred because computer chips are inexpensive and adding more controls adds negligible cost. Including an alarm clock or a calculator on a microwave oven would be little added cost. But, do you, the consumer, really need it? What happens when you lose the operator's manual that explains how to operate these complex devices?

So many features have been added to VCRs and to VCR remote controls, for example, that they have been rendered not only unusable but also unreadable. But in reducing the complexity of design, the pendulum seems to have swung too far to oversimplified controls. On-screen programming has removed much of the confusion with remote controls.

Design for Manufacturability

In translating the functional product design into a manufacturable product, designers must consider many aspects. They can use a variety of methods and alternative materials to make a product. Material choices can be ferrous (iron and steel), aluminum, copper, brass tin, nickel, titanium, or several othermetals. The nonmetals include polymers (thermoplastics, thermosetting plastics, and elastomers), wood, leather, rubber, carbon, ceramics, glass, gypsum, concrete, as well as several others. Further, all of these materials can be formed, cut, and shaped in many ways. There are extrusions, stampings, rolling, powder-metal, forgings and castings, along with a very large selection of machining processes.

In evaluating a product's design for manufacturability, the designers must follow certain rules. depending on the process selected. For example, Figure 1-1 shows two designs to be created through an extrusion process. In extrusion, which is similar to squeezing toothpaste from a tube, material is squeezed through a die and comes out of the other side in the desired shape. To make the squeezing easier, metals are usually heated . A good extrusion design avoids sharp points and sharp corners and contains a balance in the pattern. Examples of extrusions are metal screen door mouldings, window frames, and plastic picture frames.

In designing for manufacturability, it is also desirable to keep the number of individual parts to a minimum. In electronics, manufacturers accomplish this by combining circuits that have been in different components into larger and larger integrated circuits. Not only does this increase the speed within the circuits, because electrons don't have to travel as far, but it also reduces the physical size and

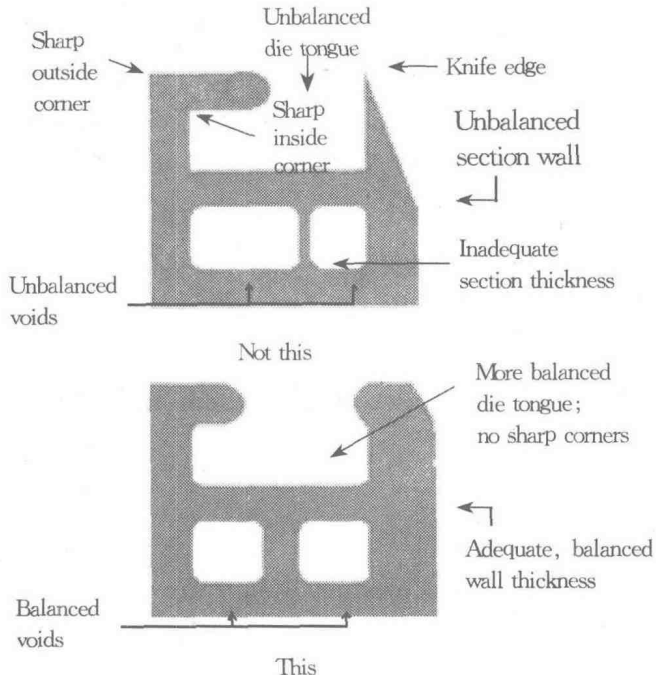

Figure 1－1　Good and Bad Practice in the Design of Cross Sections to be Extruded

increases reliability. Reliability is increased by eliminating the many connections necessary when the circuits were in separate parts.

The output of the product design activity is the product's specifications. These specifications provide the basis for production-related decisions such as the purchase of materials, selection of equipment, assignment of workers, and the size and layout of the production facility. Product specifications, while commonly thought of as blueprints or engineering drawings, often take other forms ranging from precise quantitative and qualitative statements to rather fluid guidelines. Physical products tend to have traditional blueprint specifications, while a service firm's design specifications tend to be more general.

While designing for manufacturability, we must still remember to design for the consumer. A basic rule in design is to:

Be obvious. Design a product so that a user can look at it, understand it, and figure out how to use it-quickly, and without an instruction manual.

Should products be changed every year, twice a year, every two years? How often a firm changes design depends, in large part, on its marketing strategy.

Figure 1－2 shows the design-to-production phases. This cycle extends from concept through full production. Note that Concept and Design commit about 70

percent of the product's manufacturing costs while expending only about 5 percent of the total costs(Committed costs are defined as the production costs directly resulting from the design, including materials, labor, processes, and so forth.). Often, manufacturers spend far too little time finding all the flaws during the design stage of a new product. Therefore, a more prudent approach might suggest expending a bit more to ensure a good, sound, user-friendly design and expecting to profit through reduced committed cost.

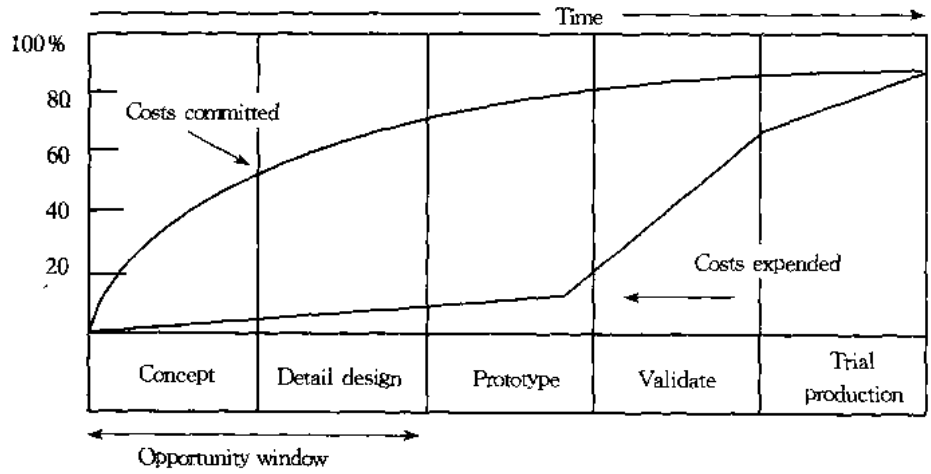

Figure 1－2　Costs Committed and Costs Expended from product Concept to Production

A major trend in manufacturing companies is early and continuing involvement with new products by production, materials planning, and engineering support groups to ensure that the products are effectively managed throughout their life cycles. At Hewlett-Packard, this responsibility is seen as carrying through product development, transition to manufacturing, volume production and obsolescence.

Concurrent engineering can be used interchangeably with the terms simultaneous engineering or concurrent design. Obviously, as these terms imply, continual interaction and parallel actions are necessary throughout the entire process from initial product design through production. Other areas such as marketing and purchasing need to be involved and interact with the different phases of design and development. Their input is critical concerning production planning. productive capacity, and the availability of parts and materials. The sequence from product design to the marketplace is not a series of consecutive steps. Continual interaction throughout the process ensures that a well-designed product is released to the market at a good price and on time.

New Words and Phrases

compatible /kəmˈpætəbl/ a. able to exist, live together, or work successfully with (something or someone else)

lap-top computer a computer which is small enough to be carried around easily and is designed for use outside an office

grill /gril/ n. a framework of parallel iron bars for broiling

niche /niːʃ, nitʃ/ n. an area or position which is exactly suitable for a small group of the same type

upfront /ʌpˈfrʌnt/ a. direct

prototype /ˈprəutətaip/ n. the first form of anything, from which all later forms develop, sometimes with improvements

parameter /pəˈræmitə/ n. a set of facts or a fixed limit which establishes or limits how something can or must happen or be done

ergonomics /ˌəːgəˈnɔmiks/ n. the scientific study of people and their working conditions, esp., done in order to improve effectiveness

aesthetics /iːsˈθetiks/n. the study, science, or philosophy of beauty, esp., beauty in art

breadboard [电子]试验(电路)板

VCR videocassette recorder

blankety-blank /ˈblæŋkitiˈblæŋk/ a. cursed

proliferation /prəˌlifəˈreiʃən/ n. a rapid increase or spreading

negligible /ˈneglidʒəbl/ a too slight or unimportant to make any difference or to be worth any attention

ferrous /ˈferəs/ a. 含铁的

nickel /ˈnikl/ n. 镍

titanium /taiˈteinjəm/ n. 钛

polymer /ˈpɔlimə/ n. 聚合物

thermoplastic /ˈθəːməuˈplæstik/ n. 热塑塑料

thermosetting plastics /ˌθəːməuˈsetiŋ/n. 热固塑料

elastomer /iˈlæstəmə/n. 弹料

gypsum /ˈdʒipsəm/ n. 石膏

extrusion /eksˈtruːʒən/ n. 挤压

stamping n. 冲压

casting n. 铸(造)

fluid a. not fixed

obsolescence /ɔbsə'lesəns/ n.	getting out of date, ; the act or fact of passing out of use
concurrent /kən'kʌrənt/ a.	existing or happening at the same time
simultaneous /ˌsiməl'teinjəs/ a.	happening or done at the same moment
consecutive /kən'sekjutiv/ a.	following in regular or unbroken order

Notes

[1] and (4) select the appropriate production process that is most compatible with: *Most* can be used before adjectives to mean " very" in evaluating expressions, especially in a formal style.

That is most kind of you.

The experience was most distressing.

[2] Make the customer's use of the product the focus of all product development: *Make* can be followed by an object, with an adjective or noun referring to a change in the object. Note the word order.

The rain made the grass wet.

You have made me e very happy man.

Exercises

Practice Ⅰ. Answer the following questions:

1. Why does the author say that no company can rest on the successful introduction of any one new product?
2. What functions does competition serve in the marketplace?
3. What factors have contributed to the increased emphasis on faster product development and introduction?
4. What does the author think of the products on the market today with too many technological features?
5. What aspects must designers consider in translating the functional product design into a manufacturable product?
6. Which is better: to keep the number of individual parts to a minimum or to a maximum in designing for manufacturability? Why?
7. What functions does product specifications serve?
8. Why is daily contact between engineering and production groups so important in making early involvement effective?

Practice Ⅱ. Topics for discussion:

1. What must a manufacturer be able to do in order to be successful in today's fiercely competitive environment?

2. Discuss the product design phases of functional design, industrial design, and design for manufacturability. Which do you think is the most important?
3. Elaborate the basic rule in design.

英语写作(一)

正规语体和非正规语体

在英语写作中,我们不仅要注意语法是否正确,词汇是否恰当,更应该注意语体是否得体(appropriate)。一般来说,书面语比较正规(formal),而口语比较随便(casual)。因此,在英语写作中,要用正规的书面语。

一、句子结构

(1)用被动语态

Informal: Please answer this question.

Formal: The students are requested to answer this question.

(2)用分词的独立结构

Informal: Since the weather had improved, we decided to go wimming.

Formal: The weather having improved, we decided to go swimming.

(3)用名词化的动词 (nominalization)

Informal: The doctor arrived early. This pleased the nurse.

Formal: The doctor's early arrival pleased the nurse.

Informal: The patient behaved abnormally. This worried the nurse.

Formal: The patient's abnormal behavior worried the nurse.

Informal: The doctor perfected the operation rapidly. This astonished his colleagues.

Formal: The doctor's rapid perfection of the operation astonished his colleagues.

另外,在正规语体中常用介词短语而在非正规语体中常用副词。如:

Informal: John spoke confidently

Formal: John spoke with confidence.

(4)用动名词短语(gerundivization)

Informal: The doctor insisted repeatedly on a strict diet. The patient was disturbed by this.

Formal: The patient was disturbed by the doctor's insisting repeatedly on a strict diet.

二、词汇

(1)正规语体中很少用缩写和简写(contraction)

Informal: I'd like to get that job you've got in the newspaper.

Formal: I would like to apply for the job advertised in the newspaper.

Informal: The furniture store has an ad in the newspaper of a special sale.

Formal: The furniture store has an advertisement in the newspaper of a special sale.

(2)正规语体中很少用动词词组 (phrasal verb)

Informal: I can't put up with your rudeness any more.

Formal: I cannot tolerate your rudeness any more.

Informal: You mustn't be put out by the train delay.

Formal: You must not be provoked by the train delay.

(3)正规语体中很少用来源于 Anglo Saxon 的词汇,而广泛运用来源于法语、拉丁语和希腊语的词汇。

Informal: I haven't been able to get that record anywhere.

Formal: I have not been able to obtain that record anywhere.

Informal: The royal train left the capital at 12.

Formal: The royal train departed from the capital at 12.

(4)在正规语体中尽量避免性别词汇(sexist word)

Informal: Every applicant wants to know how much he will make.

Formal: All applicants want to know how much they will make.

Informal: After the nursing student graduates, she must face a difficult state board exam.

Formal: After the nursing student graduates, he or she must face a difficult state board examination.

Exercise

Make the following paragraph formal by eliminating slangs, contractions, etc.

The graduation speaker really blew it. He should have discussed the options and challenges facing the graduating class. Instead, he shot his mouth off at us and trashed us for being lazy. But, he did make some good points. Our pros have certainly babied us by not holding fast to deadline, by dismissing assignments that he class ragged them about, by ignoring our tardiness, and by handing out easy C's like hotcakes. Still, we hated this speech as the final word from the college establishment. It should have been the orientation speech when we started college.

Auxiliary Text (1)

Process Selection

Manufacturing operations are categorized into three broad types of process structures, each category depending to a large extent on the volume of product(s) to be produced. These

three categories are often referred to as project processes, intermittent processes, and line-flow processes. While we identify three discrete categories, we should emphasize that the different types of manufacturing processes that exist should be viewed as a continuum, and that any one company may incorporate a combination of these processes in the manufacture of its products. As seen in figure 1－3, for example, intermittent processes are further divided into job shop and batch processes, and line-flow processes are likewise divided into assembly line and continuous processes.

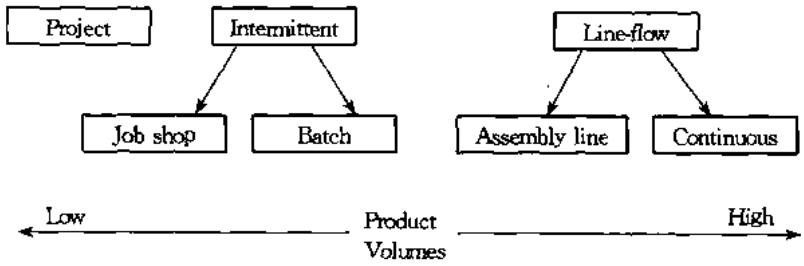

Figure 1－3　Types of Processes

Project process

A project-oriented process usually involves the manufacture of a single, one-of-a-kind product. Examples here include the production of a movie and the erection of a skyscraper. The major strength of a project-type process is that it is totally flexible to meet the individual needs of the customer.

Variable costs in this category are comparatively very high. On the other hand, fixed costs are negligible or even nonexistent. (In the extreme case, when there is truly only one product to build, all costs are expensed and there are no fixed costs at all.)

Skilled personnel are usually required for this type of process, as they must often work independently, with minimal guidance and supervision. In addition, workers here need to be well trained in a variety of tasks.

Intermittent process

Intermittent type processes can be further divided into job shop and batch processes. We define a job shop as a process where a specific quantity of a product is produced only once. Numbered prints from a painting, programs for concerts, and T-shins commemorating specific events are good examples of products made in a job shop process.

A batch process produces the same item again and again, usually in specified lot sizes. McDonald's is a good example of a batch process where hamburgers are cooked throughout the day in lot sizes of 12.

Variable costs are still relatively high with intermittent processes, although they are usually lower than those of a project-type process. However, higher fixed costs are incurred with these processes. Similarly, worker skills remain high, though somewhat less than those