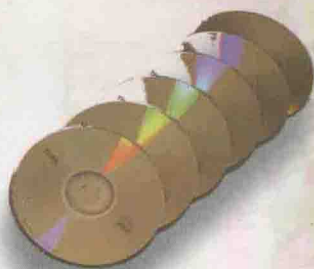




新 科技 英语 阅读 教程

主编 李德高 张桂萍
主审 吴铭方



石油大学出版社



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主编 李德福 副主编 李海英
主审 李德福

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A New Course in
Reading Scientific English

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主编 李德高 张桂萍
编委 梁孟华 冯晓梅
张宜波 段天须
主审 吴铭方

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前 言

《新科技英语阅读教程》是根据新大学英语教学大纲关于“保证英语学习四年不断线”的指导思想,为配合专业英语阅读教学编写的一册科技英语阅读教材。本教材是在“提高学生专业英语应用能力”的教学改革研究中产生,经过三年的试用和反复修改逐渐成熟完善的。

本教材的目的在于帮助读者了解科技英语结构,对科技英语类文章阅读“进行分析、推理和综合概括”,进而达到进一步提高科技英语阅读、写作和翻译能力的目的。

本书包括阅读学习方法指导和正文两部分。

阅读学习方法指导部分提供学习本书阅读材料的步骤建议。

正文部分共分九个单元,分别围绕 Process and instruction, Definition, Classification and Listing, Contrast and comparison, Exemplification, Cause and Effect, Description, Argumentation and Preface,提供了 33 篇相应篇章结构的最新科技英语选文。选文题材新颖,涉及工业生产、计算机、经济管理、电信技术和新科技等内容。

除第九单元外,每单元包括科技英语语篇结构知识介绍和相应例文学习,常用句型,以及三篇阅读实践学习材料和相应的读后练习。

- 1) 语篇结构知识部分简要介绍科技英语语篇特征。例文学习包括阅读引导、段落启发性问题和文章信息内容分析结构图,该部分旨在帮助学生领会文章思想内容,学习如何应用语篇结构概括文章主要信息。

2) 常用句型结构部分对相应语篇结构提供可查阅的基本句型和部分例句。

3) 阅读实践材料和读后练习是学生主要应该学习的内容。

第九单元简要介绍了序言的语篇特征,并提供了例文分析。

本书可用于自学和课堂教学。

使用本书的最低要求是结合例文学习,了解科技英语语篇结构,对每单元的正文材料进行两遍以上的阅读实践,并根据相关提示,学习正文词汇表中带“*”的单词,完成课后练习中关于篇章结构和信息内容方面的题目。

使用本书的较高要求是在了解相应语篇特征,概括文章信息内容的基础上,掌握词汇表中带“*”的单词,完成课后练习中关于词汇、翻译和写作方面的题目。读者可以对每单元中1—2篇文章作较高要求学习,对剩下的文章作最低要求学习。

本教材是在吴铭方教授的指导下编写的。编写者分工情况:李德高负责全书结构设计和通稿,并完成 UNIT ONE 和 UNIT SEVEN 全部,UNIT TWO,UNIT SIX 和 UNIT EIGHT 的部分编写。张桂萍完成 UNIT THREE 和 UNIT FOUR 全部,UNIT FIVE 部分编写。梁孟华在全书的调整、校阅和使用策略方面做了大量工作。冯晓梅完成 UNIT NINE 和部分校对工作。张宜波完成 UNIT TWO 和 UNIT FIVE 部分编写。段天须完成 UNIT SIX 和 UNIT EIGHT 部分编写。

本书适合于高年级理工科大学生和从事科技工作的同志。

本书编写和试用过程中得到各级领导和同事们的支持与合作,在此表示感谢。由于编者水平有限,教材中不妥之处在所难免。希望读者批评指正。

本教材配有多媒体 CAI 光盘《新科技英语阅读辅导》。有需要者可与石油大学外语系李德高联系,电话:(0546)8392140。

编者

1999年6月

阅读学习方法指导

(在了解语篇结构知识和常用句型的基础上,读者可以按下列步骤完成每篇文章的学习。)

Stage One

Think about the following question and quickly read the text.

Computers used in the past were much different than those of today. How can you run a software with an old computer?

(You may think about the questions on the right margin while you are reading the text.)

1. Before you can use a microcomputer, you must load DOS^① or “boot the system”. The procedure for booting the system on most micros is simply to load the operating system from disk storage into main memory. In most micros, this^② is no more difficult than inserting a DOS disk in a disk drive and flipping the “on” switch. On some systems all you have to do is turn on the

① Disk Operating System (磁盘操作系统)

② “this” here refers to “to load ... from ... into main memory”.

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system and within a few seconds, with DOS in memory, you are ready to begin processing.

2. Once you have loaded the operating system to memory and the system prompt is displayed on the screen, you are ready to run a graphics package, a word processing package, or any other software package. To run a software package, you simply insert the diskette containing the software in the appropriate disk drive, then enter the name of the file that contains the applications software. For example, to run the WordPerfect^① word processing package on an MS^②-DOS-based micro, you would load the software diskette to drive A, then key in "WP" (the name of the program file) after the DOS prompt. The next thing you see would be the opening screen and eventually the main menu for the word processing package.

3. If your computer has a hard disk, you can store the program on hard disk. You can then load your program directly

How can you boot the system?

① "WordPerfect" is the name of word processing software(字处理软件).

② Microsoft (微软)

from the hard disk, thereby eliminating the need to insert the program diskette each time you run the program.

How can you run application software?

(249 words)

When you have read the passage for the first time, you should have grasped the main idea as is shown in the following information map:

How to run an application software	
If we don't have a hard disk	If we have a hard disk
1. To boot the system: Insert a DOS disk and turn on the computer 2. To run a software: Insert the software disk at the system prompt and then enter the software name	We can just turn on the computer and input the name of the application software

Stage Two

When you read the text for the second or third time:

1. You should work out what the expressions mean in the text.

microcomputer

word processing package

operating system

disk storage

main memory

disk drive

process

system prompt

graphics package

word processing package

software package

application software

opening screen

main menu

productivity tools

hard disk

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graphics package

2. You should be able to retell the text in detail as possible as you can according to your understanding.

Stage Three

After you studied the text:

1. You should be able to keep the following words in mind:
micro(微型计算机), flip(轻弹/按), package(软件包), diskette(磁盘), productivity(生产力, 生产能力), bypass(绕过, 回避), eliminate(除去, 消除)
2. You should be aware of the different uses of the following words.
load, boot, operate, run, process
prompt, screen, program
memory, drive, package
3. You should realize how the following words are formed:
microcomputer
DOS, MS
procedure
storage, package
software
4. You should be quite familiar with the sentence structures like the following.
 - 1) The procedure for booting the system on most micros is simply to load the operating system from disk storage into main memory.
 - 2) All you have to do is turn on the system within a few seconds you are ready to begin processing.

- 3) To run a software package you should load the software diskette to drive A, then key in “WP” after the DOS prompt.
- 4) The next thing would be the opening screen and eventually the main menu for the word processing package.
5. You should be able to write a short passage on a similar topic such as “How to run a software with a modern computer”.

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UNIT ONE

PROCESS AND INSTRUCTION

产品的生产过程、装置的运转过程和操作过程、以及自然界中某种机制的演变发展过程等,对这些过程的描述,常常提供下列方面的信息:

- 什么过程
- 过程中包括什么事件
- 各事件的因果关系以及事件发生的先后次序等

从篇章上来说有两种用来描述过程的结构:**Process** 和 **Instruction**。阅读中读者应该积极思考,敏捷地理解那些在段落中和段落之间体现这种篇章特征的语句,尽快准确地获取有关信息。

PROCESS

对一般过程的描述,从语言上讲,具有下列特征:

1. 通常使用一般现在时和被动语态;
2. 各个过程步骤一环扣一环,有明显的时间顺序,这一顺序常常用 **first**, **then**, **next**, **finally** 等表示时间关系的词语体现;
3. 为使结构严谨,避免重复,经常使用 **which**, **where** 等引导的定语从句和非谓动词结构,来表达具体过程的结果和各个过程之间的前后联系。

(对于复杂过程,文章中往往先概括说明整个过程分几个阶段,然后逐一描述各个阶段的具体过程。)

SAMPLE PASSAGE

Read the text and study how you can run a software with an old computer.

1. Before you can use a microcomputer, you must load DOS^① or “boot the system”. The procedure for booting the system on most micros is simply to load the operating system from disk storage into main memory. In most micros, this^② is no more difficult than inserting a DOS disk in a disk drive and flipping the “on” switch. On some systems all you have to do is turn on the system and within a few seconds, with DOS in memory, you are ready to begin processing.

How can you boot the system?

2. Once you have loaded the operating system to memory and the system prompt is displayed on the screen, you are ready to run a graphics package, a word processing package, or any other software package.

① Disk Operating System (磁盘操作系统)

② “This” here refers to “to load ...from ... into main memory”.

To run a software package, you simply insert the diskette containing the software in the appropriate disk drive, then enter the name of the file that contains the applications software. For example, to run the WordPerfect^① word processing package on an MS^②-DOS-based micro, you would load the software diskette to drive A, then key in "WP" (the name of the program file) after the DOS prompt. The next thing you see would be the opening screen and eventually the main menu for the word processing package.

3. If your computer has a hard disk, you can store the program on hard disk. You can then load your program directly from the hard disk, thereby eliminating the need to insert the program diskette each time you run the program.

(249 words)

How can you run application software?

You should have grasped the main idea as is shown in the table when you have read the passage:

① "WordPerfect" is the name of word processing software(字处理软件).

② MicroSoft (微软)

4 UNIT ONE

Information Map

How to run an application software	
If we don't have a hard disk	If we have a hard disk
1. To boot the system: Insert a DOS disk and turn on the computer. 2. To run a software: Insert the software disk at the system prompt and then enter the software name.	We can just turn on the computer and input the name of the application software.

INSTRUCTION

对操作过程的描述常以 **Instruction** (操作指令) 的形式出现, 明确地告诉读者如何完成一个操作, 如实验过程指令, 设备安装、使用和维修说明书等。**Instruction** 常采用命令句式, 各个步骤说明严格按先后顺序进行, 常配以示意图, 每个步骤常都冠以序列号, 读者能够按指令完成所描述的过程操作。

SAMPLE PASSAGE

Read the short passage and try to show to your classmates how to sharpen a ruling pen^① according to the instructions.

A major instrument in making a mechanical drawing^② is the ruling pen, which is used to ink in straight lines and noncircu-

① 鸭嘴笔(一种制图用笔)

② 机械制图