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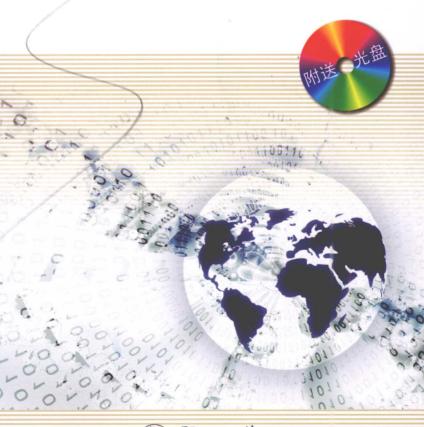
21世纪应用型本科教育行业英语系列教材

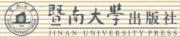
Workplace English for

Information Technology

IT行业英语

谭新星 段琢华 主编





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前言

2002 年教育部启动新世纪大学英语教学改革,2007 年颁布《大学英语课程教学要求》。在该教学文件的指导下,大学英语课程教学改革与建设蓬勃发展,取得了令人瞩目的成绩: 创建出以现代信息技术,特别是网络技术为支撑的教学模式,确立了学生在教学过程中的主体地位,建设了资源共享的大学英语学习网站和自主学习视听说学习中心,使英语学习朝着个性化和自主式方向发展;课程内容体系也开始向综合英语类、语言技能类、语言应用类、语言文化类和专业英语类的必修课程和选修课程相结合的方向拓展。

在过去的10年中,许多地方院校的大学英语课程建设经历了从专科教育向本科教育的过渡,在包括师资队伍建设、教学设施建设、教学内容体系和教学方法的改革等方面取得了比较显著的成果。但是,目前大多数院校把教学内容定位在基础英语,把教学目标定位在大学英语四级考试合格率。显然,这样的教学目标与地方院校应用型人才的培养目标和社会需求是不完全吻合的。地方高校大学英语教学深化改革面临的重大研究课题应该是根据应用型人才的培养目标和社会需求扩展课程内容体系,做到辅助专业,注重实用,面向社会,服务行业。开发应用型本科教育行业英语教材正是基于上述的分析和改革的需要而设计的,目的是培养学生在职场环境下的英语交际能力,为就业竞争力的提升及未来的可持续发展打下必要的基础。

本系列教材的开发是在积极与专业课教师合作,针对应用型本科院校大学英语开设拓展课程的教学需要进行设计的,其突出特色如下:

- (1) 突出大行业职场交际所需要的英语知识与技能的训练, 注重交际语言和技能的 实用性、通用性、时效性、典型性和可模拟性。
- (2) 选用的材料反映了该行业的发展史和在技术应用方面的最新或重大成果。听说材料与职场情景密切相关,简短精练;阅读文章以职场交际需求为主线,题材多样化,如行业人物访谈、行业发展趋势与动向、企业或公司简介、新产品或新技术引进与



开发介绍等,既体现行业涉外交际的需要,又生动有趣;选用的应用文体现职业需求,简短典型,易读易模仿。

(3) 练习的设计体现了以完成职场任务为导向和引导学生主体参与的教学理念,充分利用 group work, pair work, discussion, presentation, project, survey report 等学习方式,使练习体现职业性、实践性、交际性和协作性。不仅能为学生创造参与课堂活动的机会,还能指导他们到相关企业进行现场学习和实践,完成 group project, survey report 等学习任务。

本系列教材的每册书由八个单元组成,每个单元包括五个部分,即单元目标(Unit Objectives)、听与说(Let's Listen and Talk)、读与写(Let's Read and Write)、职场项目(Workplace Project)和职业沙龙(Career Salon)。书后附有练习答案、参考译文、听力会话和短文的文字材料、词汇表及光盘。

本书以IT行业为背景,涉及的题材有IT产业的发展、信息技术概况、信息系统介绍、信息系统开发流程、网络通信、IT企业文化、IT环境的交流技巧和软件工程。

本系列教材的总主编是韶关学院外语学院的安晓灿教授和车贵成教授。《IT 行业英语》由韶关学院外语学院与计算机科学学院合作完成,主编是韶关学院外语学院的谭新星和计算机科学学院的段琢华,副主编是外语学院的廖庆生、孙红元和计算机科学学院的江华,编者有谭新星(第一单元)、廖庆生(第二单元)、孙红元(第三单元)、温平珍(第四单元)、宁济沅(第五单元)、陶亭亭(第六单元)、苏艳(第七单元)、钟晶(第八单元)。全书的选材和翻译由计算机科学学院的龙腾芳(第一、二单元)、蒋昌金(第三、四单元)、江华(第五、六单元)、段琢华(第七、八单元)共同完成。

本系列教材的开发是一次大胆的尝试,目的是推进应用型本科教育大学英语课程的 改革与建设,其中定会存在不当和疏漏之处,敬请使用者批评指正。

> 编 者 2012年1月

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Unit 1

Development of IT

Unit Objectives

- * Learn to prepare and attend a job interview
- * Learn about the development of IT
- * Learn how to write a resume

Let's Listen and Talk

Listening

computer programs

Mr. Silver: Sure! I'm the person most suitable for this job!	
Interviewer: Ahwell, we're looking for someone who can do a2	job.
Mr. Silver: Please give me a chance! I have3 experience	e at Shaoguan
Computer Company for two years.	
Interviewer: What did you do there?	
Mr. Silver: I was4 writing computer programs.	
Interviewer: Good. Why did you leave your last job?	
Mr. Silver: I5because it was a temporary assignment.	
Interviewer: What salary do you expect?	
Mr. Silver: A wage6 to the position with the opportunity to adv	vance.
Interviewer: OK. I'll let you know our7 in two weeks.	
Mr. Silver: OK, I'll keep my fingers crossed.	
Interviewer: So, thank you for coming today. See you.	
Mr. Silver: See you.	
Situation 2 Getting better prepared for a job interview	
Task 3	
Listen to the passage and answer the following questions.	
1. What is essential to ensure a successful job interview?	
2. What should you do first when you are preparing for a job interview?	
3. What facts should you get to know about the company you are applying	g for?
4. How do you prepare to answer questions at a job interview?	
5. How should you dress for an interview?	
Task 4	
Listen to the passage with some blanks for you to fill in.	
1 is essential to ensure a successful job interview. The time that	it takes for the
interview could be the most important moments in your2 Therefore,	you should take
time to prepare what you might say and how you will look for the interview.	You need to do
three things to prepare for an interview.	
First,3 as much as you can about the company and the job	you're applying
for. You should understand the basics of the company's products, services, po	
offices and 4.	
Second, prepare to answer questions that usually arise during an interv	riew. Before the
interview,5 about ten questions you think might be asked by the interview.	erviewer.
Finally, prepare to look your best for an interview. 6 the way	
essential that you be Because most businesses are conservative, you	
conservatively.	

Speaking

Situation 3 Asking about a job opening

Sample Dialogue 1

Cai Feng: Hello! I'm Cai Feng. I'm calling to ask whether you have a job opening for a computer programmer.

Personnel: Yes, there could be an opening in three weeks.

Cai Feng: What are the qualifications for the job?

Personnel: The applicants should have at least a college education on computer science, and with some work experience.

Cai Feng: Is the job temporary or permanent?

Personnel: It's a permanent full-time job.

Cai Feng: What're the working hours?

Personnel: It is from 9 a. m. to 5 p. m., five days a week.

Cai Feng: And what about the salary?

Personnel: Well, the starting salary is \$2,000 a month, with some basic benefits such

as health insurance, sick leave, paid vacation, and so on.

Cai Feng: OK. I'm interested in this job. And how can I apply for the job?

Personnel: You can find the application form in our website and fill it in.

Cai Feng: Thank you for the information. Goodbye!

Personnel: Goodbye!

Task 5

Pair work. Start a conversation with your partner according to the situation:

You've read about a job opening for a computer programmer advertised by a computer company in China Daily and now you are calling the company to ask about it.

Situation 4 Attending a job interview

Sample Dialogue 2

Interviewer: Good morning, Miss Cai Feng. We have here your application for the

position of computer programmer. Tell me some key facts about yourself.

Cai Feng: Sure. I am a college graduate. I majored in software engineering.

Interviewer: Do you have any work experience?

Cai Feng: Yes. I worked as a computer programmer in a computer company for two months.

Interviewer: What are your strengths?

Cai Feng: I'm reliable and hardworking.

Interviewer: Do you speak English? That would be an essential requirement for this job.

Cai Feng: Yes, I am good at spoken English.

Interviewer: That's fine. But you still need to take our English test tomorrow morning.

Cai Feng: No problem.

Interviewer: What salary do you expect?

Cai Feng: A wage suitable to the position with the opportunity to advance.

Interviewer: Our final decision will be available next week. Thank you for coming to this interview.

Cai Feng: Thank you for considering my application.

Task 6

Pair work. Role-play a job interview with your partner according to the following situation: You are attending a job interview with the personnel manager of Shaoguan Computer Company. The manager is asking you some questions concerning your education, work experience, strengths, English proficiency and the salary you expect.

Let's Read and Write

Reading

Task 7

Read Passage 1 and then work in pairs to speak out the common expressions given in
brackets.
1. Information Technology (IT) is the (获取、
处理、存储以及传播) of vocal, pictorial, textual and numerical information by a
microelectronics-based combination of computing and telecommunications.
2. In short, anything that renders data, information or perceived knowledge
(以任何可视的形式) whatsoever, via any (多媒体发布机制), is
considered part of the domain space known as Information Technology (IT) .
3. These clerks—often youngsters fresh from elementary school—spent long working days
hunching over a desk (抄写文档) in long hand or
(处理银行账户) without the aid of a calculating machine.
4. Other small machines—dubbed minicomputers—were developed for
(过程控制), (道路交通管理) and many other areas where previously
the cost of a mainframe computer would have been prohibitive.
5. By about 1980, with the development of software such as (文字
处理器和电子表格), the personal computer began to find a role in the office.
6 (大规模的信息处理) took off in the 1850s with the
development of mass markets for information goods and services.
7. In the late 1950s, (电子管) began to be replaced by
(分离的晶体管).
8. The next evolutionary stage in the development of electronics was (集成电

路), in which a single '_____' (芯片) contained the equivalent of a dozen or more transistors.

Passage 1

A Brief History and Development of Information Technology

Information technology (IT) is the **acquisition**, processing, storage and **dissemination** of vocal, pictorial, textual and numerical information by a **microelectronics-based** combination of computing and **telecommunications**. The term in its modern sense first appeared in a 1958 article published in the *Harvard Business Review*, in which authors Leavitt and Whisler commented that "the new technology does not yet have a single established name. We shall call it information technology (IT)".

IT is the area of managing technology and **spans** wide variety of areas that include but are not limited to things such as processes, computer software, information systems, computer hardware, programming languages and **data constructs**. In short, anything that **renders** data, information or **perceive**d knowledge in any visual format whatsoever, via any multimedia distribution **mechanism**, is considered part of the **domain** space known as Information Technology (IT).

Large-scale information processing took off in the 1850s with the development of mass markets for information goods and services, such as life insurance, bank accounts and cheap telegrams. In order to satisfy these markets, huge offices were established in London and the provinces, where hundreds, sometimes thousands, of clerks beavered away performing tasks that would now be done by a computer. These clerks—often youngsters fresh from elementary school—spent long working days hunching over a desk transcribing documents in long hand or processing bank accounts without the aid of a calculating machine. These situations had not changed until the computer was created.

The first electronic computer ENIAC was built at the University of Pennsylvania in 1946, which contained 18,000 **electronic tubes** consuming 150 **kilowatts** of electric power. In 1955 there were just 263 computers in the world. These were mostly used for scientific calculations in research laboratories and universities. However, a few visionaries saw very early on that the computer also had a potential for **data processing**.

In the late 1950s, electronic tubes began to be replaced by **discrete transistors**. The new technology transformed the computer, improving its speed and reliability by an order of **magnitude**, as well as producing far less heat.

Computers also became much cheaper. For the first time electronic data processing computers became practical for ordinary, medium-sized businesses and they were sold in tens of thousands. By the mid-1960s, there were about 30,000 computers in the world.

The next evolutionary stage in the development of electronics was **integrated circuits**, in which a single '**chip**' contained the equivalent of a dozen or more transistors. Integrated circuits produced another **leap** in computer speed and **reliability** and a further **reduction** in cost. The result was not only more powerful **mainframe computers**, but also small business computers that were ideal for small

获得,获取 传播,散布 基于微电子学的; 电信,远程通信

跨越

数据结构;提供 感知,察觉 机制;范围

大规模的 人寿保险 电报

拼命工作

弯成弓状; 抄写

电子管; 千瓦

数据处理 分立的,离散的 晶体管 (数量)巨大

集成电路 芯片 飞跃 可靠性;降低 大型计算机 and medium-sized firms. Other small machines—dubbed minicomputers—were developed for process control, road traffic management and many other areas where previously the cost of a mainframe computer would have been prohibitive. By the mid-1970s, there were more than a quarter of a million computers in operation around the world.

By about 1980, with the development of software such as word **processors** and **spreadsheet**s, the personal computer began to find a role in the office. In 1981, IBM fully legitimated the new style of computing by producing its first 'PC' (Personal Computer). Over the next decade the IBM PC and **compatible** machines from other manufacturers transformed the working environment of most office workers and changed many aspects of computer usage. IT-related domain is a major application area of computer.

In the 1990s, the new **frontier** of computing moved on from the isolated personal computer to the world of networked computers. Although the basic technology of the Internet was established in the 1970s for use in universities and research laboratories, the expanding capabilities of the personal computer in the early 1990s caused the Internet to grow **exponentially**. Whereas in 1990 there had been just a quarter of a million computers linked to the Internet, by 2000 there were 72 million.

Nowadays IT is **diffusing** into the home. Widespread use of cars facilitated new ways of life, with a growth of suburban living and out-of-town shopping centers, and a decline of train and bus services. The expansion of consumer IT **is associated with** changes in ways of working (for example, **telework**), playing (new home entertainment systems), shopping (**teleshopping**), and learning (multimedia products of various sorts). The worldwide IT services **revenue** totaled \$763 billion in 2009.

把 … 称为

处理器 电子表格

兼容的,一致的

前沿

以指数方式

传播

与……有关 遥控工作 电话购物 收入

Task 8

Read the passage again and supply the missing words or expressions to complete the following statements in pairs.

1. IT is the area of _____ and spans wide variety of areas, which include things such as processes, computer software, information systems, computer hardware, ____ and

- In the 1990s, the new frontier of computing moved on from the ______to the _____.
 Some visionaries saw that the computer also had a potential for very early.
- 4. The new technology of discrete transistors transformed the computer, improving
- by an order of magnitude, as well as producing far less heat.

 5. Integrated circuits produced another leap in computer and a further
- as well.

 6. The creation of more powerful _____ and small _____ were due to the improvement of computer speed and reliability and its cost reduction.
 - 7. By the mid-1970s, there were more than 250,000 computers _____all

over the world. 8. The expansion of consumer IT is related to changes in ways of
entertainment,and learning.
Task 9 Work in groups and discuss the following questions. 1. What is Information Technology (IT)? 2. When did large-scale information processing take off? 3. Where and when was the first electronic computer ENIAC built? 4. When did the personal computer begin to find a role in the office? 5. How many computers had been linked to the Internet by 2000? Task 10
Read the sentences taken from Passage 1 and work in groups to translate them into Chines 1. In order to satisfy these markets, huge offices were established in London and t provinces, where hundreds, sometimes thousands of clerks beavered away performing tas that would now be done by a computer.
2. The first electronic computer ENIAC was built at the University of Pennsylvania in 194 which contained 18,000 electronic tubes consuming 150 kilowatts of electric power.
3. For the first time electronic data processing computers became practical for ordinar medium-sized businesses and they were sold in tens of thousands.
4. Although the basic technology of the Internet was established in the 1970s for use universities and research laboratories, the expanding capabilities of the personal computer the early 1990s caused the Internet to grow exponentially.
5. The term in its modern sense first appeared in a 1958 article published in the <i>Harva Business Review</i> , in which authors Leavitt and Whisler commented that "the new technologidoes not yet have a single established name. We shall call it information technology (IT)".

Task 11

Work in pairs to complete the statements with the information from Passage 2 .

- 1. These characteristics are that the machine is electronic, that it has ______, and that it is general purpose.
- 2. The machine was huge; it weighed 30 tons and contained over 18,000 ______ consuming 150 kilowatts of electric power.
 - 3. It was controlled, however, by that had to be manually set.
 - 4. This would enable the machine to execute conditional branches and change _____.
- 5. In spring 1944, von Neumann wrote his "First Draft of a Report on the EDVAC" (Electronic Discrete Variable Automatic Computer) which described the stored-program,
 - 6. So the 1940s was the time of .

Passage 2

Computer: History and Development

It is hard to say exactly when the modern computer was invented. Starting in the 1930s and through the 1940s, a number of machines were developed that were like computers. But most of these machines did not have all the characteristics that we associate with computers today. These characteristics are that the machine is electronic, that it has a stored program, and that it is for **general purpose**.

One of the first computerlike devices was developed in Germany by Konrad Zuse in 1941 to deal with extensive calculations in **statistics**, called the Z3. It was general-purpose, stored-program machine with many electronic parts, but it had a **mechanical memory**. Several similar developments were in progress in the USA at the same time. Another **electromechanical** computing machine was developed by Howard Aiken, with **financial assistance** from IBM, at Harvard University in 1943. It was called the Automatic **Sequence** Control Calculator Mark I, or simply the Harvard Mark I. Neither of these machines was a true computer, however, because they were not entirely electronic.

Perhaps the most influential of the early computerlike devices was the **Electronic Numerical Integrator and Computer**, or ENIAC. It was developed by J. Presper Eckert and John Mauchly at the University of Pennsylvania. The project began in 1943 with funding from the U. S. Army and was completed in 1946. The machine was huge; it weighed 30 tons and contained over 18,000 **vacuum tubes** consuming 150 kilowatts of electric power.

The ENIAC was a major advancement for its time. The ENIAC was the first general-purpose, electronic computing machine and was capable of **perform**ing thousands of operations per second. It was controlled, however, by switches and **plugs** that had to be **manually** set. Thus, although it was a general-purpose electronic device, it did not have a stored program. Therefore, it did not have all the characteristics of a computer.

John von Neumann, an influential mathematician, turned his attention to the ENIAC in the summer of 1944. While this computer was being built, von Neumann and the ENIAC team **drew up** a plan for a successor to the ENIAC. The biggest

通用

统计学

机械的;存储器 机电的 资金援助 序列

电子数字积分计算机

真空管

执行

插头; 手动地

草拟

problem with the ENIAC was that its memory was too small. Eckert suggested a mercury delay-line memory which would increase

memory capacity by a factor of 100 compared with the electronic memory used in the ENIAC.

An equally big problem was programming the ENIAC, which could take hours or even days. In meetings with von Neumann, the idea of a stored-program, universal machine evolved. Memory was to be used to store the program in addition to data. This would enable the machine to **execute** conditional branches and change the **flow** of the program. The concept of a computer in the modern sense of the word was born.

In spring 1944, von Neumann wrote his "First Draft of a Report on the EDVAC" (Electronic Discrete Variable Automatic Computer) which described the stored-program, universal computer. The logical structure that was presented in this draft report is now referred to as the von Neumann architecture. This EDVAC report was originally intended for internal use only but it became the "bible" for computer pioneers throughout the world in the 1940s and 1950s.

The first two computers featuring the von Neumann architecture were not built in America but in Great Britain. On 21 June, 1948, Frederic C. Williams of the University of Manchester managed to run the **prototype** of the Manchester Mark I, and thus proved it was possible to build a stored-program, universal computer. The first really functional von Neumann computer was built by Maurice Wilkes at Cambridge University. This machine called **EDSAC** first ran a program on 6 May, 1949 computing a table of **square numbers**. So the 1940s was the time of modern computers' birth.

水银延迟线存储器 存储容量;倍数

执行:流程

电子离散变量计算机;逻辑结构 体系结构

先驱

原型,样机

延迟存储电子自动 计算机;平方数

Task 12

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1.	computerlike device	
		类似飞机的设备
2.	mechanical memory	
		电子存储器
3.	vacuum tube	
		真空风扇
4.	manually set	
		自动设置
5.	the flow of the program	
		生产流程
6.	universal machine	
		通用放大器
7.	logical structure	
		逻辑推理
8.	for internal use only	
		仅供外部使用