网络英语

Internet English

基础篇

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高等学校网络英语系列教材

网络英语·基础篇

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内 容 简 介

　　本书主要讲述互联网基础知识、网络浏览器的使用和网络浏览、网络信息的获取与下载、搜索引擎的使用、电子邮件的申请和使用、网络安全、多媒体的应用，等等。本书内容翔实，环环相扣，层层递进，选材全部采用最实用的英语网络知识，语言鲜活、地道。

　　本书可作为高等院校英语专业"网上阅读"课程的教材，也可作为其他专业"网络英语入门"课程的教材。本书的使用对象是具有一定英语基础的大学本科生，英语、商务、国贸和计算机专业的学生都可以使用，同时本书也适用于相关专业的研究生和高职高专的学生。此外，对于网络英语感兴趣的读者也可通过阅读本书，提高自己的网络使用技巧和英语水平。

序

人类迈进 21 世纪以来，电子技术发展日新月异。计算机的普及和互联网的广泛使用已经成为现代社会的标志。随着信息技术的发展，人们之间的交往和沟通方式也发生了变化。网上浏览、网上聊天、网上购物、网上流媒体点播及远程教育正是这种变化在人们生活中的具体反映。技术的发展和社会的变化对当代人提出了挑战，要求人们了解互联网，熟练地使用互联网，以便在瞬息变化的社会里与时俱进，赶上世界发展的潮流。

《高等学校网络英语系列教材》的出版正是适应了社会的需求，为读者提供了详尽的学习材料。本系列教材涉及网络基础、网络应用、电子商务等诸多方面。该系列教材内容丰富，集实用性、趣味性、知识性为一体，是一套难得的有关网络英语的教科书。

《高等学校网络英语系列教材》是英语教材，所选的文章都是英语原文。目前，图书市场上可以买到各种各样的英语读物和教材，但是有关网络的读物大多是用中文出版的，用英语出版的有关网络的读物和教材寥寥无几。用英语学习有关网络的知识，可以使读者了解英语语言在一个比较陌生的领域里是如何使用的，让读者更广泛地接触真实的语言，帮助读者触类旁通，扩大英语词汇量，提高英语水平。

教育部于 2000 年修订并批准实施的《高等学校英语专业英语教学大纲》中新增了"网上阅读"课程，要求学生掌握网上阅读与从网上获取信息的能力。在国内的一些大学里还开设了"电子商务"课程。《高等学校网络英语系列教材》可以作为"网上阅读"和"电子商务"课程的阅读教材。因此，它填补了大学教材在这方面的空白。

《高等学校网络英语系列教材》是由北京第二外国语学院的英语专家、教授编写的。他们不仅具有丰富的英语教学经验和国外生活经历，而且还热衷于计算机和网络技术的使用，并且在本科和研究生的教学中开设了相应的课程。编者的这种跨学科的知识结构使得这套系列教材更具实用性和教学上的可操作性。

愿广大读者能从这套教材中开阔眼界、了解网络，同时也能不断提高自身的英语水平。

阎善明　教授
北京对外经济贸易大学

前言

　　网络和英语是当前社会上比较流行的话题，也是现代人必备的素质。在我国处于新世纪改革开放的大潮及加入 WTO 的背景下，网络和英语无论在生活还是工作中都与我们紧密相连。本书的目的就是要适应新形势对教学改革的要求，力求通过高新技术手段，使学生熟练掌握网络应用的基本技能，并运用到实际生活和工作中去，以尽快提高学生的上网效率，充分利用网络这个无穷的宝藏，提高自身的素质。同时，由于网络上超过 90% 的资源都是以英语为母语的人士所提供的，因此本书的第二个目的就是对网络上流行的英语术语、词汇、惯用法、表达方式等进行总结，并用通俗的语言表达出来，使读者在获取知识的同时，对英语语言和网络英语术语也有一个大概的了解，以利于浏览英文网站。

　　本书内容涉及网络应用基础的各个主要方面，如互联网简介、网络浏览器的使用和网络浏览、网络信息的获取与下载、搜索引擎的使用、电子邮件的申请和使用、网络安全、多媒体的应用，等等。本书在内容上环环相扣，层层递进；在选材上，全部采用最实用的英语网络知识，语言鲜活、地道。

　　本书可作为高等院校英语专业“网上阅读”课程的教材，也可作为其他专业“网络英语入门”课程的教材。本书的适用对象是具有一定英语基础的大学本科生，英语、商务、国贸和计算机专业的学生都可以使用。同时，本书也适用于相关专业的研究生和对网络英语感兴趣的读者。通过阅读本书，读者不仅可以提高自己的网络使用技巧，而且还可以提高英语水平。

　　由于本书编写时间仓促，难免有错误遗漏之处，恳请广大读者不吝指正。

编　者
2005 年 1 月

注：本书课后练习答案可到网站 http://press.bjtu.edu.cn 下载或发邮件到 cbszlj@jg.bjtu.edu.cn 索取。

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目 录

Chapter 1

What Is World Wide Web

1.1 Introduction

The World Wide Web (also called the WWW, W3, or simply "the Web") is a huge global database of information, which is stored and distributed by the millions of linked computers that make up the Internet. Using the Web, you can access information from all over the world, and can display it in the form of documents called "Web pages" on your own desktop computer.

Many different types of information are available on the Web. In addition to plain text, Web pages can also contain pictures, video clips and sounds, and they can even be programmed to "interact" with the person viewing them. This ability to provide multi-media information content means that the Web is now an extremely powerful educational tool. The ability to use the Web is rapidly becoming a fundamental academic skill.

The Internet as we know it today is not the product of a long or sustained effort by any single research team. Rather, it is the amalgamation of the efforts from some very bright people working independently of each other. Most people point to January 1, 1983, as the date when the Internet was born.

Tim Berners-Lee, a physicist at CERN in Switzerland, invented the World Wide Web (WWW) in 1992 as a way to organize information in a more brain-like fashion. His idea was to allow

people to make multiple free associations with different bits of information.

His research was based on hypertext, a concept invented by Ted Nelson as part of the "Xanadu Project" in the 1960s. Hypertext allows an author to link a passage of text to another document so that when you activate that link, the client program opens the document to which it refers. Recent advances have evolved hypertext into hypermedia, which is similar to hypertext but throws multimedia images, videos, and sounds into the mix.

Although Berners-Lee invented the Web for his physics project, it took off and was quickly adopted by many other groups on the Internet. The Web has now outpaced every other service such as Gopher or WAIS. It is so popular now that the Web is what most people think of when one mentions the Internet.

1.2 The Working Procedure of Internet

There are four basic building blocks to the Internet, Hosts, Routers, Clients and Connections. Hosts and Clients are explained later in the chapter, but for now, be content to know that unless you have very special circumstances, in most cases your computer falls under the "Client" category. Data is sent from your computer in the form of a "packet". You can compare a packet to be similar to an envelope, it surrounds your data and contains both a return and destination address. Your computer handles the packets for you, it's all done in the background, without your knowledge.

A Router is a special device. Basically routers sit at key points on the Internet and act like traffic cops at an intersection of hundreds of streets. The Router basically reads the destination address on the packets being sent by your computer and then forwards the packet to the appropriate destination. In some cases your data will travel through several routers before reaching its ultimate destination.

1.3 Dial-up Connection to the Internet

At the moment, there are two basic kinds of Internet connections. There are low-speed connections, and there are high-speed connections. Actually, there is only one kind of low-speed connection. It's called a dial-up connection, because it uses the regular phone lines, and because it actually does dial a phone number to connect you to the Internet.

Getting connected to the Internet is fairly simple, but there are a number of steps you need to take

before hand.

The first requirement will be to locate an Internet Service Provider (ISP) in your area. This is a company through which you can access the Internet. Prices and features will vary, so calling around, shopping for the best price is recommended.

Once you have found an ISP and signed their service agreement, next you will need to install some softwares on your computer, including telecommunications software, or other Internet protocol transceiver software, A World Wide Web browser, an e-mail program, etc. With all these softwares installed, you will be ready to access the Internet.

Once you are ready, it's now time to connect to the Internet. How is this accomplished? Well it's simple really. Your computer will dial a local number, which is provided by your ISP. Once you have logged into your ISP, you are connected to the Internet.

1.4   To Connect to the Internet You Will Need

(1) A computer plus a modem.
(2) Access to a phone line.
(3) An Internet account. In the case of an individual computer connected to the Internet via a phone line, this will normally come as a package allowing you to access the Internet via an ISP (Internet Service Provider) and usually also includes an e-mail account, which allows you to send and receive e-mail via the Internet.
(4) Lastly you will require an Internet browser (i.e. Microsoft Internet Explorer), which is software that allows you to view Web pages.

1.5   High-speed Connections

You may have come across the phrase "broadband access." This buzzword refers to a connection, either wired or wireless, that can carry a large amount of information in a short time. High-speed Internet connections, as discussed here, are an example of broadband access.

High-speed connections allow information to travel quickly from the Internet into your computer, much more quickly than a dial-up connection permits. In practice, this means that you don't have to wait so long for images and text to appear on your screen. With dial-up connections, a picture

appears slowly on your monitor. With a high-speed connection, it's there in a flash. Lots of Internet services work better at higher speeds: music, radio, video, voice, downloads. It's a more pleasant experience all around.

There are four basic types of high-speed connections, but not all are available in all areas, and in some regions none are available at all.

1. Digital Subscriber Lines (DSL)

DSL is also called ADSL, the "A" means "Asymmetric". DSL cleverly uses existing phone lines to carry the Internet service so that you can talk on your telephone while you are still connected to the Internet. In fact, with DSL, you are always connected to the Internet — you don't connect and disconnect, as you do with dial-up. Connection speeds vary, and you pay more to get a faster connection. DSL is not available everywhere, though.

2. Cable

The Internet signal here is carried on the TV cable network (it doesn't interfere with the TV signal). As with DSL, you're always connected. It's fast, but there have been reports of slower service when a lot of subscribers are using the service at the same time.

3. Satellite

This is just edging above the horizon, so to speak. Its great advantage is that it is available wherever there is a line of sight to an appropriate satellite, even in rural areas that are beyond the reach of cable or DSL. As yet, however, the technology has some way to go. So far you still need a phone line to send information out, even though you are receiving data at high speed from the satellite. It's slower than cable or DSL, and is considerably more expensive. However, improvements are on the way.

4. Integrated Services Digital Network (ISDN)

ISDN lines are connections that use ordinary phone lines to transmit digital instead of analog signals. With digital signals, data can be transmitted at a much faster rate than with a traditional modem. ISDN converts audio signals—your voice, for example—into digital bits. Because bits can be transmitted very quickly, you can get much faster speed out of the same telephone line—about three times faster than a dial-up, in fact. In addition, ISDN connections are made up of two different channels, allowing two simultaneous "conversations"; you therefore can speak on one channel and connect to the Internet over the other channel. All these transactions occur on the same ordinary phone line currently plugged into your telephone.

1.6   The Information on the Web

What information can you get on the Web? The short answer to this is "almost anything". Tens of millions of documents are currently available on the Web, covering a huge range of topics. Some of the most useful include:

- teaching resources — lecture notes, interactive tutorials, discussion articles;
- research — project descriptions, databases, conference proceedings, grants;
- computing — software archives, tutorials, manuals, discussions;
- administration — staff lists, course details, minutes of meetings;
- government — legislation, political parties, United Nations, European Union;
- environment — conservation, climate change, wildlife, pollution;
- career — vacancy listings, career agencies, on-line newspapers;
- travel — tourist guides, accommodation, timetables, weather;
- culture — art galleries, music, cinema, literature, religion;
- recreation — sport, recipes, TV listings, magazines, personal home-pages.

It may help to imagine the Web as a huge de-centralized library. If you need information about, for example, cinema in France, forest destruction in South America, or job vacancies in Ireland, then all of that information is probably available somewhere on the Web.

1.7   Use of Internet

As a client to the Internet, you should have the following abilities:

- Send e-mail
- Upload/Download files
- Access the World Wide Web

Send e-mail. E-mail is the ability to write a message to someone, using a mail program, and use the Internet as a means of delivering that message. Contrary to popular opinion, and to the opinion of some "so-called" experts that have received nationwide TV airtime, e-mail is not instantaneous. When you send a message to someone it leaves your computer and travels first to your Service Provider, from there your e-mail may travel through several other HOST computers until it reaches its final destination. The time it takes to transit from one host to another varies depending upon how busy

the network is at the time you sent it.

Upload/Download files. Upload and Download are two different faces on the same coin. Basically it refers to moving a file, either from a host computer to your client computer or from your client computer to some host computer.

Access the World Wide Web. Representing the latest in Internet technology, the Web blends the best and not-so-best of the textual information with the graphical capabilities of today's desktop systems. On the Web you will find information relating to almost any conceivable topic, including the topics mentioned above.

Words and Expressions

sustained *a.* 持续不断的，相同的	archives *n.* 档案，公文
amalgamation *n.* 融合，合并	minutes *n.* 记录，备忘录
outpace *vt.* 超过，赶过	accommodation *n.* 食宿
hosts *n.* 主机	de-centralized *a.* 分散
routers *n.* 路由器	airtime *n.* 电影或电视开始的时间
clients *n.* 客户机（程序）	instantaneous *a.* 瞬间，即时的
ultimate *a.* 最后的，最终的	conceivable *a.* 可能的，想得到的
broadband *n.* 宽带	Internet Service Provider 网络服务供应商
interactive *a.* 交互式的	Local Area Network 局域网
tutorials *n.* 指南，使用手册	

Questions for Discussion

1. What is World Wide Web? When did it come into being?
2. How does the Internet work?
3. How do you connect to the Internet?
4. What information can you find on the Internet?
5. What are the uses of the Internet?
6. Do you often log on to the Internet? What do you usually do on the Internet?

Chapter 2
How to View Web Pages

2.1 How the Web Works

In theory, hypertext describes a method for organizing information. In practice, however, hypertext describes the ability to link related documents together using words and phrases. Take, for example, a document that contains an overview of several different travel destinations. The name of each destination might be linked to another document that contains more detail. When a user clicks a link in the first document, the browser opens the second, more detailed document.

Hypertext has two interesting characteristics:

- It imposes no order or class on information—only random relationships. Whereas many methods focus on ordering information or putting information in a hierarchy, hypertext focuses on creating relationships between information. In this way, hypertext supports the organization of information in the "brain-like" manner that Berners-Lee imagined.
- It allows information to have different relationships to other information. When creating an ordered list or outline, you put a single piece of information in a single place within the organization. However, hypertext easily allows each piece of information to occupy many different locations within an organization.

The term hypermedia describes what you find on the Web. Hypermedia is a natural extension of

hypertext in that the contents of each document include much more than text. They include multimedia, like images, videos, and sounds. Many types of media that you find in a hypermedia document can be linked to other hypermedia documents. In a Web page, for example, you can link images to documents so that when a user clicks the image, the browser opens the document to which it refers.

2.2 Some Basic Terms You Need to Know

1. Web pages (HTML documents)

A Web page is a hypermedia document. It is a specific implementation, though, that has its own characteristics. Figure 2.1 is a typical Web page.
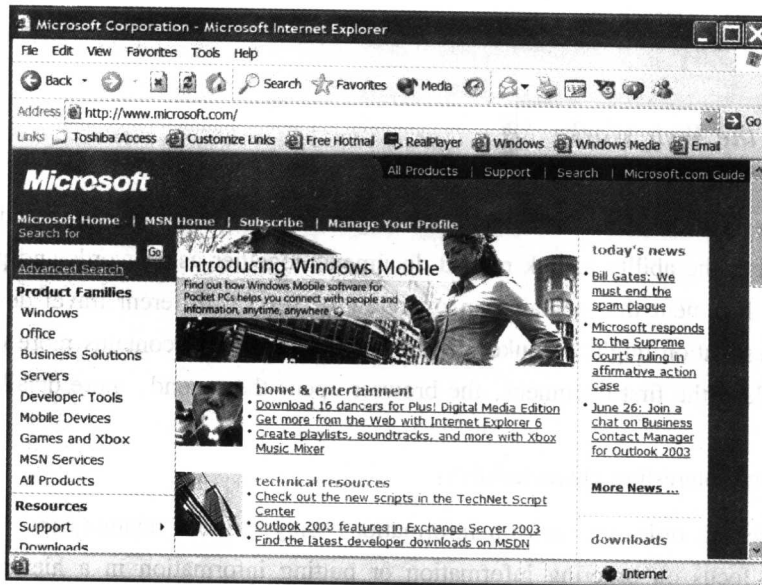

Figure 2.1 Microsoft's homepage

HTML (Hypertext Markup Language) describes a Web page, which is stored in a plain text file with the HTM or HTML file extension. The primary purpose of HTML is to describe how to format the text content of a Web page. For example, HTML tags specify when text is displayed with emphasis or when a block of text is formatted as a heading. Some HTML tags also cause the Web browser to display an image or to format content as a table. Most importantly, HTML tags can link a word or phrase to other documents on the Internet. In short, a Web page is a
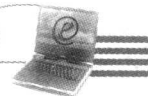
combination of text and the HTML tags that format that text.

2. Uniform Resource Locators (URLs)

You open a resource using its address, or URL (see Figure 2.2). An URL is the standard convention for specifying the location of every resource on the Internet, whether that resource is a document or service.

Address http://www.microsoft.com/　　　　　　　　　　　　　　　　　Go

Figure 2. 2　URL

An URL has three parts.

- **Scheme** — The scheme describes the protocol that the client should use to access the resource. The protocol is usually followed by :// except in the case of file, which looks like file://, mailto, which looks like mailto:, and news, which looks like news:.
- **Host** — The host is the domain name of the Internet host on which the resource resides. The third-level domain for the host name usually tells you what kind of information you find at the host. For example, you probably find Web pages at a host called www. host. com and you probably find an FTP site at a host called ftp. host. com.
- **Path** — The path is the full path and possibly the file name of a document. Although the protocol and host are always required, the path is not. If you're opening an http URL, leaving off the path causes the Web server to return the default home page for the site.

This is the format of the URL: protocol://host/path/filename. For example, this is a URL on the home page of the House Committee on Agriculture of the US House of Representatives: http://www. house. gov/agriculture/schedule. htm. This URL is typical of addresses hosted in domains in the United States. The structure of this URL is as follows:

- Protocol: http;
- Host computer name: www;
- Second-level domain name: house;
- Top-level domain name: gov;
- Directory name: agriculture;
- File name: schedule. htm.

Note how much information about the content of the file is present in this well-constructed URL. Other examples:

telnet://opac. albany. edu   the University at Albany library text-based catalog

ftp://ftp. uu. net/graphics/picasso   a file at an ftp site

Several top-level domains (TLDs) are common in the United States:

com — commercial enterprise

edu — educational institution

gov — US government **entity**

mil — US military entity

net — network access provider

org — usually nonprofit organizations

New domain names were approved in November 2000 by the Internet Corporation for Assigned Names and Numbers (ICANN): . biz, . museum, . info, . pro (for professionals) . name (for individuals), . aero (for the aerospace industry), and . coop (for cooperatives). These domain names are beginning to become available.

In addition, dozens of domain names have been assigned to identify and locate files stored on host computers in countries around the world. These are referred to as two-letter Internet country codes, and have been standardized by the International Standards Organization as ISO 3166. For example:

ch — Switzerland

cn — China

de — Germany

hk — Hongkong

jp — Japan

tw — Taiwan

uk — United Kingdom

3. HTTP (Hypertext Transport Protocol)

HTTP is the protocol that defines how clients form requests and how Web servers respond to those requests. In short, HTTP describes how the Web transports Web pages.

HTTP is a plain text protocol, which means that you could read and understand each command sent to the server. A browser sends a request to the Web server, which replies in turn with a response.
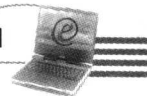
2.3   *How to Use a Web Browser*

The client program that you use to access the Web is called a Web browser. The two most popular browsers are Internet Explorer and Navigator. Internally, Web browsers are incredibly complex programs. They support series of standards that govern everything from how to transfer a Web page using HTTP to how to display a document with HTML to how to secure a transaction using SSL (Security Socket Layer). Externally, however, Web browsers are extremely easy to use. To get you up and running, take a look at the capabilities you find in most every Web browser.

- **Browsing URLs** — Each Web browser provides the same methods for opening a Web page. You can click a link, type the URL of the Web page in the Address Bar, use the menu, pick a site from your list of favorites, and so on.

- **Toolbar buttons** — Most Web browsers provide the same buttons in their toolbars. Figure 2.3 describes them.
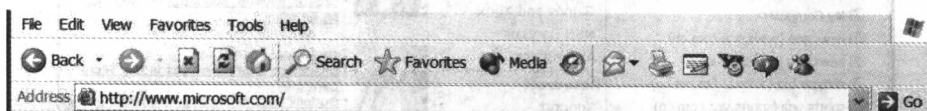
Figure 2.3   Toolbar buttons

- **History Lists** — Your browser keeps three different history lists. First, it keeps a list of all the Web pages you've visited during the current session; you can move forward and backward through this list using the Forward and Back buttons. Second, it keeps a history of all the Web pages you've opened by typing their URLs in the Address Bar. You see this list by clicking the arrow next to the Address Bar. Third, it keeps a separate list of every Web page you've visited. Figure 2.4 decribes them.

- **Printing, Saving, and Sending** — Your Web browser provides a number of ways to keep a copy of a Web page. You can print it. You can save the page to your disk. You can also send a page or a link to a page to someone else via Internet mail.

Figure 2.4   History lists