

英语选修教材

初探计算机英语

Computer Concepts Basics

(美) Dolores Wells-Pusins 著
Ann Peele Ambrose



机械工业出版社
China Machine Press

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Dolores Wells-Pusins Computer Concepts Basics

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出版说明

目前，教育部发表了适用于全日制义务教育普通高级中学的《英语课程标准》。从新英语课程标准中的课程性质、基本理念、设计思路、课程目标以及内容，我们不难看出英语教学的目、目标、观点、实施和评价等各方面都要进行重大改革，以使基础教育阶段的英语教育水平有较大的提高，满足21世纪人才培养的需要。

外语是基础教育阶段的必修课。英语是外语课程中的主要语种之一。英语教学的特点之一是要使学生尽可能多地从不同渠道、以不同形式接触和学习英语，亲身感受和直接体验语言及语言运用。因此，在英语教学中，除了合理有效地使用教科书以外，还应该积极开发其他课程资源。一些外语特色学校，或者双语学校率先引进了一些英语原版的跨学科教材作为选修教材，其目的就是让学生从更多的方面接触英语，提高学生的学习兴趣，有利于开发学生的多元智能。

鉴此，北京华章图文信息有限公司特别精选了一些国外的优秀教材作为高中的选修教材供广大师生选用。这些选修教材包括英语原文阅读、文学欣赏、学校生活、科技探索、英语语法、计算机英语等。他们的题材和体裁都是学生所关心、所感兴趣的。学生感兴趣，学习就会相对轻松，容易奏效。兴趣会是天生，也会后天养成，有时一时激发的兴趣也会使人改变初衷、改变人生。我们相信这些构思新颖、设计独特、精美实用的选修教材会给学生留下深刻的印象，他们的兴趣会转化为持续的行动，成为未来的文学家、科学家、精英和各个领域的人才。在特创的跨学科英语环境中，他们不仅在跨学科探讨中会学了其他学科的知识，而且对他们所面临的高考、就业和其他选择都会打下良好的基础。

在科学技术日新月异的今天，“IT精英”、“知识经济”的出现，不仅使我们的生活发生了巨大的变化，而且使我们在电脑和网络的热潮中体验着美好的人生。掌握英语和计算机已经成为本世纪人才的必备条件。《初探计算机英语》(Computer Concept Basics)是一本用英语教计算机的教材。本书用浅显的英语简单地介绍了计算机的基本概念，其中包括硬盘、软件、应用程序、网络、网页制作等有关计算机方面的知识。

作为一本以任务型教学理念编写的教科书，全书共分20单元，每个单元的题目就是一个问题。每个单元的前面都标有明确的学习任务、词汇和所需时间。学习任务不仅是教师的教学目标，也是学生的学习目的。词汇一栏中的单词都是计算机专业方面的词汇或术语。每个单元的后面都配有相应的练习，以便巩固所学的知识。单元后面的跨学科方案(Cross-Curricular Projects)是根据每个单元的不同内容，结合其他学科，如数学(maths)、科学(science)、语言艺术(language arts)、社会学(social studies)等，让学生从不同的角度、不同层面利用英语作为工具，进行更广泛地交流与学习，同时培养学生用英语就其他学科的有关问题进行探讨。单元的Web方案(Web Project)和合作方案(Team Project)提供了不同的提高综合能力的方案，给有潜力的学生在更广阔的空间，向纵深发展。教师和学生可以自主选择其中不同的方案作为拓展练习。

《初探计算机英语》不仅是通过用英语教学生计算机常识和一些计算机方面的专业术语，使他们在比较轻松的环境中学到英语，而且还可以通过学习这些计算机常识和计算机专业术语，

为以后成为“IT精英”，成功地在工作上熟练应用计算机打下良好的基础。

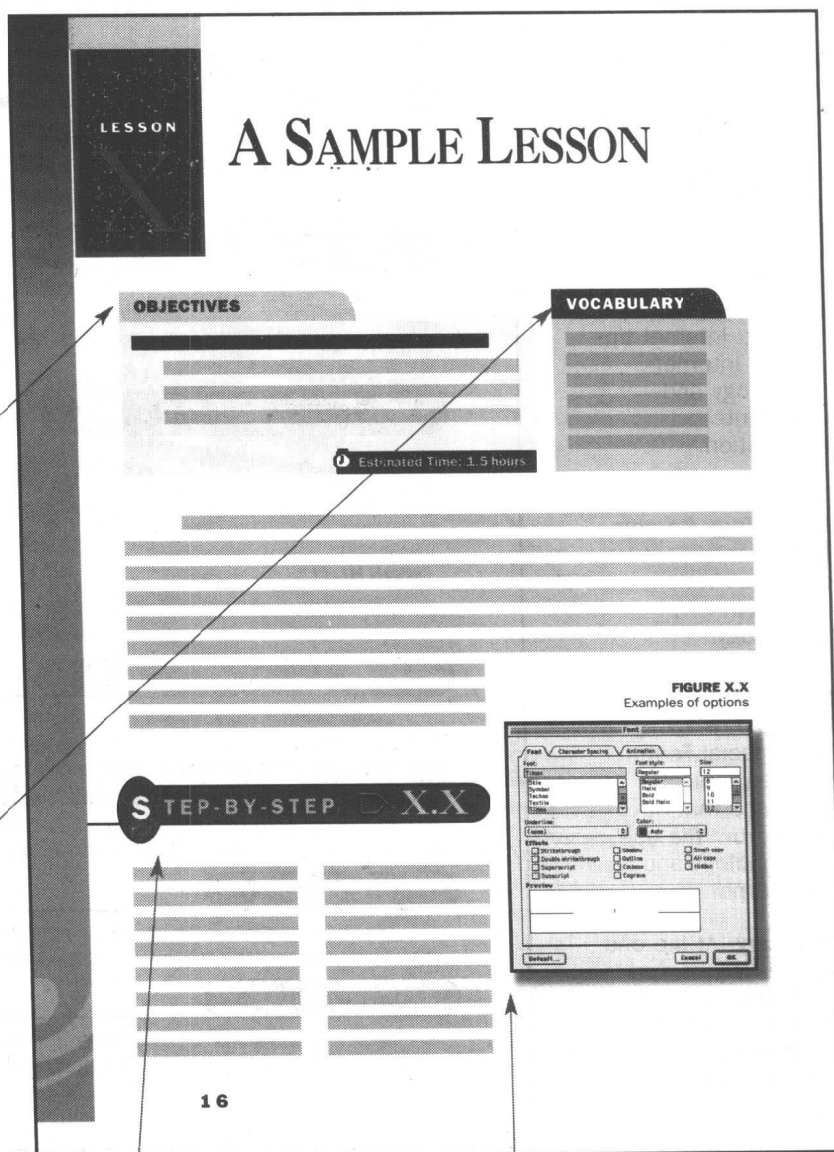
本书配有活动册，包括一些附加的练习、复习题和考试题。另外为自学者配有光盘（The Electronic Instructor），光盘中有单元练习答案、测试题和测试答案以及活动册中的练习答案。

总之，《初探计算机英语》可以成为国际学校、双语学校、外语特色学校和重点高中的一本用英语教计算机的选修教材，满足双语教学的需要，同时，《初探计算机英语》也可以成为一本自学计算机英语的教材。

How to Use this Book

Objectives—
Objectives are listed at the beginning of each lesson, along with a suggested time for completion of the lesson. This allows you to look ahead to what you will be learning and to pace your work.

Vocabulary—
Vocabulary is listed at the beginning of each lesson.



Step-by-Step Exercises—These exercises that appear throughout the lesson lead learners step-by-step through the procedures introduced.

Enhanced Screen Shots—Screen shots now come to life on each page with color and depth.

How to Use this Book

Marginal boxes—

These boxes provide additional information. Hot Tips show advanced or alternative ways to perform a task. Did You Know gives extra information about content discussed in the text. Internet tips provide Internet technology and useful Internet information.

Technology Careers—

This Special Feature describes various careers in technology.

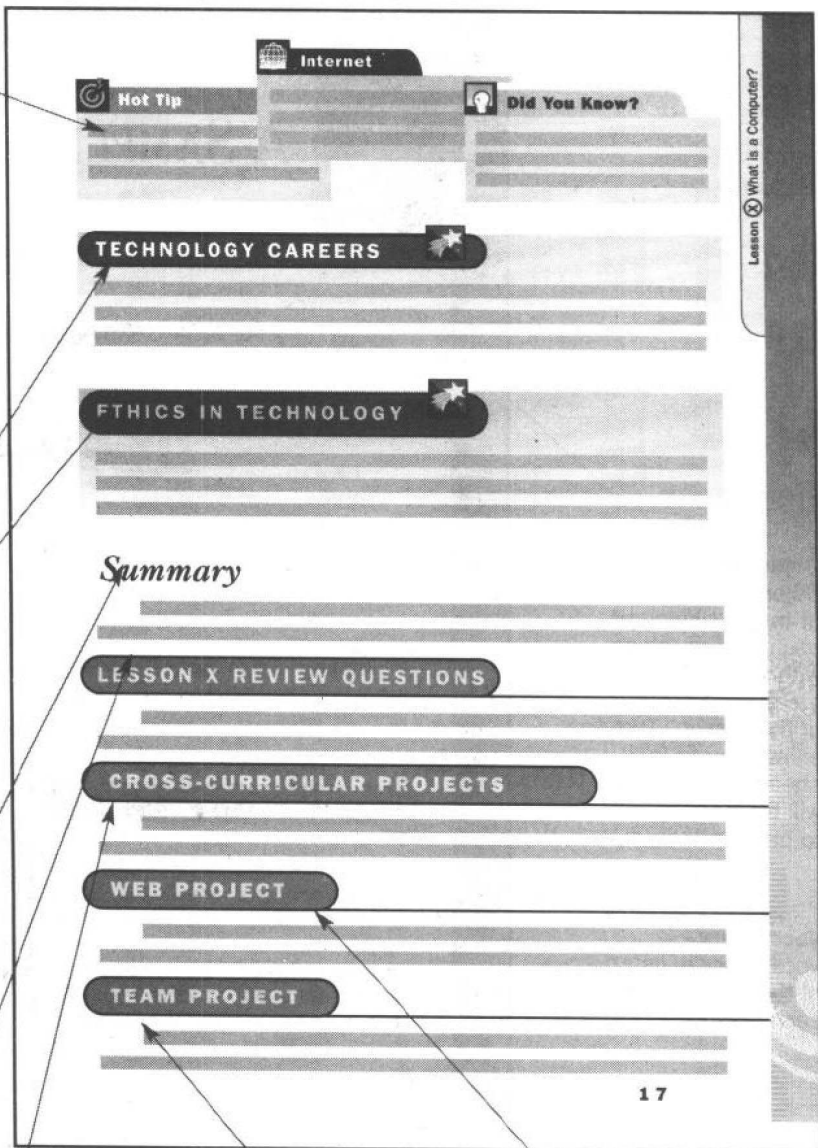
Ethics in Technology—

This Special Feature explores ethical questions that have arisen from the use of technology and the Internet.

Summary—At the end of each lesson you will find a summary to prepare you to complete the end-of-lesson activities.

Review Questions—

Review material at the end of each lesson enables you to prepare for assessment of the content presented.



Cross-Curricular Projects—

End-of-lesson applications of lesson material is applied to various subjects for real-world experience of the subject matter.

Team Project—

Each lesson gives you an opportunity to share what has been learned in the lesson by working cooperatively on a project with other class members.

Web Project—

Hands-on application of what has been learned in the lesson that helps your understanding and use of the Internet.

PREFACE

South-Western's Computer Concepts BASICS is a brief introduction to computers. This text covers computer hardware, software, application skills, keyboarding skills, the Internet and Internet searching, Web page creation, networking, careers, and computer ethics. It can be used in any class on business applications, technology, or computer applications. This textbook, along with the Instructor's Manual and Student Workbook, is all that is needed for a brief course on computer concepts and the Internet and can be used for 35 or more hours of instruction. After completing these materials, the student should have an understanding of the basics of computers, how technology is changing the world in which we live, and the importance of the Internet.

Partnered with a tutorial on a software application, such as Microsoft Office, MicrosoftWorks, or ClarisWorks, this text provides a complete course on computer concepts—with hands-on applications. It is assumed in this course that students have no prior experience with computer concepts.

Other possible applications include supplementing a mathematics, science, language arts, or social studies class through the integrated end-of-chapter and workbook activities and exercises.

The lessons within the textbook are built around Vista Multimedia, a video/CD Company. Relating chapter information to this company provides the student a link to the real world.

About the Materials

The full materials for this course include the textbook, the workbook, and the instructor's guide. An instructor CD-ROM and testing software are also available. Although advanced students may complete the course successfully in a self-guided manner, it is recommended that the course be taken in an instructor-guided, hands-on environment, especially for beginning or intermediate students.

Features of the Text

Twenty lessons gradually introduce the skills necessary to learn the fundamentals of what computers are and how they can be used, including how to access and use the Internet and World Wide Web. Step-by-step exercises divide each lesson into conceptual blocks and are accompanied by integrated hands-on exercises that reinforce the presented information. Because the student provides the data used for the exercises, the text can serve as a roadmap for learning the different applications. At the end of each lesson is a summary; review questions, including multiple-choice, true-false, and short answer; Web projects, team projects, and cross-curricular projects. Other features include margins notes on topics such as Did You Know?, Internet tips, and Hot Tips.

Included within each lesson are objectives, vocabulary lists, estimated completion times, screen illustrations for visual reinforcement, and photos and illustrations to provide interest and clarity. Special sections on ethics and careers are included in each lesson.

SCANS

In 1992, the U.S. Department of Labor and Education formed the Secretary's Commission on Achieving Necessary Skills, or SCANS, to study the kinds of competencies and skills that workers must have to succeed in today's marketplace. The results of the study were published in a document entitled *What Work Requires of Schools: A SCANS Report for America 2000*. The in-chapter and end-of-chapter exercises in this book are designed to meet the criteria outlined in the SCANS report and thus help prepare students to be successful in today's workplace.

Activities Workbook

The student workbook contains additional exercises and additional review questions. Definitions, short-answer, fill in the blank, and true/false questions are provided in the student workbook as a basis for study, chapter review, or test preparation.

Electronic Instructor

The Electronic Instructor CD-ROM includes solutions to end of lesson exercises and projects, test questions and solutions, and solutions to the workbook exercises.

Acknowledgements

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WHAT IS A COMPUTER?

LESSON

1

OBJECTIVES

When you have completed this module, you will be able to:

- Define a computer.
- Identify how computers are used in our daily lives.
- Compare the types of computers.
- List the parts of a computer system.
- Explain how the Internet, the World Wide Web, e-mail, and networks affect the use of computers.

 Estimated Time: 1.5 hours

VOCABULARY

Computer
Computer system
Data
Data communications
E-mail
Hardware
Internet
Microcomputer
Networks
Software

You have recently been hired to work at Vista Multimedia as a part-time sales assistant. Vista Multimedia rents videos and CDs and provides a service for customers to use computers in the store and to create their own CDs. You will use the computer to perform many of your duties. It appears to be the most important piece of equipment in the store. It is used for recording sales, for maintaining employee records, and to communicate with suppliers; just to name a few applications.

That really should not be a surprise. The computer is probably the single most important invention of the twentieth century! It affects us not only individually but also as a society as a whole. You can see computers almost everywhere!

- In schools they are used to enhance instruction.
- At arcades they can transport you to an imaginary world.
- At banks computers allow you to withdraw cash from your account without having to talk with a teller.
- While watching a football game on television, you can even see an instant replay of a tackle. The list could go on and on.

As technology produces more powerful computers, we will find more ways to use them to enhance our lives. See Figure 1.1.

FIGURE 1.1

One example of the wide variety of ways people use computer systems.



What Is a Computer?

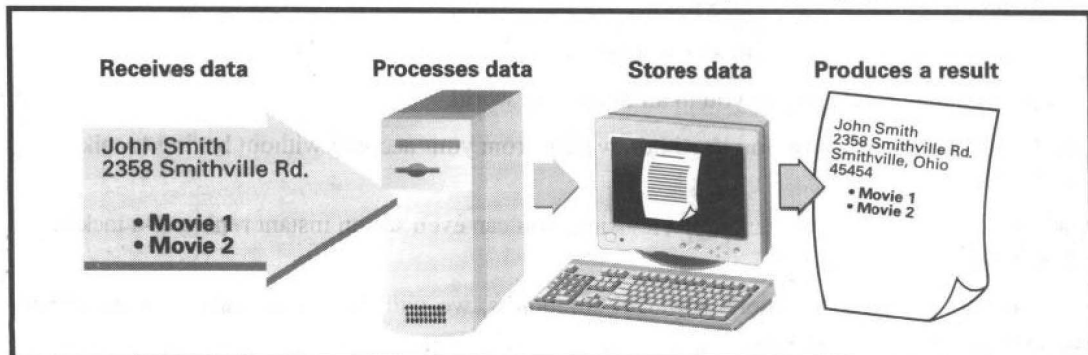
Just what is a **computer**? What does it really do? It is an electronic device that receives data, processes data, stores data, and produces a result (output).

Let's see how this definition fits with the way the computer in the video store is used.

- **Receives data:** Customers' names and the name of the video rented are entered into the computer.
- **Processes data:** The computer will change the data from what we entered into what we want the result to be.
- **Stores data:** The information is stored in the computer's memory or on disk.
- **Produces a result:** We will see a final display of the information we enter. See Figure 1.2.

FIGURE 1.2

The processing cycle of the computer



Why Are Computers So Popular?

OK, now you know what a computer is and what it does. But why has it become so popular? Basically, it performs only three operations:

- Arithmetic operations (adding, subtracting, multiplying, and dividing)
- Logical comparison of values (examples: equal to, greater than)
- Storage and retrieval operations

However, what really makes the computer as widely used as it is? Is that it:

- performs these functions very quickly?
- produces accurate and reliable results?
- stores large amounts of data?
- provides versatility in its various applications?
- provides cost-effective applications?
- is becoming more and more powerful and more useful?



Did You Know?

Charles Babbage is the father of computers.

The History of the Computer

Can you remember a time when computers did not exist? You probably cannot. Computers in the 1950s, 1960s, and 1970s were larger and limited in what they could do. They were temperature sensitive and difficult to repair. Only large companies could afford them and only a few visionary people like Steve Jobs or Bill Gates saw a future for small home computers. See Figure 1.3.

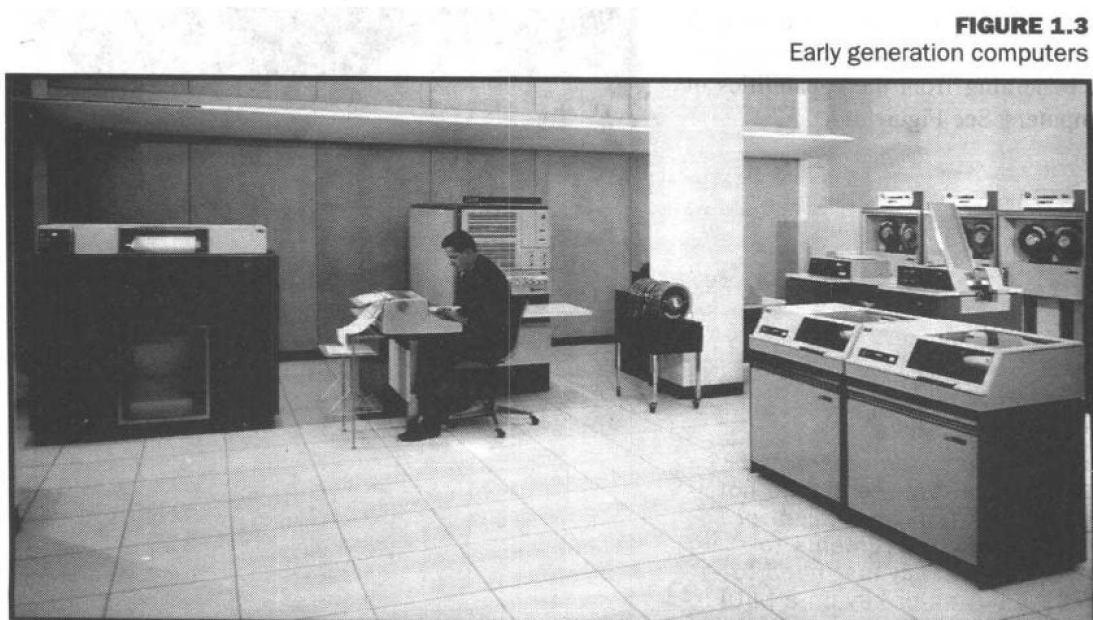


FIGURE 1.3
Early generation computers