国外计算机科学教材系列

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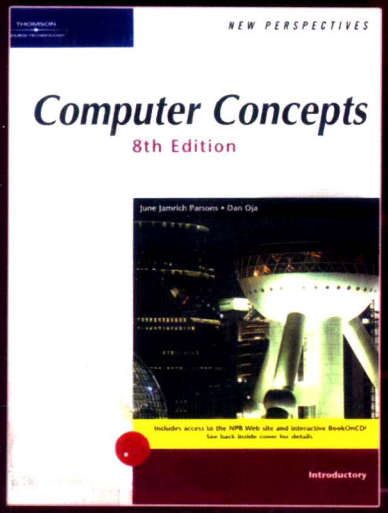
计算机文化

（第八版）

New Perspectives on Computer Concepts

Eighth Edition



英文版

[美] June Jamrich Parsons
Dan Oja 著

電子工業出版社
Publishing House of Electronics Industry
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内 容 简 介

本书从计算机的基本概念入手，全面讲述了计算机硬件、软件、文件管理、防病毒和备份、网络技术和数字媒体等基础知识和操作。书中提供了大量的教学实验和课后练习，使学生能在实践中理解和巩固所学的知识。本书配套有学习光盘，包括全书内容的电子版本及检索系统、InfoWeb链接、媒体播放、动画演示、教学实验及测验等内容，为教师和学生提供了先进的计算机教学环境，可以适应各种教学要求。

本书可用做高等院校低年级学生或非计算机专业的学生学习计算机文化、计算机基础以及专业英语等课程的教材，也可以作为广大学生及计算机爱好者的计算机英语读物。

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出 版 说 明

21世纪初的5至10年是我国国民经济和社会发展的重要时期，也是信息产业快速发展的关键时期。在我国加入WTO后的今天，培养一支适应国际化竞争的一流IT人才队伍是我国高等教育的重要任务之一。信息科学和技术方面人才的优劣与多寡，是我国面对国际竞争时成败的关键因素。

当前，正值我国高等教育特别是信息科学领域的教育调整、变革的重大时期，为使我国教育体制与国际化接轨，有条件的高等院校正在为某些信息学科和技术课程使用国外优秀教材和优秀原版教材，以使我国在计算机教学上尽快赶上国际先进水平。

电子工业出版社秉承多年来引进国外优秀图书的经验，翻译出版了“国外计算机科学教材系列”丛书，这套教材覆盖学科范围广、领域宽、层次多，既有本科专业课程教材，也有研究生课程教材，以适应不同院系、不同专业、不同层次的师生对教材的需求，广大师生可自由选择和自由组合使用。这些教材涉及的学科方向包括网络与通信、操作系统、计算机组织与结构、算法与数据结构、数据库与信息处理、编程语言、图形图像与多媒体、软件工程等。同时，我们也适当引进了一些优秀英文原版教材，本着翻译版本和英文原版并重的原则，对重点图书既提供英文原版又提供相应的翻译版本。

在图书选题上，我们大都选择国外著名出版公司出版的高校教材，如Pearson Education培生教育出版集团、麦格劳－希尔教育出版集团、麻省理工学院出版社、剑桥大学出版社等。撰写教材的许多作者都是蜚声世界的教授、学者，如道格拉斯·科默（Douglas E. Comer）、威廉·斯托林斯（William Stallings）、哈维·戴特尔（Harvey M. Deitel）、尤利斯·布莱克（Uyless Black）等。

为确保教材的选题质量和翻译质量，我们约请了清华大学、北京大学、北京航空航天大学、复旦大学、上海交通大学、南京大学、浙江大学、哈尔滨工业大学、华中科技大学、西安交通大学、国防科学技术大学、解放军理工大学等著名高校的教授和骨干教师参与了本系列教材的选题、翻译和审校工作。他们中既有讲授同类教材的骨干教师、博士，也有积累了几十年教学经验的老教授和博士生导师。

在该系列教材的选题、翻译和编辑加工过程中，为提高教材质量，我们做了大量细致的工作，包括对所选教材进行全面论证；选择编辑时力求达到专业对口；对排版、印制质量进行严格把关。对于英文教材中出现的错误，我们通过与作者联络和网上下载勘误表等方式，逐一进行了修订。

此外，我们还将与国外著名出版公司合作，提供一些教材的教学支持资料，希望能为授课老师提供帮助。今后，我们将继续加强与各高校教师的密切联系，为广大师生引进更多的国外优秀教材和参考书，为我国计算机科学教学体系与国际教学体系的接轨做出努力。

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PREFACE

NEW PERSPECTIVES ON COMPUTER CONCEPTS 8TH EDITION

Whether you're a complete novice or computer-savvy, *New Perspectives on Computer Concepts 8th Edition* offers an engaging hands-on approach to computers backed by innovative learning technology. The 8th Edition incorporates invaluable feedback from the New Perspectives on Computer Concepts Advisory Committee, made up of over twenty instructors, to ensure that this book contains the most current information and resources for learning about computers.

THE NP8 LEARNING SYSTEM

You have purchased more than just a book. *New Perspectives on Computer Concepts 8th Edition* includes a printed book, an integrated Web site, and an interactive BookOnCD designed to be used together to provide a cutting-edge learning experience.

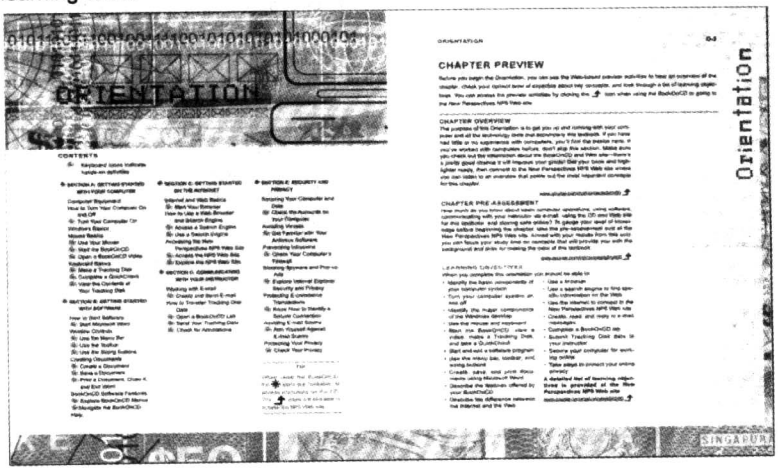
Want to study smarter? The NP8 Web site offers tools to help you understand the material from all angles and to thoroughly prepare you for exams. Want to see the concepts in the book in action? The BookOnCD brings concepts to life by directly linking to videos and animations.

Throughout this book you'll see CD and Web Activities icons. These tell you that there's more to explore beyond the surface of your textbook.

NP8 BOOK FEATURES

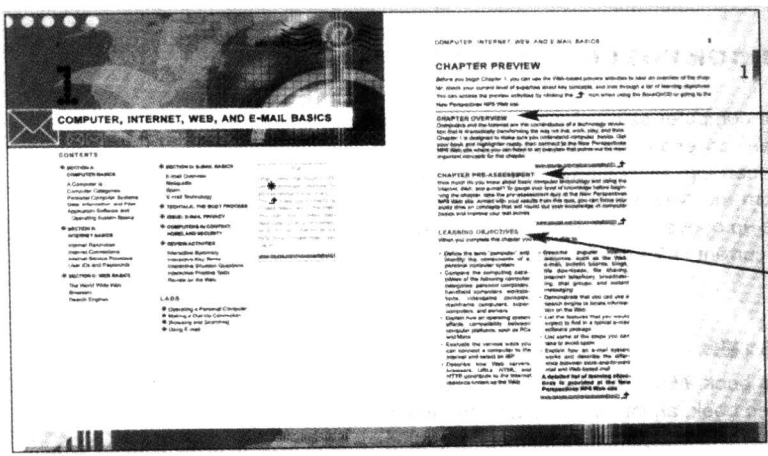
ORIENTATION CHAPTER

If you have little or no experience with computers, this chapter will put you at ease with the essential computer concepts you need to get up and running quickly. Even if you already know how to use computers, the Orientation offers helpful tips about how to most effectively use NP8's technology-based learning tools.



CHAPTER OPENER

The Chapter Openers serve as guides to everything you'll learn and do in each chapter.



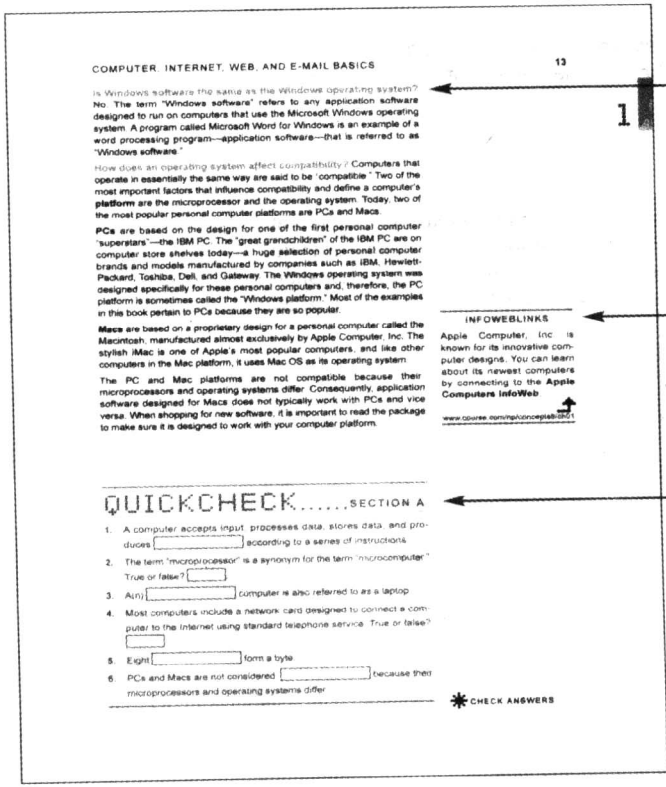
Understand key areas of focus in the chapter by listening to a 5-minute **Interactive Overview** on the NP8 Web site.

Measure your knowledge of the chapter's material by taking a short **Pre-Assessment**, accessible from the NP8 Web site.

Read the **Learning Objectives** list for an overview of the material you should understand upon completing the chapter.

CHAPTER FEATURES

Chapter features, such as FAQs, InfoWebLinks, and QuickChecks, help you understand concepts, put information in context, and explore topics beyond those presented in the text.



Gain a broad understanding of topics through the **FAQ** headings, which provide a relevant context for the material.

Delve deeper with structured Web research using the **InfoWebLinks**. You can use the InfoWebLinks as a starting point for research projects or simply to gather additional information about an interesting subject.

Make sure you understand each section's content with the **QuickCheck** questions. On the BookOnCD, answers to the QuickCheck questions can be saved and submitted for grading.

TECHTALK

Each chapter includes a **TechTalk** section that presents challenging technical information in a easy-to-understand way. TechTalk helps you delve deeper into the mechanics of how computers and computer technologies work.

ISSUE

Controversy and technology seem to go hand and hand. It's no longer enough to study what computers are, but rather how they shape our world. Each chapter explores a contemporary **Issue** and gives you the opportunity to express your opinion through What Do You Think questions.

COMPUTERS IN CONTEXT

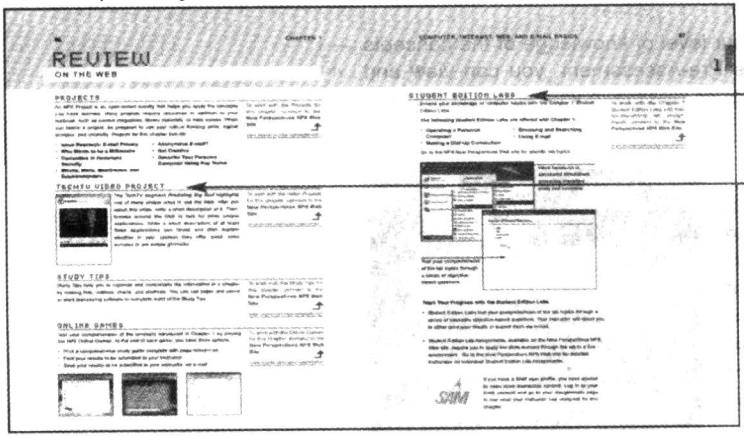
So you're not a computer major? There are still a number of ways technology will affect you in your future career. In the **Computers in Context** section, you'll discover how technology plays a role in careers such as film-making, architecture, banking, and fashion.

REVIEW ACTIVITIES

Prove your mastery of the concepts in each chapter with the **Review Activities**, which are printed in the book and also accessible in an interactive format on the BookOnCD. The Review Activities include the Interactive Summary, Interactive Situation Questions, Interactive Key Terms, and Interactive Practice Tests. When you work on the Review Activities using the BookOnCD, you can save and submit your scores to your instructor. The Interactive Practice Tests are also available through the NP8 Web site.

REVIEW ON THE WEB

Take your knowledge of the concepts one step further with the **Review on the Web** activities available on the New Perspectives NP8 Web site. These activities, which include **Projects**, **Study Tips**, and **Online Games**, reinforce the concepts that you have learned in the chapter.



Student Edition Labs help you review and extend your knowledge through observations, hands-on simulations, and challenging objective-based questions.

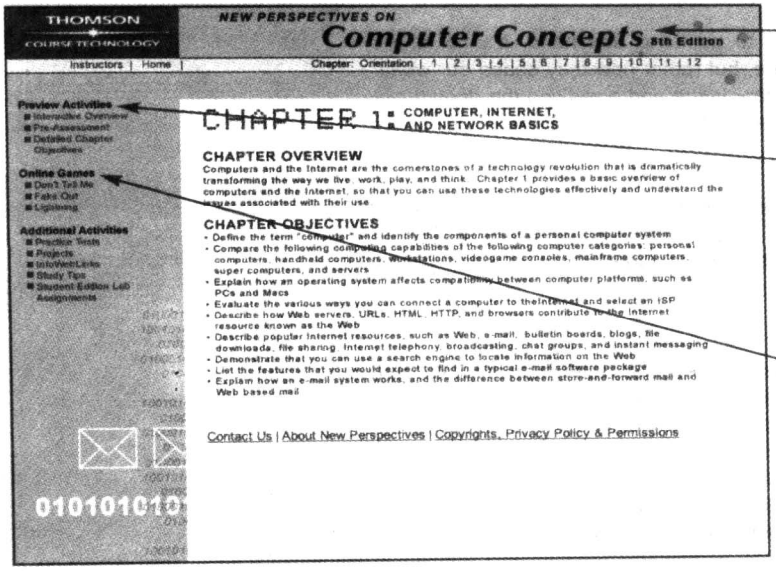
TechTV Video Projects feature TechTV news clips that explore technology-related issues and trends.

TECHBUZZ

Some new technologies make a lasting impact, while others are just a flash in the pan. The new magazine-like **TechBuzz** section at the end of the book helps you follow tech trends, cutting-edge products, and emerging technologies.

NP8 WEB SITE

Use Course Technology's centralized login page, CoursePort, to gain access to the NP8 Web site. Web Activity icons in each chapter direct you to the NP8 Web site, which offers a wealth of online resources and study tools.



Use the NP8 Web site to access valuable resources, including the **InfoWebLinks, TechTV Library, Study Tips,** and **Student Edition Labs.**

Tailor your study plans for the chapter by using the **Chapter Preview Activities**. Listen to an interactive overview, take a pre-assessment quiz, and read through the detailed chapter objectives.

Test your comprehension with the **Online Games**, which challenge you with different interactive scenarios.

AUDIO INTERACTIVE OVERVIEW

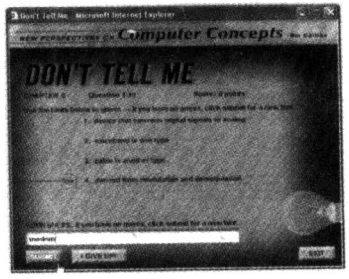
Get your book and highlighter ready, and listen to a 5-minute **Interactive Overview,** which points out key concepts and topics in each chapter.

PRE-ASSESSMENT QUESTIONS

Use the **Pre-Assessment** to gauge your level of knowledge of the concepts in each chapter. Upon completing the Pre-Assessment, you can view and print a study guide that helps focus your study time in your weakest areas of knowledge.

ONLINE GAMES

The **Online Games** give you a rewarding interactive way to reinforce concepts taught in each chapter. Each game offers a printable study guide that points you back to specific pages in the text for review. You can also save your results from the Online Games and submit them electronically to your instructor for grading.



INTERACTIVE PRACTICE TESTS

Interactive Practice Tests, also available on the BookOnCD, consist of 10 multiple-choice, true/false, and fill-in-the-blank questions chosen at random from a large test bank. Each test offers a printable study guide with page references. Your test scores can be saved and submitted to your instructor electronically.

TECHTV VIDEO CLIPS LIBRARY

Ever wondered what it is like to program your own video game? What are the social implications of a digital system that tracks patrons at a neighborhood bar? Stay on top of emerging technologies and technology-related issues with our library of **TechTV Video Clips**. TechTV Video Projects, included in every chapter, challenge you to further investigate the issues and topics raised in the video clips.

PROJECTS

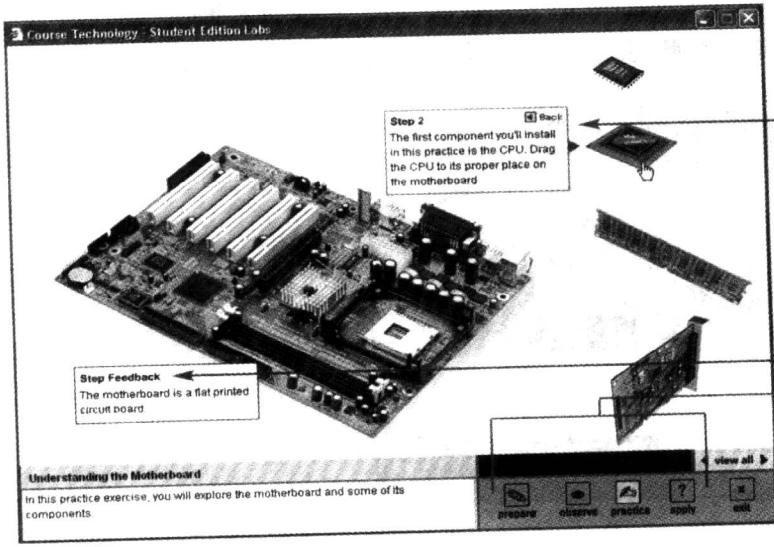
Work with the NP8 **Projects** to apply the concepts you have learned from reading and lab activities. NP8 Projects are open-ended assignments that require you to research topics, apply critical-thinking skills, and produce reports, summaries, graphics, or other creative deliverables.

STUDY TIPS

Study Tips help you organize and consolidate the information in a chapter by making lists, outlines, charts, and sketches.

STUDENT EDITION LABS

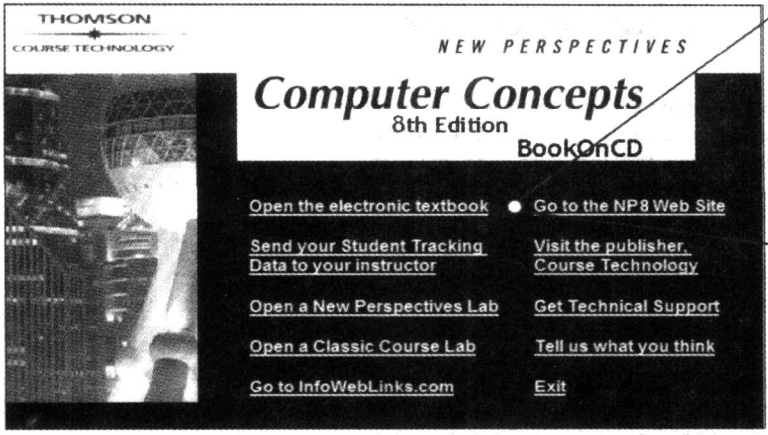
You can master hundreds of computer concepts including input and output devices, file management and desktop applications, computer privacy, virus protection, and much more using the **Student Edition Labs**. The interactive Student Edition Labs help you learn through dynamic observation, step-by-step practice, and challenging review questions. Student Edition Lab Assignments challenge you to apply the skills learned in the labs to realistic case problems.

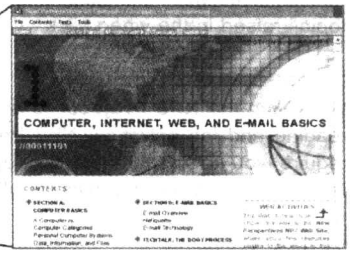


NP8 BOOKONCD

The interactive BookOnCD includes the entire contents of the printed book and brings the concepts to life with the following interactive features:

- **Interactive Review Activities** test your understanding of the concepts presented in each chapter.
- **Interactive QuickCheck** questions check your comprehension of each section.
- **Videos**, **animations** and **screentours** throughout each chapter bring the figures to life.
- **New Perspectives Labs** give you hands-on experience applying concepts and using software.

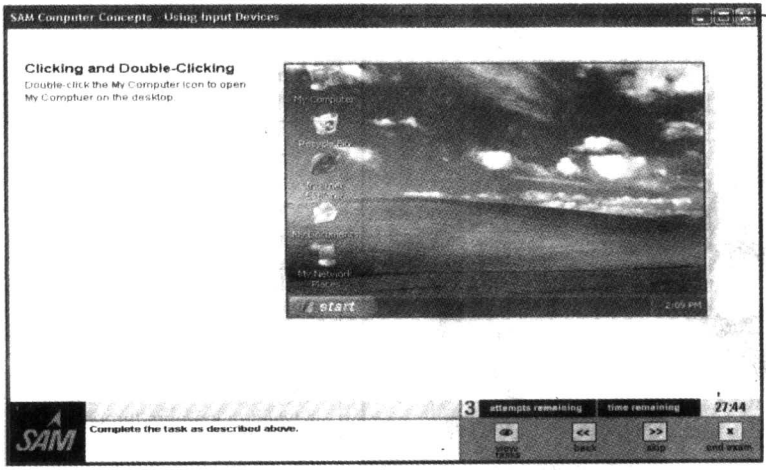




You can save or print your results from the BookOnCD Interactive Review Activities, QuickCheck questions, and New Perspectives Labs to submit to your instructor.

SAM COMPUTER CONCEPTS

If your instructor has chosen to use SAM Training and Assessment Software in your course, you will have access to interactive training simulations that reinforce the lessons presented in this text, as well as realistic hands-on exams.



Hands-on tasks allow you to demonstrate your understanding of important computer concepts and applications.

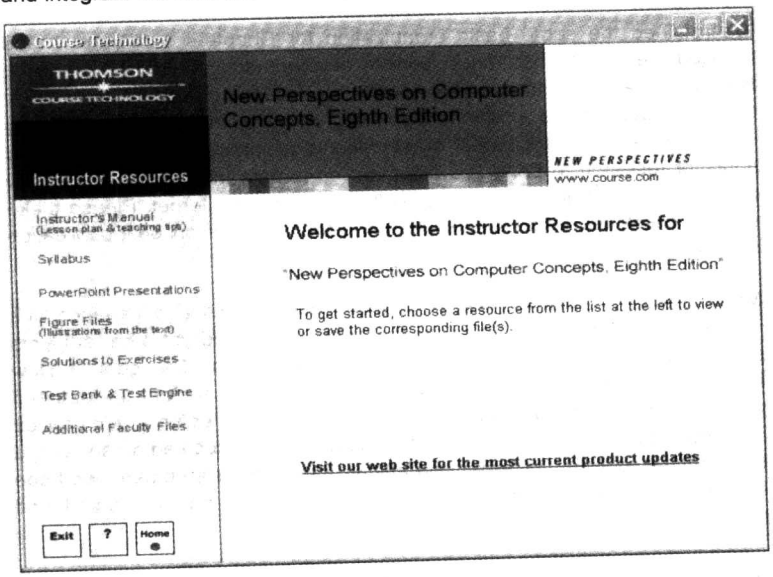
此为试读，需要完整PDF请访问：www.ertongbook.com

NP8 INSTRUCTOR RESOURCES

New Perspectives instructional resources and technology provide instructors with a wide range of tools that enhance teaching and learning. These tools can be accessed from the Instructor Resources CD or at *www.course.com*.

INSTRUCTOR'S MANUAL: HELP IS ONLY A FEW KEYSTROKES AWAY

An enhanced Instructor's Manual offers an outline for each chapter, plus instructional suggestions and teaching tips, including how to effectively use and integrate the Web site content, CD content, and labs.



EXAMVIEW: OUR POWERFUL TESTING SOFTWARE PACKAGE

With ExamView, instructors can generate printed tests, create LAN-based tests, or test over the Internet.

COURSE PRESENTER

Instructors can deliver engaging and visually impressive lectures for each chapter with the professionally-designed Course Presenter. The Course Presenter is a PowerPoint presentation that is multimedia-enhanced with screentours, animations, and videos.

INSTRUCTOR'S EDITION

The Instructor's Edition content explains in depth the New Perspectives Computer Concepts pedagogy and technology resources. It also provides suggestions on how to use New Perspectives on Computer Concepts technology in the classroom.

BLACKBOARD AND WEBCT CONTENT

Course Technology offers a full range of content for use with BlackBoard and WebCT to simplify the use of New Perspectives in distance education settings.

FROM THE AUTHORS

Technology continues to move forward at a rapid pace. To help instructors and students stay in step with the march of technology, we produced this media-rich and Web-enhanced 8th Edition of New Perspectives on Computer Concepts. An expanded Orientation section at the beginning of the book now includes a hands-on introduction to computer security and privacy—essential information for both beginning students and those who are computer savvy. A new TechBuzz section at the end of the book gets students thinking about technology trends and the potential of new products to become the next "killer apps" or "tech turkeys."

We retained the same basic organization for Chapters 1 through 7 and updated their content to reflect current developments. Based on feedback from students, instructors, and reviewers, we focused on making technology concepts even more understandable by streamlining explanations and honing figures for the clearest presentation possible. We logged countless hours of research to bring you the most up-to-date information about new products and trends in computers, software, and the Internet. Please make sure to check the InfoWebLinks for important updates on post-publication events.

Many of today's students have substantially more practical experience with computers than their counterparts of 10 years ago, and yet other students enter college with inadequate technology preparation. The goal of New Perspectives on Computer Concepts is to bring every student up to speed with computer basics, and then go beyond basic computer literacy to provide students with technical information that every college-educated person would be expected to know. Whether you are an instructor or a student, we hope that you enjoy the learning experience provided by our text-based and technology-based materials.

ACKNOWLEDGEMENTS

The book would not exist—and certainly wouldn't arrive on schedule—were it not for the efforts of our media, editorial, and production teams. We thank Amanda Young Shelton and Emilie Perreault for tireless work on every detail of the project; Rachel Goldberg for her leadership for the entire New Perspectives series; Jennifer Goguen for managing production; Fatima Lockhart, Donna Mulder, Tensi Parsons, Keefe Crowley, Greg Manis, Joe Bush, and Eric Murphy for creating videos, screentours, interactive tests, photos, illustrations, and animations; Rebekah Tidwell for her work on the Pre-Assessments; Dave Nuscher for his work on updating the Online Games; Chris Robbert for his clear narrations; Sue Oja, Debora Elam, Deana Martinson, Karen Kangas, Jaclyn Kangas, and Kevin Lappi for checking and double-checking the alpha and beta CDs; Lisa Lord for her insightful developmental edit; Robin K. Flynn for making sure that every comma is in the right place; Keefe Crowley for designing and maintaining our InfoWebLinks site; artist Steve Deschene for a stunning interior design; and Christina Micek for her photo research. We want to thank you all!

-June Parsons and Dan Oja

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