

Computers!

RANDOM HOUSE

PROFESSIONAL

ALFRED A. KNOPF

REVIEW COPY

Software Inside!

WordPerfect 4.2

SuperCalc3

dBASE III PLUS

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Computers!

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Computers!

We dedicate this book to our parents

Val and Tom Trainor

Irene and Chuck Krasnewich

"Example is not the main thing in influencing others.
It is the only thing."

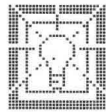
—*Albert Schweitzer*

Learning Themes

The special themes and emphasis of *Computers!* lie in the practical nature of its content. The materials in this book are designed to help you establish a perspective that will carry forward in your future encounters with computer-related systems. Accordingly, special symbols, or icons, have been created to call your attention to three major content features of this book: problem identification, problem solving, and increases in personal productivity. In addition, a special icon has been devised to highlight another content feature: articles reprinted from major newspapers and magazines. These articles have been selected to help you relate the impact of computers to the events and environment of your everyday life. The icons and their significance are displayed below.



Problem Identification



Solution



Personal Productivity



News Clips

Preface

Those of us teaching introductory computer classes must continuously balance the emphasis of basic concepts against the practice of hands-on applications. With too much of the former, students lose interest and fail to understand the relevance of computer technology to their own lives. An exclusive hands-on approach may be easier and more fun to teach, but it is like teaching nail-pounding instead of carpentry.

In writing *COMPUTERS!*, we have tried to provide the opportunity to integrate basic concepts and hands-on applications through the use of projects, worksheets, software tutorials, and an introduction to BASIC programming. The common denominator in these features is the problem solving approach. Computers are seen as a personal and organizational tool to meet the needs of users.

Comprehensive Coverage

We feel an introductory textbook must be based upon a strong foundation of terms and concepts. *COMPUTERS!* is carefully designed to provide complete definitions of common terms. They are then clarified by examples relevant to college students. Study questions, placed throughout each chapter, clearly highlight critical material. A summary of the key concepts and a list of important terms are at the end of each chapter. In addition, the separate test bank contains true/false, multiple choice, and fill-in items related to each study question.

However, learning about computers is not just memorizing terms and concepts. Students must be able to use this knowledge to work with changing technology. Materials at the end of each chapter are designed to support this goal. They contain hands-on projects, specifications for written reports, and thought-provoking questions to stimulate discussions about the computer's role in society, where emphasis is on problem identification, problem solving, and personal productivity. Additional assignments and accompanying worksheets are provided in the student study guide.

Hands-on Applications

Designing a book that integrates hands-on applications with basic concepts is a difficult task. It is impossible to anticipate all the situations under which this text could be used—the hardware available, the computer lab arrangement (if any), the background and experience of the instructor, etc.

Our goal is versatility. For example, Unit III presents a general overview of personal productivity software features and their practical applications. Those classes with access to hardware can enhance this overview by taking advantage of the applications software included with the software version of this book. Each of the three popular commercial software packages—SuperCalc 3, WordPerfect 4.2, and dBASE III PLUS—is accompanied by a hands-on tutorial provided as an addendum in the software version of this book. Including software with the text eliminates the need for an instructor to obtain on-site licenses or to maintain legal copies of software for each student.

If little or no hardware exists for student use, instructors can show hands-on computer applications through the supplementary videotapes and the Insight sections in the text. The version of *COMPUTERS!* without the software packages is available for those schools or sites where there is enough software to support individual student use.

Additional opportunities for hands-on applications are presented through BASIC programming. Provided as an additional addendum in the software version, a step-by-step tutorial offers a unique introduction to the BASIC programming language. The emphasis of this tutorial is on the use of BASIC as a tool to solve common programming problems.

The Support Package

A variety of classroom settings and instructional philosophies are supported by the following supplementary materials for *COMPUTERS!*:

- APPLICATION SOFTWARE AND TUTORIALS. WordPerfect 4.2, SuperCalc 3, dBASE III PLUS sampler software and a step-by-step, hands-on tutorial are included with each copy of the software version of *COMPUTERS!*
- BASIC PROGRAMMING TUTORIAL. A brief, menu-driven BASIC tutorial on disk, accompanied by documentation, is available in three versions—for the IBM PC, Apple II, and DEC Rainbow.
- COMPREHENSIVE INSTRUCTOR'S MANUAL. It includes terms, detailed lecture outlines, answers to all study questions in the text, worksheet and project answers, additional class exercises, teaching tips, a pretest for each chapter, and references.
- LECTURE NOTES/STUDY OBJECTIVES ON DISKETTE. Detailed lecture notes are available on diskette to allow easy modification. In addition, study questions (without answers) for each chapter are arranged on disk. Instructors can provide these files to students who wish to complete the study questions using the WordPerfect software.
- STUDENT STUDY GUIDE. Included are terms, space for answering in-text study questions, projects with related worksheets, mix-and-match exercises, and references.

- **COMPUTERIZED TESTBANK.** Over 2,000 testbank entries are coded to correspond to the text's study questions. A test generator allows the instructor to add, delete, and modify questions in the test bank. Also, tests with answer keys can be easily generated.
- **TRANSPARENCY MASTERS WITH UPDATES.** Transparencies contain illustrations from the text plus examples highlighting state-of-the-art topics. To keep them current, the transparencies will be updated on a semiannual basis.
- **BROADCAST QUALITY VIDEOTAPES.** The series, "Computers at Work," has been broadcast by PBS and numerous statewide consortia. This documentary-style series of 16 half-hour tapes includes a Student Videocourse Manual that keys reading assignments in the text to each video lesson.
- **INTERFACE JOURNAL.** This quarterly journal, written by computer educators for computer educators, has a wealth of articles, teaching tips, and software reviews designed to help teachers stay current in the ever-changing computer age. A subscription rate is available to adopters upon request.

Special Acknowledgments

The development of an instructional package like *COMPUTERS!* takes the dedicated effort of many people. We have identified the people to whom we owe a great deal of thanks in the following acknowledgments. However, there are always a few whose effort and professionalism goes beyond the call of duty.

First and foremost, Erika Berg of Mitchell Publishing supplied us with inspiration and energy when we needed it the most. Her tireless work in bringing all the pieces of this project together is greatly appreciated.

C. Brian Honess, University of South Carolina, gave us hard-hitting reviews of the book's content and wrote the BASIC tutorial which is included as an addendum in the software version of this textbook. Keiko M. Pitter, Truckee Meadows Community College, bailed us out by writing the software tutorials for WordPerfect, SuperCalc 3, and dBASE III PLUS for the software version. Both Brian and Keiko deserve very special thanks for working under tight schedules while producing excellent materials.

Thanks are also due to the following people who provided helpful comments and suggestions each step of the way: Geoff Alexander, Cabrillo College; William Cornette, Southwest Missouri State University; Steve Deam, Milwaukee Area Technical College; Patrick Fenton, West Valley College; Enid Irwin, Santa Monica College; Peter Irwin, Richland College; Thom Luce, Odessa College; Michael Michaelson, Palomar College; Herb Rebhun, University of Houston, Downtown; Fred Scott, Broward Community College; David Wen, Diablo Valley College; and Louis Wolff, Moorpark Community College.

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Muskegon, Michigan*

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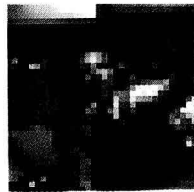
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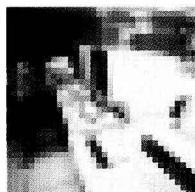


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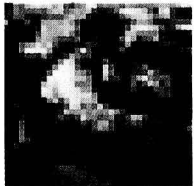


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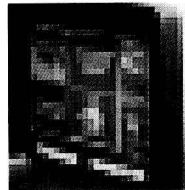
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