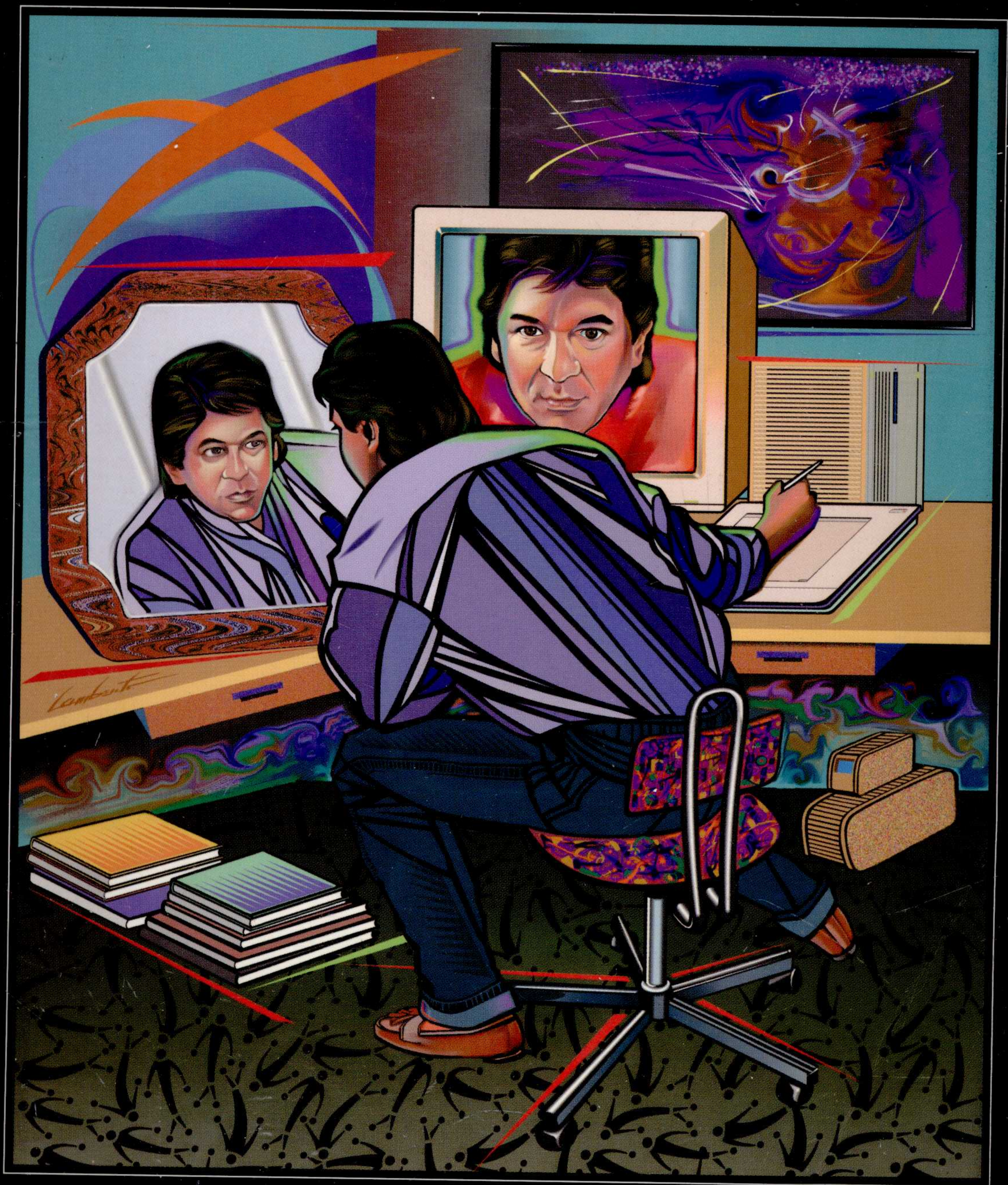


The New
COMPUTER
USER



David Sullivan

30363

The New Computer User

David Sullivan

Oregon State University



The Dryden Press
Harcourt Brace College Publishers

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Compositor	GTS Graphics, Inc.
Text Type	Caslon 224 Book

Cover Image	Lamberto Alvarez
Text Design	John Ritland and Circa 86, Inc.

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Address for Editorial Correspondence

The Dryden Press, 301 Commerce Street, Suite 3700, Fort Worth, TX 76102

Address for Orders

The Dryden Press, 6277 Sea Harbor Drive, Orlando, FL 32887
1-800-782-4479, or 1-800-433-0001 (in Florida)

ISBN: 0-03-097861-0

Library of Congress Catalog Card Number: 92-83856

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Printed in the United States of America

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PREFACE

This book responds to a historic change: computers have become easier and more fun to use. *The New Computer User* was written to be as user-friendly as the new computers themselves. The book advocates using a computer as a partner to accomplish everyday tasks like writing, planning, forecasting, drawing, organizing, and even thinking in general.

In my introductory computing classes at Oregon State University, I have taught thousands of people to form a partnership with their computer. A true partnership requires a certain amount of give-and-take and familiarity. More than anything else, I want students to grow comfortable using a computer. This won't happen by accident or by magic. My job is to give them appropriate objectives and provide the tools they will need to meet the challenge.

I also need to root out the worst misconceptions. A few fearful students approach everything about computing with dread—even the keyboard. These people need to know that it is okay to make mistakes and ask seemingly “dumb” questions. They also need simple, reassuring explanations that don't require an advanced degree to read.

Some students grow impatient and frustrated when the computer doesn't respond in the way they expect. These people need to understand how a successful human/computer partnership is formed. Despite all the media hype about artificial intelligence and adaptive software, in reality the user still needs to learn and adapt to each program's built-in commands and quirks. This requires practice, patience, experimentation, and yet more practice. These people also deserve the benefit of guidelines and tips that really do work. To meet this need, I've done my best to pack each page with class-tested, practical information about how to use computers effectively.

Occasionally a student wants to learn technical details about computing. I refer these students to traditional computer science or information systems classes. In this book, the study of computing is not an end in itself, but rather it is a means to other results, such as better forecasts, more economical clerical work, or improved writing.

Students no longer need to learn how hardware functions in order to use software successfully. Just as they don't need to know how a telephone works to make a call, they don't need to know about parity bits to use a word processor. In each application area I have asked, “What does the user need?” and only then have I introduced tools to meet those needs. This approach not only focused the text on essentials, it also arranged the material in a logical, easy-to-understand order.

The students who expect to be taught command-by-command have the most dangerous misconception. It can be a huge mistake to focus too heavily on the mechanics of giving commands. I made a similar mistake when I learned how to ride a bicycle many years ago. The incident was so painful, I still remember it vividly. I placed all my attention on staying upright and keeping my feet on the revolving pedals . . . until

I ran into a parked car. This sort of myopia in an introductory computer class can lead to similar bloopers. Despite my warnings, a few students proudly turn in well-formatted memos filled with incoherent ideas and gross grammatical errors. Others hand in attractive charts that plot data from worksheets 'riddled with obvious bugs. Computers cannot correct these errors. In fact, by removing the drudgery and making the final laser-printed result look so spiffy, computers seduce the unwary student into believing the output is flawless. I call this process garbage-in, gospel-out. Guarding against this sort of error is so important that I've made it an underlying theme throughout the book.

The challenge today is not merely to learn to use a computer, but to learn to use it *well*. As a comparison, music students would not think of studying merely the keystrokes and hammer mechanisms of a piano without simultaneously learning to play music with artistic expression.

As students grow into a comfortable partnership with computing, they begin to make fundamental changes in how they go about using their computer. At first, a new computer user is likely to use the computer as a fancy typewriter or calculator with a TV screen. But people soon adopt new work habits that take advantage of the freedom to create, revise, link, and navigate without the tyranny of paper. For example, a student may abandon the process of writing first-draft documents on a yellow pad in favor of brainstorming ideas directly onto the screen, confident that editing can rearrange the ideas at any time. This kind of change can help unlock creativity and boost productivity.

To nudge these tendencies along, students need clear descriptions of how ordinary people can make the best use of their computers. So although it may be interesting to know how a supercomputer created special effects in the *Star Wars* movies, I left this sort of geewhiz explanation out of the book. To make sure I didn't get carried away with theoretical procedures, I created the vast majority of the book's screen images on the computers in my home and office. Students need down-to-earth advice and practical real-world examples.

Any powerful tool needs to be used with caution. In contrast to a mechanical tool, such as a chainsaw, that poses physical threats to its user, a computer poses less obvious but equally serious ethical perils. Issues like protection of privacy and copyrights abuse won't cut off your leg, but they demand attention. So this book emphasizes using good judgment and sound ethics; they are essential facets of modern computer literacy.

FEATURES

To reassure beginning users that computers need not be intimidating, the book is filled with practical, user-friendly features.

- *Post-it tips.* Notes shaped like Post-it stickers offer real-life advice to help students avoid common computing pitfalls.

- *Practical pointers.* These boxed inserts contain more extensive tips on dealing with traps and tricks-of-the-trade.
- *Ethics alerts.* Computer viruses, ethical dilemmas, software piracy, and other controversial issues are highlighted in boxed inserts throughout the text. Chapter 12 discusses these issues in more specific detail.
- *User profiles.* These boxed inserts feature young people in computer-related jobs. These practical profiles focus on realistic career opportunities, not merely on famous computer industry moguls.
- *Ongoing vignette.* Each chapter begins with an episode from the story of a fictional college graduate who uses computer skills to advance his career. These entertaining stories introduce each chapter's concepts, demonstrating their application in a typical business setting.
- *Relevant, full-color illustrations.* Almost every page includes color photographs and screen captures, featuring recently released DOS, Windows, and Macintosh programs.
- *Meaningful chapter-end material.* Each chapter concludes with an intelligent summary defining the chapter's key words in context. Self-tests help students check their comprehension. Discussion questions are worthy of discussion, and exercises are assignable regardless of what kind of computer hardware or software is available.

SUPPORT MATERIALS

The New Computer User is accompanied by an impressive supplemental package worthy of a new-generation computer textbook.

For the Student

- **Interactive Multimedia Tutorial Software** helps students review important concepts presented in classroom lectures. Audio clips and animated segments are included to help clarify complex topics and add interest to the learning environment. Requires Microsoft Windows 3.1 or higher.
- The **Study Guide** provides students with an excellent tool for advance preparation as well as for review, especially before exams. Chapter outlines and expanded summaries challenge students to recall what they've learned, and innovative self-test

questions, analogies, and mind teasers help the student interact with the new concepts.

For the Instructor

- **Multimedia Presentation Software** is easy to use for classroom presentations, adding organization and flair to daily lectures. It features a laser disc that includes video segments, hundreds of full-color electronic transparencies, and bulleted lecture outlines for classroom display. The laser disc is driven by LectureActive, a user-friendly software program which allows the instructor to organize lectures in advance, using electronic notecard prompts to assure a smooth presentation. Available for MS-Windows and Macintosh platforms.
- The **Instructor's Manual** by David Sullivan carefully coordinates with the main textbook to help reduce preparation time by providing detailed chapter outlines, teaching suggestions, exercises, notes to accompany the overhead transparencies, interesting anecdotes, and more. It also comes with a **disk** containing the entire Instructor's Manual as well as an extensive collection of class-tested teaching materials and projects.
- The **Test Bank** contains over 1,500 multiple-choice, true/false, fill-in, and critical thinking questions rated by difficulty. Quality, not quantity, was the goal behind the test questions.
- A **Computerized Test Bank** featuring our exclusive EXAMaster Plus preparation system allows the instructor to quickly and easily create and print a test containing any combination of questions from the test bank. Questions and answers may be added, edited, or deleted, and scrambled versions of the same test are easy to create. Available for MS-Windows and Macintosh platforms.
- Over 100 full-color **Overhead Transparencies** are available consisting of figures and screens from the textbook as well as many class-tested outlines and illustrations developed by David Sullivan to augment those found in the text.

ACKNOWLEDGMENTS

My greatest debt of gratitude is to my students. In the last couple years, I have become an ardent supporter of total quality management (TQM), a continuous process of listening carefully to customers and then adapting to give them what they want. So now instead of trying to sidestep criticism, I encourage students to tell me exactly what they think and then adapt my teaching methods to accommodate their expectations.

This sounds so simple that it may seem obvious, but in fact, most businesses and educators assume they know what their customers want, or they force their customers to take "what is best for them."

Since adopting a TQM approach to my teaching, I no longer teach theoretical ideas of doubtful usefulness. These soliloquies have been replaced with practical, user-oriented explanations with more immediate and obvious value. Thus, the basic philosophy of this book and many of its detailed suggestions and tips come directly from student feedback.

Along similar lines, I needed the advice and suggestions of other instructors to keep me on track while writing the book. Each stage of the book's evolving manuscript received a detailed review, from initial book proposal to final draft. Those listed below all played an important role in shaping the book.

Arnie Dyck
University of Waterloo

David Ellis
Saint Joseph's College

Pat Flanagan
El Paso Community College

John Groh
San Joaquin Delta College

Rhonda Haller
Jackson Community College

Herbert Hamilton
New Mexico State University

David Harris
College of the Redwoods

Patricia Harris
Mesa Community College

Joe Kastrzyk
Salem State College

Carl Naegele
University of San Francisco

Greg Perry
Tulsa Junior College

John Rezac
Johnson County Community College

Martin Richards
University of North Texas

John Walker
Dona Ana Community College

Karen Watterson
Watterson Database Group

Melinda White
Santa Fe Community College

John Witherspoon
Monroe Community College

John Zales
Harrisburg Area Community College

An essential component of the TQM process is a commitment to continuous improvement. The quality of my books is inseparably linked to listening to what students and instructors want. Fortunately this is fun to do. I like discussing my books more than I like the detailed work of preparing illustrations and writing clear descriptions. So this paragraph is a long-winded way of asking you to tell me what you think. Tell me where I've messed up and don't pull any punches. If you like what I've written, I wouldn't mind hearing that either. I can be reached at SULLIVAN@BUS.ORST.EDU on the Internet. For those of

you without an e-mail account, I receive traditional mail at the College of Business, Oregon State University, Corvallis, Oregon 97331. Or if you would like to speak with me in person, my office phone number is 503-737-3687.

Thanks go to my former publisher, Houghton Mifflin Company, for their kind permission to allow me to use certain passages and figures from my earlier textbooks.

Finally, I would like to extend my thanks to the book team at The Dryden Press for their determination, professionalism, and creativity: Richard Bonacci, executive editor; Kevin Cottingim, acquisitions editor; Lisa Toftemark Rittby, developmental editor; Jim Patterson, project editor; Terry Rasberry, art director; Mandy Manzano, production manager; Greg Meadors, photo and permissions editor; and Scott Timian, marketing manager.

In keeping with the book's user-oriented emphasis on practical and essential material, I won't bore you with a dedication or a description of how many lonely hours my family spent while I labored over the book. They know my gratitude.

David Sullivan
January 1994

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