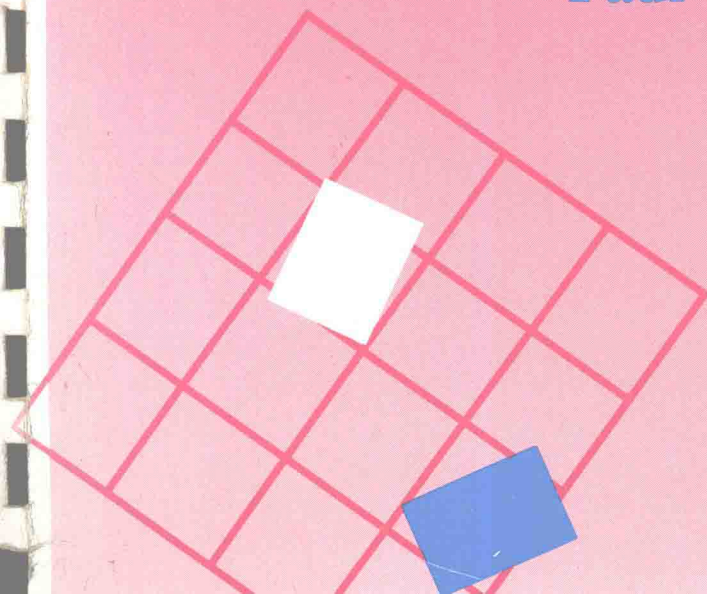


U S I N G
MICROSOFT
WORKS
EFFECTIVELY

W I N D O W S V E R S I O N

Paul Werner Ross



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Business and Educational Technologies
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Microsoft Works for Windows® is an integrated software package for microcomputers. All of the standard applications, including word processing, spreadsheets, databases, and graphics are available in a single program that allows a high degree of interaction between the various applications. Telecommunications is available through the terminal program of Microsoft Windows®, instead of being included as part of Works, as it is in the MS-DOS® and Macintosh versions of the product. This is discussed in chapter 10.

An integrated system such as Microsoft Works for Windows makes teaching microcomputer applications easier because it presents a unified design for commands and applications.

About this Book

This book was developed for use in an introductory course in microcomputer applications using the Microsoft Works for Windows package. The objectives of this book are as follows:

1. To introduce the student to microcomputer use and to provide an overview of the Microsoft Windows and the Microsoft Works for Windows environment. Just as important, is our goal to impress upon the student the importance of Microsoft Works for Windows' powers of integration; the effective interaction of word processing, spreadsheet, database, and graphics.
2. To teach word processing techniques.
3. To teach spreadsheet techniques.
4. To teach use of databases in Microsoft Works for Windows.
5. To show how to use data derived from Microsoft Works for Windows to create effective and attractive graphics. This includes the use of the Microsoft Draw drawing component of Microsoft Works for Windows.
6. To introduce the student to telecommunications through the use of the Windows Terminal program in Microsoft Windows.

Level of Instruction

This book is designed for use in a one-semester course in microcomputer applications using Microsoft Works for Windows. We assume no previous computer experience on the part of the student. Additional material on microcomputers and the disk operating system (MS-DOS) is provided for students who are unfamiliar with microcomputer operation.

For the student who has prior computing experience, the instructor can omit this material on MS-DOS and microcomputer operation or use it for review and reference. A brief introduction is given to the Microsoft Windows environment under which Works for Windows must be run.

The book is written for the student with average ability, for whom simplicity and practicality are essential characteristics of a textbook. One year of high school algebra is assumed as an appropriate mathematical background. Because many of the major uses for spreadsheets and databases come from the business community, a modest familiarity with business practice is helpful in appreciating some of the example problems.

Organization

This book represents an effort to produce a book on the essential of use of an integrated software applications program. The Microsoft Works for Windows package has applications in business or industrial environments, as well as in the college classroom.

Pedagogy

Throughout each chapter, descriptions of how to use Microsoft Works for Windows are backed by clear, step-by-step examples and explanations. The text has been carefully developed to ensure that the student will achieve the most thorough understanding of the Microsoft Works for Windows package possible.

End-of-Chapter Review Material

At the end of each chapter, the following features reinforce the student's understanding of the concepts and applications covered:

Key Terms: A list of key terms is provided as a review device for the student.

Now Try This: These exercises form a mechanism for self-testing. These exercises are carefully graded; from simple problems that might take just a few minutes to solve, to more complex ones that can serve as the basis for extensive group design projects.

The text follows this plan:

Chapter 1 -- An Introduction to Works for Windows

This chapter covers the basic ideas behind personal computers and their use, including a brief introduction to the MS-DOS operating system, the Microsoft Windows environment, the use of the mouse, the idea of an integrated system, and a brief description of the major applications contained in Works for Windows.

Chapter 2 -- Fundamental Word Processing Techniques

The second chapter deals with the fundamentals of word processing, including how to manage files, enter text, the use of the menus, and basic text entry and editing techniques. A short introduction to printing and the use of the spelling checker appears in this chapter as well.

Chapter 3 -- Advanced Word Processing Techniques

The third chapter builds on the material of the second chapter to develop advanced word processing techniques, like finding and replacing text, the use of text attributes, including boldfacing, the use of headers and footers, and the use of multiple windows.

Chapter 4 -- Fundamental Spreadsheet Techniques

This is the first of two chapters showing how to create spreadsheets, and understand spreadsheet concepts. Issues of

data entry, formatting, and simple cell formulas are covered, as well as the use of elementary spreadsheet functions and printing the spreadsheet.

Chapter 5 -- Advanced Spreadsheet Techniques

This is the second of the two chapters on spreadsheets. It treats the advanced financial functions, table lookup capabilities, special mathematical functions, and sorting the data in a spreadsheet.

Chapter 6 -- Graphing in Works

It is not merely enough to be able to calculate numbers with a spreadsheet; it is frequently desirable to show the results graphically. This chapter explains and teaches the graphical capabilities of Microsoft Works for Windows, including how to print graphs.

Chapter 7 -- Fundamental Database Techniques

This chapter explains basic database concepts and shows how to create a database, enter data, and edit it. Further, the operations of adding and deleting fields, and sorting and searching a database are covered.

Chapter 8 -- Advanced Database Techniques

This is the second chapter dealing with databases. It covers the topics of defining and printing both simple and complex reports, as well as exploring the use of totals, subtotals, and control breaks. Material on database functions is presented, building on the concept of functions introduced earlier in the chapters on spreadsheets.

Chapter 9 -- Microsoft Draw

Microsoft Draw is a simple drawing program provided as a component of Microsoft Works for Windows. With the Draw application, the user can create simple to complex drawings for inclusion in Works for Windows word processing documents.

Chapter 10 -- Windows Terminal

If you have a modem connected to your computer, you can use it in conjunction with the Windows Terminal program to communicate with data services, computer bulletin boards, or mainframe computers. This chapter covers the operation of this useful Windows program.

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Chapter**1****An Introduction to Works for Windows**

Looking Ahead

This chapter is about elementary computer concepts, MS-DOS® and Microsoft Windows® commands, and the capabilities of Microsoft Works®. In this chapter, you will learn about the following:

- o What the Microsoft Windows environment is.
- o How to use the mouse.
- o How to manage files with the Microsoft Windows File Manager.
- o How to use the Microsoft Windows Notepad to retrieve and manipulate ASCII text files.
- o What Works is, what it does, and how to start it on your computer.

If you are an experienced microcomputer user, this chapter will serve as a partial review of the more important aspects of microcomputer use. If you are new to microcomputers, this chapter will give you some elementary insights into how your computer operates and how to use it effectively.

Stand-Alone Integrated Systems

The Works application package offers substantial benefits over conventional computer applications packages that have a separate program for each application. The benefits of Works derive from the reduced cost of a single package over many different packages. Further, with an integrated package, such as Works, there is a smaller amount of training required to learn how to use a single package versus many different packages. Finally, with Works, the different components can be easily

used for the exchange of information, such as including a table from a spreadsheet in a word processing document.

The tasks of word processing, spreadsheets, databases, graphics, and telecommunications have historically been done with separate software packages. With separate systems or applications packages for word processing, spreadsheets, databases, and telecommunications, a number of problems arise:

- o Separate training must be conducted for each computer application package. The commands for each application are often different from one package to the next.
- o It is often difficult to transfer data from one application to another, such as the output from a spreadsheet to a word processing document.
- o Rapid transfer from one application to another is difficult. Usually, one application must be halted or suspended and another started.
- o The total cost of separate applications packages frequently exceeds the cost of a single integrated package, such as Works.

In a *menu-driven* or *mouse-driven* system such as Works, in contrast to a command-driven system, the user selects a list of tasks to be performed, and then selects a task from this list. This significantly reduces the learning time, as the menus are similarly structured for each application within Works. This has the very practical value that learning one Works application leads naturally to mastering another Works application.

In Works, data can be easily transferred from one application to another through a process known as windowing. This means that each application appears in a separate "window" on the user's screen. With an integrated package such as Works, you can begin a word processing document, then suspend it temporarily while you enter a spreadsheet to perform calculations. Information from one window can be captured to a temporary area known as the *clipboard*, and then pasted into another Works application. For example, a graph in Works' spreadsheet system can be easily incorporated into a Works

word processing document.

Further, the files created by the different components of Works can be exchanged with many other commonly available applications packages. For example, the files from the popular Lotus 1-2-3 spreadsheet system are compatible with Works' spreadsheet, and can be read by it. Works word processing documents can be exchanged with many popular word processing packages, as Works provides for saving or accepting a Works word processing document in a variety of common word processing formats.

The Personal Computer

The *microcomputer* and Microsoft Works is the focus of this text. A microcomputer has two components: *hardware* and *software*. The hardware consists of the physical components of the system. Some of the hardware components of a computer system include:

- o *Input devices*, such as the keyboard, used to enter data, or the mouse, used to point to, and select tasks.
- o *Output devices*, such as monitors and printers, used to display information.
- o A *Central Processing Unit (CPU)*, where the actual operations and calculations are performed. This is a complete integrated circuit chip that is contained on the main circuit board in the computer.
- o *Storage devices*, such as disks and tapes used to store information or programs not currently in use. This information is stored in a form known as a file. Storage devices are usually built into the system unit, which also includes the CPU and the computer's main memory.

The software for a computer is the set of instructions, or programs, that control the operation of the machine and direct the conversion of the raw data that you input into the output you desire. The software that will be discussed in this book is an integrated applications package known as Microsoft Works for Windows and is run under the Microsoft Windows system.

What is Microsoft Windows?

Microsoft Windows provides a very different computer environment than most people are used to. Usually, to use a computer, you must master a set of commands in the operating system, known as MS-DOS, for Microsoft Disk Operating System. The difficulty with learning the MS-DOS commands are:

- o They are usually not intuitive.
- o There are a great number of commands. You find that you use many of them infrequently.
- o Many of the MS-DOS commands have additional parameters that must be learned and remembered.

Microsoft Windows provides a better environment for you, both for the beginning and experienced computer user. The formal name for this environment is a Graphical User Interface, sometimes referred to as a *GUI* (pronounced *gooie*) *interface*.

Worse yet, in dealing with a textual interface, for every computer application that you use you will have to remember the necessary command or commands required to invoke the application. This is another hindrance between you and the effective use of your computer.

The model that Microsoft Windows uses for this graphical or visual environment is that of a desktop. Just like on a real desktop, you can arrange tasks, select one at will, put it back on the desk, or put it away when you are done.

Microsoft Windows uses four elements to implement this desktop-like environment:

- o A graphics mode display instead of a text mode display.
- o *Icons*, or stylized pictures, of the tasks or applications available to you.
- o Lists of commands, known as *menus*. These menus are usually available as a *pull-down menu* from a list of commands at the top of the screen.

- o A *mouse* is a graphics pointing device used to select and perform many tasks. The buttons on the mouse, primarily the left button, are used in conjunction with the mouse pointer on the screen to activate different software functions.

In a visually-oriented computing environment, such as Microsoft Windows, human interaction takes place with the computer in visual ways. This is in contrast to a textual and keyboard environment, which demands that you be proficient in the operation of a keyboard. The device with which you interact with the computer should not be an obstacle to your use of the computer, but an aid in streamlining your thought processes.

The key to this highly interactive and visual environment is the pointing device called the mouse after its superficial resemblance to a small rodent, with the tail as the interconnecting cable between the mouse and the computer.

You simply move the mouse, which moves the pointer on your screen. When the pointer is where you want it on the screen, you press one of the buttons on the mouse to make your selection. Execution of an application in Microsoft Windows is simply a matter of clicking the mouse button twice (called double-clicking) on the desired application icon.

With a little practice to gain skill in coordinating your hand motions and the location of the screen pointer, you will find that you can perform tasks in a Microsoft Windows environment with much greater ease than by simply using a keyboard.

In this chapter, and from time to time, we will suggest some alternative keystroke sequences instead of mouse actions. For example, if your fingers are already on the keyboard, the sequence **Alt-F4** and **Enter** (pressing the **Alt** and **F4** function key at the same time, and then pressing the **Enter** key) to exit Microsoft Windows may be faster than selecting the Microsoft Windows close option and confirming it by pressing the **Enter** key.

This later strategy requires a combination of a mouse movement and then moving your hands to the keyboard to press the **Enter** key. The objective in using a system effectively is to avoid moving your hands from the keyboard if they are

already there, or from the mouse, if your hand is on the mouse.

If you do not care to use the keystroke combinations, as they do require a modest effort to remember, just use the mouse operations that the text suggests.

In the balance of this chapter, we will go over some basic mouse movements and examine the basic operations of using the Windows environment.

Basic Mouse Operations

The mouse is more than simply a pointing and selection device. When you use the mouse, you will become familiar with the following mouse operations:

- o *Pointing.* The position of the mouse pointer on the Microsoft Windows desktop can be controlled by moving the mouse on the actual desktop. Moving the mouse in any direction causes the mouse pointer to move in exactly the same direction. You point to an icon on the desktop or screen by positioning the pointer over the icon.
- o *Clicking.* A click of the mouse is a rapid press and release of the left button on the top of the mouse. To select an icon, point to the icon, and then click the left mouse button. The selected icon will have its title highlighted. If you want to abort a selection, just move the mouse pointer to an empty place on the window and release the mouse button. Alternatively, click on some empty place on the window.
- o *Pressing.* The pressing operation consists of pressing and holding down (not releasing) the button on the mouse. The operation is normally used as part of the dragging operation.
- o *Dragging.* Dragging is a frequently used operation involving one of the following:
 1. The mouse pointer, or pointer, is placed over an icon, text, or a menu item.
 2. The left button on the mouse is pressed.