MICROCOMPUTER USE

Software Applications and Problem Solving with

WordPerfect 4.2 and 5.0

WordStar

Lotus 1-2-3

dBASE III Plus

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VP-Planner Supplement Available

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PREFACE

The course that uses *Microcomputer Use: Software Applications and Problem Solving with WordPerfect, WordStar, Lotus 1-2-3, and dBASE III Plus* may well be the most interesting and useful one students take. It would be difficult to think of many academic areas in which the developments in technology continue to be so rapid and astonishing, and virtually no career or profession remains untouched by the everchanging role of the microcomputer. Whether students enter business, teaching, or the professions, they will interact with the computer. Facility in microcomputer use is a highly valued asset in the work place.

It is obvious that this skill is desirable. But which aspects of computer use are best to include in a microcomputer course? What types of applications are most appropriate for students? And how can instructors *educate* rather than simply *train* students in microcomputer use? To address these questions, *Microcomputer Use: Software Applications and Problem Solving* uses the following features.

CONCEPTUAL FOUNDATION

Concepts should be stressed along with techniques, so that education and skill building are combined. Different manufacturers of the same type of software give their packages different procedures and capabilities. New versions of the same software package differ from their predecessors (as can be seen in WordPerfect's versions 4.2 and 5.0, presented simultaneously in Chapters 3–5). If students have been taught only which buttons to push—if they have been trained but not educated—then their knowledge will quickly become obsolete. Much better prepared for change are the students who grasp the technological and business needs that the various software packages attempt to meet. In *Microcomputer Use: Software Applications and Problem Solving,* each lesson first presents the concepts—to help educate the user. The tutorials then train the user in which buttons to push to produce specific results.

TUTORIALS AND EXERCISES WITH REAL-WORLD APPLICATIONS

Once they know the conceptual bases for different techniques and applications, students learn best by *doing*. The tutorials and exercises in each lesson of *Microcomputer Use: Software Applications and Problem Solving* follow this "learn by doing" approach. Whenever possible, they focus on practical applications—such as using word processing to produce business letters, resumés, and term papers; using a spreadsheet to prepare an individual budget, analyze financial data, and create charts and graphs to display and compare data more clearly and imaginatively; and using a database to maintain a list of book or compact disk titles or the list of customers and inventories required in many typical business applications.

COMPREHENSIVE, VERSATILE STRUCTURE

Microcomputer Use: Software Applications and Problem Solving is composed of 13 lessons organized into 5 major parts. Part One, Microcomputer Fundamentals, provides an introduction to microcomputer hardware and software, including a discussion of the essential MS-DOS system commands each student needs to prepare a disk for future exercises; Part Two, Word Processing, includes three lessons on word processing; Part Three, Electronic Spreadsheets, has three lessons about spreadsheets; and Part Four, Database Management, presents three lessons about database management. Part Five, Other Microcomputer Applications, contains lessons on using the microcomputer for data communications, statistics and graphics, and various other management applications.

Students who have little or no experience using a microcomputer should certainly begin with Part One. Parts Two through Four can be studied in any order, but it is usually most useful to study the parts in the order presented, especially if output from the spreadsheet or the database management system is to be integrated into a document produced on a word processor.

Each lesson contains an extensive discussion of key concepts, a summary, and exercises that range from simple to challenging. Lessons 1–11, which deal with the operating system and specific software applications, contain tutorials that help students truly understand and appreciate the concepts and reach a competent, confident skill level.

The tutorials and exercises provide over 100 hours of computer lab time. The tutorials teach the use of a software package in a step-by-step manner, taking the student slowly and thoroughly from booting the microcomputer, to entering specific data, to saving data on a file, to retrieving and editing that file, to printing the final product. The exercises, which let students practice their new knowledge, range from simple reinforcement of skills, through mastery of a wide variety of topics, to more difficult, project-length assignments.

SOFTWARE OPTIONS

Students need access to software that is reasonable in cost yet, to the greatest degree possible, full-featured, up-to-date, and similar to what they are likely to find in the work place. In the areas of databases and spreadsheets, identifying the most popular commercial packages is relatively easy: dBASE III Plus and Lotus 1-2-3, both covered here, are currently the most popular packages. In word processing, however, the choice is not so obvious. WordStar has been the industry leader, but WordPerfect is currently the best seller. Therefore, we have included them both. Also, for those who prefer an inexpensive work-alike of Lotus 1-2-3, a VP-Planner/VP-Planner Plus supplement is available. Some schools prefer, and can afford, to purchase sufficient copies of the latest versions of these commercial software packages. Others will opt to use educational versions, which may not contain all the options of the commercial versions but will be more than sufficient for almost every conceivable student application.

Harcourt Brace Jovanovich, the publisher of this textbook, has contracted with the commercial software producers to make the most recent educational versions of several of the above-mentioned packages available at no cost to schools that adopt this book. Specifications for each of these packages are given on page 82 for WordPerfect, page 340 for dBASE III Plus, and on page 547 for VP-Planner Plus. Whether students use the full commercial version or the educational version of the software, *Microcomputer Use: Software Applications and Problem Solving* will fit their needs. For still other schools or individuals who prefer to use software specifically created for educational purposes but featuring the typical "commercial" options, another version of this book—*Microcomputer Use: Word Processors, Spreadsheets, and Data Bases,* Second Edition, by Teresa Alberte-Hallam, Stephen F. Hallam, and James Hallam—is available with accompanying free MicroUSE software for the IBM PC and compatibles.

TIPS ON SELECTION AND COMPARISON OF SOFTWARE

Although students may learn how to apply the personal computer using the currently most popular commercial software packages, they should be introduced to the main features of some of the competing packages, such as SuperCalc, R:BASE, and Paradox. No one software package can suit every need, but each has advantages. *Microcomputer Use: Software Applications and Problem Solving* examines the concerns involved in selecting the appropriate software for word processing, spreadsheet, database, and other applications and briefly presents the main features of over a dozen packages.

OTHER APPLICATIONS

The major portion of the book is devoted to word processing, spreadsheets, and databases, but several other exciting and useful areas of application are also considered: data communications and public-access databases such as

CompuServe, statistical and graphics software, and a variety of other up-and-coming areas, including artificial intelligence and expert systems. For example, CompuServe currently has approximately 400,000 subscribers and, to users who have a PC and a modem access, offers hundreds of valuable online databases, a source we found invaluable in preparing up-to-date material for this book. In fact, our CompuServe electronic address is 72307,450, and we would appreciate hearing from users of *Microcomputer Use: Software Applications and Problem Solving.*

ANCILLARY MATERIALS

The Instructor's Manual that accompanies *Microcomputer Use: Software Applications and Problem Solving* contains suggested course syllabi, instructor notes and activities, and sample test questions. A data disk for student use contains the data from a select number of exercises.

ACKNOWLEDGMENTS

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Special thanks go to the people who prepared formal reviews of *Microcomputer Use: Software Applications and Problem Solving:* James Buxton, Tidewater Community College, Virginia Beach Campus; Paulette Gannett, Broome Community College; Martha Hedley, Jim Im, University of New Orleans; Robert Jenkins, Utah Valley Community College; Karen Watterson, and Sharon West, University of South Alabama. This textbook also benefitted from the suggestions of the reviewers of the Second Edition: Gerald Adkins, University of Georgia; Warren J. Boe, University of Iowa; Qwynne Larsen, Metropolitan State College; Carolyn B. Regner, University of Wisconsin, Oshkosh; Paul W. Ross, Millersville University; Leonard Sweet, University of Akron; and John Zales, Harrisburg Area Community College.

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Teresa Alberte-Hallam

Stephen F. Hallam

SOFTWARE LICENSING INFORMATION

The publisher of this textbook has contracted with commercial software firms to make educational versions of WordPerfect 4.2 and dBASE III PLUS available, through instructors, to the students who use this textbook. Instructors who request this software will receive specific instructions on how to inform students of their rights and responsibilities under those license agreements.

In addition, the publisher is required to print the following notices in the Preface. The first notice duplicates the license agreement under which dBASE III PLUS is made available; the second lists in detail the nature of the limitations to the educational version of WordPerfect 4.2.

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WORDPERFECT

The Limited-Use introductory version of WordPerfect 4.2 (L-WP) is intended to allow one to *learn* the features of WordPerfect 4.2; however, the L-WP is not intended to allow one to print usable academic or professional documents.[1]

Certain limitations *(which should not deter* learning *WordPerfect through the L-WP)* have been encrypted into the L-WP to guard against productive use, and are as follows:

I. One may work with as large a document on screen as desired, but one may only save to disk a data file no larger than 50,000k (appx. 25–30 regular pages).
   1. A data file created with the L-WP cannot be imported into regular WordPerfect, nor can a file created in regular WordPerfect be imported into L-WP.

[1] "*WPC" will be automatically printed after each paragraph of text to discourage academic or professional use of the L-WP. *See* paragraph II on page x.

II. Data files of any size may be printed through parallel printer port "1" without defining a printer, but font changes and extended ASCII characters are not allowed. Also, "***WPC**" will be printed after each paragraph.

III. One will be able to learn all the functions of WordPerfect 4.2's speller and thesaurus by calling up the "readme.wp" file and following the step-by-step directions; however, one cannot use the L-WP speller and thesaurus with any of one's own documents because there are only a limited number of words in the L-WP speller and thesaurus. (The regular speller has 115,000 words, and the regular thesaurus has approximately 150,000 words.)

IV. The help file of L-WP allows the user to retrieve the function-key template, but similar to the speller and the thesaurus described above, space will not allow the full help files on the L-WP disk.

L-WP is designed to be used for introductory, word processing courses, and thus far has been well received in these types of environments. Notwithstanding the broad abilities provided in the L-WP, presumably the L-WP will not satisfactorily substitute for regular WordPerfect 4.2, and therefore the full-feature version may be obtained directly from WordPerfect Corporation at a 75% educational discount.

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