

ACCOUNTING

INFORMATION for decisions

INGRAM ALBRIGHT BALDWIN HILL

ACCOUNTING INFORMATION for DECISIONS

Robert W. Ingram *University of Alabama*

Thomas L. Albright *University of Alabama*

Bruce A. Baldwin

Arizona State University – West

John W. Hill *Indiana University*



SOUTH-WESTERN College Publishing

An International Thomson Publishing Company

Accounting Team Director: Richard Lindgren Senior Acquisitions Editor: David L. Shaut Developmental Editor: Sara E. Wilson Production Editor: Rebecca Glaab

Production House: Peggy Williams with American Composition & Graphics, Inc.

Manufacturing Coordinator: Gordon Woodside

Cover Design: Tin Box Studio Cover Illustration: John Bleck

Internal Design: Joseph M. Devine and Michael H. Stratton

Exhibit Illustrations: Rick Moore

Exhibit Diagram Illustrations: Mohammad Monsoor

Photo Researcher: Jennifer Mayhall Marketing Manager: Matthew Filimonov

Copyright © 1999 by South-Western College Publishing Cincinnati, Ohio

ALL RIGHTS RESERVED

The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without the prior written permission of the publisher.

ISBN: 0-538-81538-8

1 2 3 4 5 6 7 8 9 VH 6 5 4 3 2 1 0 9 8

Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Accounting: information for decisions / Robert W. Ingram ... [et al.].

p. cm. Includes index.

ISBN ()-538-81538-8 (alk. paper)

1. Managerial accounting. I. Ingram, Robert W.

HF5657.4.A283 1998

657--dc21

97-51615

CIP

 $I(\widehat{T})P^{\mathfrak{g}}$

International Thomson Publishing

South-Western College Publishing is an ITP Company. The ITP trademark is used under license.

Je Caion

We dedicate this book to our families whose love and support have been essential to our success.

How to Do Well in this Course (For Students Only)

We are going to let you in on some trade secrets instructors seldom tell students. That's why this section is labeled, "For Students Only." If instructors find out we have revealed these secrets, we'll probably get a lot of mail.

Getting good grades is not a matter of luck. That's not the secret. Also, it is no secret that doing assignments (on time), going to class (regularly), getting enough sleep and exercise, eating properly, and studying throughout the semester (instead of just at exam time), will improve your grades. But, this is hard work. So, what you want is a way to get good grades and not work so hard, right? Well, pay attention—the secret is to work smarter! That's not the same as being smarter, which is a matter of luck. Here's how you work smarter.

Step 1: Determine why this course is important for you. First, figure out why you're taking this class. What are your goals for the class? Do you care about this course? Do you have a strong motivation to learn about accounting? Perhaps being an accountant comes on your list of career options just below sweeping up at McDonalds. Maybe your goal is to make lots of money. Or, maybe you're just in college to have a good time until you inherit the family fortune. In any case, this course is designed for you. One of the surest ways to have a million dollars is to start with ten million and not know anything about accounting and business management. If you don't inherit wealth, you're not likely to get it without speaking the language of business. Accounting is the language! Maybe you just want to get a good job, but you're pretty sure you don't want to be an accountant. Fine! This course isn't going to make an accountant out of you. It will help you understand some of the "mystical rituals" of accounting that non-accountants often find confusing. Whatever type of management position you have in any organization, you can be pretty sure you're going to have to work with accountants and with accounting information. You should know they can have a major effect on your life. Many organizations use accounting information to evaluate their employees for salary and promotion decisions. You should understand how to interpret this information. You may even learn

accounting isn't what you think. Whether you grow to love or hate accounting, decide what you can get out of this course that will be useful to you.

Step 2: Find out what your instructor expects of you in the course. Next, check out your instructor. If you're lucky, your instructor is sensitive, warm, caring, has a good sense of humor, is witty, loves teaching, and wants you to do well in the course. If instead, your instructor is more normal (and less perfect), remember, the instructor is still the instructor. And, as the instructor she has power over your life. So, find out what she expects from you. What are her goals for the course? What does he want you to know or be able to do once you complete the course? Perhaps, he will tell you (good sign), but if not, ask. You should say: "Professor Whatever-Your-Name-Is (it would be wise to use the right name) what's the lowdown on the layout for this course?" This is education jargon for "what are your goals for this course?" This may catch her off guard, so give her a minute or two to think. You may even have to wait until the next class meeting to get your answer. Make sure you and your instructor understand each other's goals. Some accounting instructors expect all their students to become accountants. If you have one of these, make it clear. Tell your instructor: "I don't plan to be no accountant!" (Make sure you add the ant, or you may get fast agreement.) Find out what's in this course for you.

Step 3: Find out how you will be graded. Now, find out how you will be graded. How does the instructor test? Is he one of the picky types: "What is the third word on the fifth line on page 211?" Or, does he go in for the broader, thought questions: "Explain how accounting was instrumental in negotiating the third treaty of Versailles in 1623." Does he go in for multiple guess, or are short answers his cup of tea? Whatever the method, you need to know what is expected of you and how these expectations translate into grades. Occasionally, you'll find an instructor whose stated expectations don't agree with how he tests and grades. That's why you need to find out about both expectations and grades. If they don't seem to be consistent, you'll have to determine what the instructor really expects.

Step 4: Emphasize learning what's important. Figure out what you need to do to accomplish your goals and meet the instructor's expectations. A major lesson you should learn, if you haven't already, is "what you take from a course (and almost anything else) depends on what you bring to it." Your attitude is important. If you decide something is worth learning, you'll probably find a way to learn it. Not because you're supposed to learn it, but because you want to. "Wanting to" is the biggest part of working smarter. Wanting to learn will go a long way toward helping you get a good grade. Unfortunately, it may not be enough unless what you want to learn is also what your instructor wants you to learn. Therefore, you need to make sure you and your instructor are on the same wave length. If you're not, talk it over. Find out why the instructor has a different outlook. You may change your opinion about what's important. Determine how to focus your efforts. Not everything in this book or course is equally important. Focus on what's most important to you and to your instructor.

Step 5: Communicate with your instructor. Try to remember your instructor is a person. Even the authors of this book are people. We have wives, children, and pets. Most instructors really want to see you do well, but we need your help. Instructors don't know everything. In particular, we can't read your mind. You need to let your instructor know if you're having problems understanding the material you're expected to learn, figuring out what the instructor expects of you, or figuring out how to prepare for tests and other assignments. Talk with your instructor about problems you're having with the class. Remember, your instructor really is human.

This is your class. You paid for it. OK, maybe it was your parents, or somebody else who put out hard, cold cash for you to take this course. Don't let anybody keep you from getting your money's worth. Working smarter means determining what's important and focusing your attention and efforts on these things. Then, don't be

distracted from your goals. If you run into problems, deal with them. If you don't understand something in class or in the book, ask questions. If you're afraid of asking dumb questions in class, remember: looking dumb in class is better than looking dumb on an exam. If you think you may be missing key points, talk with your instructor. If you want to learn, you can.

That's it. Give it a try. We think you'll find the course more enjoyable and the experience more rewarding. Of course, you might also try doing assignments, going to class, getting enough sleep and exercise, eating properly, and studying throughout the semester. They usually help, even though they are hard work.

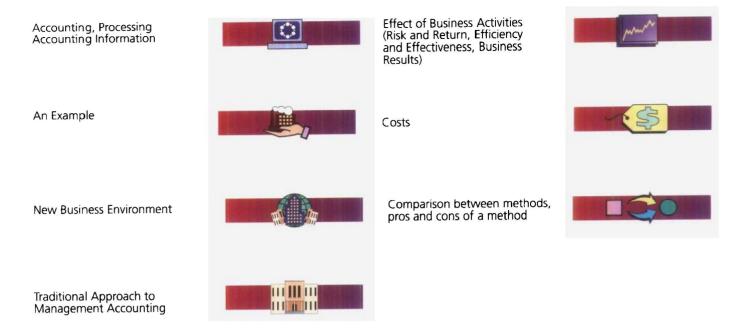
Best wishes to you, not only in this course, but throughout life.

Rob Ingram Tom Albright Bruce Baldwin John Hill

A side note:

To aid you in the learning process, basic concepts are indicated by margin icons. The concepts and their respective icons are shown below.

Transformation Process	Control of Accounting Systems	
Reporting Rules, Standards	Cash, Cash Flow	\$
Decisions, Decision Making, Analysis, Understanding, Strategy	Time, Accrual Accounting	
Organizations, Management, Professionals	International	
Financial Reports	Stockholders	
Accounting Information Systems	Obligations, Valuation, Contracts, Service Organizations	



One more icon lets you know there's a related Internet hotlink connected to the text's World Wide Web site. Visit our site and follow the directions.

A Major Breakthrough

BRINGING DOWN THE WALLS

There's a major breakthrough happening in a business near you. It's happening in large and small companies, in manufacturing and service firms, in global conglomerates and local merchandisers. This breakthrough promises to change the way these businesses operate and meaningfully improve their results. This is not a technological breakthrough, although it is fostered in many ways by new technologies. It is not a breakthrough of technique, although, again, new techniques make it more productive.

This major breakthrough is one of perspective, of attitude, of how people look at and use information. Specifically, the breakthrough is in the role of accounting information and personnel in the modern business organization.

That giant crashing noise you hear is the thick walls between accounting and other business functions coming down. Accounting is being liberated from the seclusion of the accounting department and integrated into one large room where decisions about the entire business are made. Accounting, going far beyond its traditional role of collecting data and creating information, is now in the business of sharing information with the rest of the team and sharing in the decision-making process.

STRENGTH IN UNITY

The crumbling of these old walls means big changes not only for how accounting is viewed, but how it is taught. Accounting: Information for Decisions directly responds to the integration of accounting into the mainstream of business decision-making. Students using this text gain the advantage of seeing accounting as a source of invaluable information, a source of real business intelligence. They learn how to interpret and leverage that information into smart business decisions. In short, they prepare themselves for business.

Accounting: Information for Decisions also unifies coverage of financial and managerial accounting for the student. This single text tells a complete story. As students learn about the use of financial accounting information, they experience a foreshadowing of the use of managerial accounting to support business decisions. Then, when they move on to the managerial accounting chapters, the students readily grasp the total picture of accounting information's role in successful business operations.

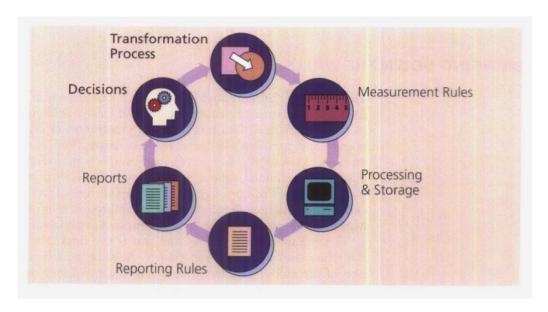
DECISIVE ACTION

As described above, the driving force behind this text is decision-making. Students using this text today will soon be business managers. Accounting information will be an important tool for many of them as they make the decisions necessary to improve their operations and results. Every point of coverage has been selected with this decision making focus in mind.

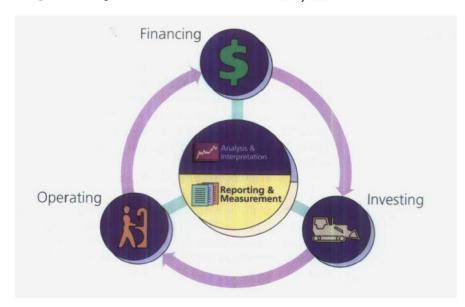
FINANCIAL CHAPTERS

Transformation of resources and timing of events direct the content and organization of chapters 1–13. They are introduced and explained in the first several chapters and provide the foundation for the examination of accounting information and decisions that comprise the remainder of the financial section.

Every chapter opens with a graphic that visually assists students in focusing on the theme of the chapter. Chapters 1–6 open with a graphic of the accounting information cycle.



Chapters 7–13 present the activities of the firm cycle.



The first chapter explains the transformation process and the structure of business organizations that is necessary for this process. Chapter 2 introduces accounting within the context of this transformation process, describing the information needs of the decision makers who operate the business. This chapter introduces the structure and purpose of the accounting system as it is derived from these information needs.

The third chapter introduces timing issues that are essential to accrual accounting and compares accrual and cash flow measures of activities in the transformation process. The fourth chapter describes the accounting cycle as a process of measuring, recording, and reporting accrual and cash flow information. Chapters 5 and 6 examine financial statements as interrelated summaries of business activities that rely on both accrual and cash flow measures. Chapters 3 through 6 prepare students to understand and interpret the full range of financial statement information provided by actual corporations. Those aspects of the accounting process necessary for this preparation are covered in depth, using simple, carefully explained examples.

Chapter 7 presents another issue important for understanding the dynamics of business activities over time, the time value of money. This aspect of the time dimension is important for understanding accrual measurement of long-term contractual relationships that occur frequently in business activities.

Chapters 8 through 13 examine accounting for the transformation process in depth. These chapters describe specific measurement and reporting issues that arise in the transformation process. These issues are examined with reference to corporate accounting reports with the goal of understanding and interpreting these reports.

It is relevant to note not only what has been included in these chapters, but what has been omitted. Topics covered in most introductory financial books that have little to do with corporate reporting, such as bank reconciliations, petty cash funds, or payroll accounting, receive little or no attention in this text. Technical measurement issues, such as FIFO and LIFO, are described simply, with the goal of understanding the effects of these issues on accounting information rather than emphasizing mathematical procedures for deriving these numbers.

MANAGERIAL CHAPTERS

As in the financial chapters, the focus is on decisions. For instance, the theory of constraints, advanced manufacturing technology, just-in-time manufacturing, cellular manufacturing, statistical process control and non-financial performance measures are introduced, not as ends in themselves, but as frameworks or approaches to decision making. Activity-based costing is considered as an approach to product mix and pricing decisions in a multi-product environment. It is the decision process, not the computation process, that takes the lead.

Some topics not considered in detail in most managerial texts are explored in Accounting: Information for Decisions because they are central to decision making, including internal control and Japanese cost management techniques.

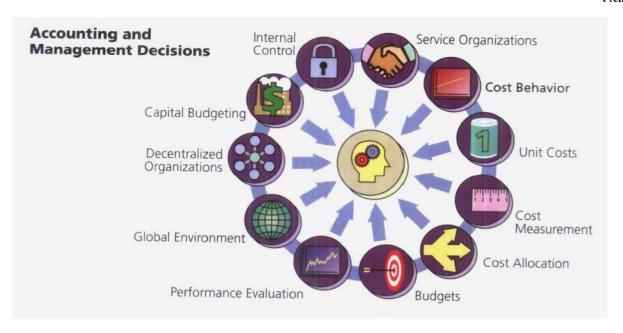
As in the financial chapters, all managerial chapters open with a graphic (shown on page xii). For chapters 14–26, the theme of decision making is visually emphasized through the accounting and management decision circle.

Chapter 14 introduces the role of managerial accounting, and how it is changing in response to the new global marketplace. The greatly increased interaction between accounting and other business functions is highlighted. Activity-based costing is also introduced.

Chapters 15–18 examine the full spectrum of product costing issues and how they relate to decision making in the modern organization. The view here is thoroughly strategic, emphasizing business implications over procedure.

Chapters 19–23 focus on control, measurement, and evaluation. Budgets, internal performance, global issues, decentralization, and capital investment decisions are examined in this section. As in all chapters, examples are drawn from the business world to illustrate how real companies use accounting information for advantage in the marketplace.

The final three chapters of the text explore expanded topics: internal control, service companies, and the Japanese perspective.



MANY SMALL BREAKTHROUGHS YIELD ONE BIG ONE

The content, organization, and format of this text differ from those of most accounting texts. This is not by accident. The choices we made in creating this text were shaped by several strong beliefs about teaching and learning accounting:

The real world is the best teacher. Consistent attention is paid to what real companies actually do, which often differs from what textbooks describe. Traditional textbook formats and terms often are not found in practice. This reality gap is a disservice to students; we have made great efforts to close it. Examples of actual corporate practices are illustrated throughout the text. The names of actual companies are presented in bold type where these companies are first used.

Never forget the final destination. Many texts become so entrenched in the detailed methods and mechanics of accounting that students lose sight of the big picture. In contrast, our conceptual basis links business activities to accounting reports and business decisions. This conceptual basis is a thread running throughout the text that links each chapter to the overall purpose of the book.

Mind your business. Students need to understand how businesses operate in order to make effective use of accounting information. We emphasize accrual and cash flow relationships because they make clear what businesses do. These relationships can be used to explain past activities and predict or plan for future activities. Students are guided in the use of accounting information rather than being forced to memorize bookkeeping procedures. The conceptual basis and use of accounting information provide a foundation for all students to understand accounting and are as essential for accounting majors as for non-majors.

Practice makes practical. Carefully prepared end-of-chapter materials reinforce chapter objectives, with emphasis on using accounting information to identify, avoid, or correct business problems. This practical approach builds critical thinking and analytical skills which will be essential to the career success of students.

Learning starts with comprehension... Careful explanation using understandable language and simple, straightforward examples makes Accounting: Information for Decisions

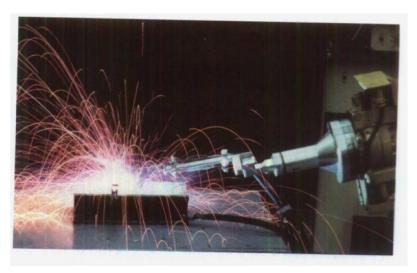
easier for students to read and understand. All material is related to the underlying conceptual focus of the book so that students can understand why accounting is the way it is. Definitions are provided when terms are first used. Jargon is avoided to the extent possible. Accounting is presented as a logical and essential process for understanding business activities, not as a mystical or arcane set of terms, rules, and procedures.

...And comprehension starts with reading. Although it may be self-evident that students can only learn from those texts they actually read, many books seem to ignore this idea. This text was designed explicitly to be read and enjoyed. A full-color, visual format is used to stimulate and hold students' attention. A reader-friendly style, including dialogue, assists with comprehension. Students are encouraged to apply what they are learning to issues with which they are familiar. Photos at the beginning of each chapter help students visualize the business environment. Additional photos in the chapters identify products and company settings for topics and self-study problem materials.

PEDAGOGY: BREAKING THROUGH TO UNDERSTANDING

The principles above guide all aspects of Accounting: Information for Decisions. In particular, the following pedagogical elements provide students optimal learning opportunities:

Opening Photos—these attention-sparking photos represent the business or topic featured in the chapter.



Learning Objectives—each chapter starts with a list of key objectives. The objectives also appear in the margins at appropriate places within the chapter, marked with concept icons (see icons on pages vii and viii). In-context objectives help students focus on important learning goals, consistently presented in active voice ("describe," "identify," "explain," etc.).

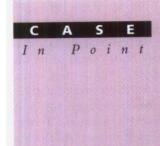
Illustrated Processes—manufacturing processes are visually presented to reinforce the narrative information. Students are able to see the setting for better understanding.



Internet Resources—a dedicated web site ensures that this text does more than simply mention Internet resources. The site incorporates the latest links to relevant accounting resources. Think of it as one-stop-surfing for the relevant accounting sites.

Mi.

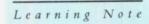
Case in Point—these narratives share information about real companies as illustrative examples of the topics being considered.



Polaroid introduced the new Captiva camera in June 1993. The manufacturing process is monitored by a statistical process control system. Statistical process control charts are maintained in real time by the production organization and help Polaroid achieve a high level of quality. For example, the shutter subassembly line is part of a quality effort that attempts to minimize defects to one defect in three million units produced. A camera or shutter can be considered defective and rejected for any of 50 different reasons, ranging from shutters that stick to strobes that do not fire. Thus, Polaroid is using statistical process control to help ensure that its new camera meets or exceeds customer expectations.

Source: For more information, see A Picture of Quality, Quality (January 1995): 43-44, 46.

Learning Note—these brief passages clarify or extend the chapter content, stressing information helpful to students.



Not all U.S. corporations pay income taxes on profits. Certain small corporations, known as Subchapter S corporations in the tax laws, are treated like partnerships for tax purposes. Each stockholder is taxed on his or her share of the corporation's profits.

Self-Study Problems—these problems—three in each chapter—encourage students to stop and review what they have learned as they move through the chapter. Each is illustrated with a photograph for visual interest. A solution at the end of the chapter completes the self-study loop.

End-of-Chapter Features—the text offers a variety of EOC material for a wide range of teaching goals: *exercises* for simple reinforcement of concepts, *problems* for more complex experience, *cases* to challenge thinking and analytical skills, and *projects* for broader, research experience. Most assignments lend themselves to cooperative learning and team experience, essential in today's business environment.

Annual Report of General Mills, Inc.—the complete, full-color annual report of this well known firm is found in Appendix B. End-of-chapter assignments tie to this resource.

Glossary and Index—a complete glossary and a complete index conclude the text. Glossary definitions indicate the chapter(s) where the term is defined. The index also highlights real company names in color.

ANCILLARIES

For the Student:

Study Guides (Ch 1–13; Ch 14–26): These guides reinforce and enhance student understanding of the topics covered in the text. Each is a thorough, value-adding book, prepared by Stephen Senge and George Sanders, both of Western Washington University.

Annual Report Project and Readings: This highly popular project by Bruce Baldwin, of Arizona State University West, is designed for use by either learning teams or individual students. It is tailored to reinforce the concepts presented in the financial accounting chapters of the text. Students work with annual reports of real companies to understand, interpret, and analyze the information. The project guides them through this process. Interesting readings from publications like *The Wall Street Journal* along with supporting Questions for Consideration provide additional material for discussion.

PowerNotes and Forms (Ch 1–13; Ch 14–26): Contained in these volumes are copies of the key PowerPoint slides with space for note taking. In addition, working paper forms have been included to assist students in preparing selected homework assignments.

CONTACCT II, Version 3: Contained in this accounting cycle software package by D. V. Rama and K. Raghunandan, both of the University of Massachusetts at Dartmouth, are tutorials, practice assignments, graded homework assignments, and a student instruction booklet. This newly revised software works with the latest version of ToolBook. (A run-time version is provided in the package.) The presentation is livelier and, as with previous versions, allows students to use the package in a lab or at home.

Business Link Video Workbooks: These student workbooks enrich student understanding of the Business Link videos through questions and activities.

For the Instructor:

Solutions Manuals (Ch 1–13; Ch 14–26): Author-prepared and carefully verified solutions to all exercises, problems, and cases are presented in these manuals.

Solution Transparencies (Ch 1–13; Ch 14–26): Where appropriate, solutions to the end-of-chapter assignments have been printed in large type, on easy-to-read acetate transparencies for use in classroom presentations.

Test Bank: This thorough test bank has been carefully assembled and verified. It provides testing materials for key points covered in each chapter.

Westest (Windows-based): This microcomputer version of the test bank allows for random selection of questions and, if desired, generation of multiple tests. Instructor-created items may be imported in ASCII format for more customized testing.

Cooperative Learning Techniques and Instructor's Guide: Contained in this supporting item are chapters explaining cooperative learning techniques for use in the classroom and matrices that suggest application of techniques to specific end-of-chapter items. Philip Cottell, Jr., of Miami University, and Barbara Millis, of the United States Air Force Academy, have prepared this information. In addition, there are outlines of each chapter, teaching notes, and descriptions of the exercises, problems, and cases to assist in class preparation.

Cooperative Learning Workshop Video: This workshop video features Philip Cottell, Jr., of Miami University, who explains a number of cooperative learning techniques for use in the teaching of accounting.

PowerPoint Presentations (Ch 1–13; Ch 14–26): Creatively prepared by Doug Beets and Paul Juras, both of Wake Forest University, these colorful, lively PowerPoint slides present the key topics of each chapter. This product has a built-in PowerPoint viewer program.

BusinessLink Video: Six video segments cover key financial accounting topics, while five address managerial topics. Real companies are featured.

BusinessLink Video Instructor's Manuals: These manuals assist instructors in the use of the BusinessLink Videos and student workbooks.

Annual Report Project Manual: Prepared by Bruce Baldwin, Arizona State University West, this manual provides guidance in using the Annual Report Project and Readings.

CONTACCT II Version 3, Manual: This manual provides solutions to the problems contained in the student software.

CONTACCT II Version 3, Test Bank: This ASCII-format 3.5" disk contains problems for testing students using the student software.

Related Products:

Using QuickBooks 4.0 in the First Accounting Course: Written by Glenn Owen, Alan Hancock College, and Paul Solomon, San Jose State University, this is the first text of its kind to provide a self-paced environment where students use a commercially-available software product to analyze, interpret, and investigate accounting information to make business decisions. Managerial aspects of computerized accounting, such as financial analysis and comparisons, also are covered. The 4.0 software is also available with this book.

Using QuickBooks 5.0 in the First Accounting Course: This version of the text provides information for using the 5.0 version of the commercial software.

Hazzard Travel: With this computerized simulation, students maintain an accounting system for the first two months of operation of Hazzard Travel, a small service business. Created by Donna Ulmer, St. Louis Community College at Meramec, and M. Robert Carver, Southern Illinois University-Edwardsville, this practice set familiarizes students with basic accounting documents, procedures, and concepts. Students make investing, financing, and operating decisions that may result in a different financial outcome from their classmates. The problems are unstructured, encouraging creativity and individual judgment.

The Accounting System: A Self-Study Primer for Introductory Accounting: William Ruland, CUNY-Baruch College, has designed this self-paced workbook to help financial statement users who may have had little or no exposure to the accounting system understand accounting procedures.

Electronic Spreadsheet Applications for Accounting Principles (Using Lotus 1-2-3 for Windows) or (Using Excel Applications for Accounting): These text-workbooks, by Gaylord Smith, Albion College, include a software tutorial and accounting application with an accompanying template disk. Preprogrammed problems require students to develop formulas and enter data to complete partially constructed spreadsheet models. Model-building problems give students experience in developing their own spreadsheet models.

The Internet Guide for Accounting: This guide, written by Georganna Hall, University of Texas-Arlington, and Gemmy Allen, Mountain View College, will enhance student understanding of accounting concepts while teaching them the basics of using the Internet to access and analyze information.

Writing, Ethics and Group Projects for Financial Accounting: Iris and Bruce Stuart, both of Concordia College, have written an ideal supplement for the financial accounting course. This casebook emphasizes communication skills, problem-solving, critical thinking, and ethics while challenging students to make real-world decisions.