



# Microsoft® Office 2010

**ACCESS**

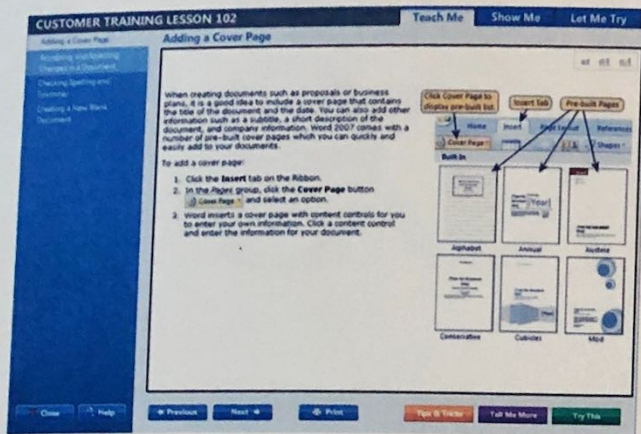
**THE O'LEARY SERIES**

TIMOTHY J. O'LEARY

LINDA I. O'LEARY

A Case Approach | **Complete**





## Teach Me, Show Me, Let Me Try!

### INCLUDES:

- Microsoft® Office Suite
- Microsoft® Outlook
- Windows XP
- Windows Vista
- Windows 7
- Internet Explorer 7
- Internet Explorer 8
- Computer Concepts

Since 1999, instructors have been using SimNet to measure student outcomes in a virtual Microsoft® Office environment. Now completely online, with nothing to install, students can practice and study their skills at home or in the school lab. Moreover, this resource is an ideal course solution but even more valuable as it can be used beyond the course for self-study!

### IT'S EASY!

SimNet is an EASY & INTUITIVE, true turn-key design. Instructors can quickly and efficiently assign content around the needs of your course, edit throughout the semester, and copy to multiple sections and instructors! SimNet is scannable so students can quickly scan the tasks in a lesson to identify the skills they know and the ones they don't... saving them time!

### STUDENTS LEARN BEYOND THE BOOK!

SimNet offers a complete computer-based learning side that presents each skill or topic in several different modes:

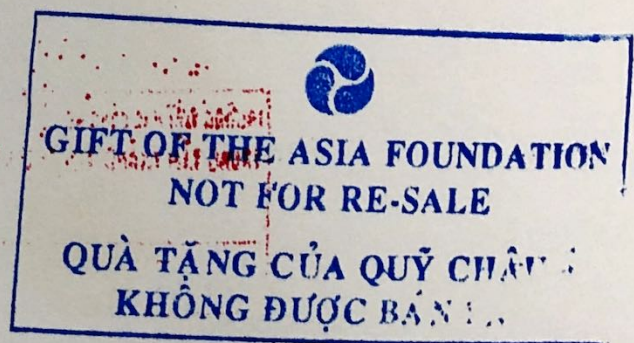
- **Teach Me:** combines instructional text, graphics, and interactivity to present each skill.
- **Show Me:** uses animation with audio narration to show how the skill is implemented.
- **Let Me Try:** allows students to apply and practice what they have learned on their own to master the learning objective.

### STUDENTS LEARN BEYOND THE COURSE!

SimNet allows students to perform their best in the course and SimNet allows students to continue learning Office skills for future classes and beyond through its self-study material! Need to learn an advanced topic or a refresher on a certain skill? Use SimSearch to search or pull up specific content when you need it.

### SIMGRADER for OFFICE 2010... YOUR PROJECT LIBRARY!

SimGrader is the most recent addition to SimNet Online, McGraw-Hill's online training and assessment software for Microsoft Office skills and more. This online program provides automatic grading of projects for Microsoft Office Suite and can be used seamlessly within SimNet Online or can be used separately if needed. Available with a full project library, SimGrader offers the widest range of projects from any of our Office series. Moreover, this offers instructors the benefit of utilizing projects that are specifically related to their student's needs and areas of study. SimNet and SimGrader are a completely online system that is easy to use for both instructors and students alike. Together, they provide an ideal solution for students to gain complete knowledge of Office skills and applications.





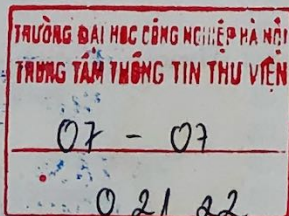
THE O'LEARY SERIES

COMPLETE EDITION

# Microsoft® Access 2010: A Case Approach

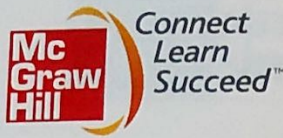
Timothy J. O'Leary  
*Professor Emeritus,  
Arizona State University*

Linda I. O'Leary



Connect  
Learn  
Succeed™





## THE O'LEARY SERIES MICROSOFT® ACCESS 2010: A CASE APPROACH, COMPLETE EDITION

Published by McGraw-Hill, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY, 10020. Copyright © 2011 by The McGraw-Hill Companies, Inc. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of The McGraw-Hill Companies, Inc., including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.

Some ancillaries, including electronic and print components, may not be available to customers outside the United States.

This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 0 RMN/RMN 1 0 9 8 7 6 5 4 3 2 1

ISBN 978-0-07-733135-1

MHID 0-07-733135-4

Vice president/Editor in chief: *Elizabeth Haefele*

Vice president/Director of marketing: *Alice Harra*

Publisher: *Scott Davidson*

Sponsoring editor: *Paul Altier*

Director, digital products: *Crystal Szewczyk*

Development editor II: *Alaina G. Tucker*

Development editor: *Alan Palmer*

Marketing manager: *Tiffany Russell*

Digital development editor: *Kevin White*

Director, Editing/Design/Production: *Jess Ann Kosic*

Project manager: *Marlena Pechan*

Senior buyer: *Michael R. McCormick*

Senior designer: *Srdjan Savanovic*

Senior photo research coordinator: *Jeremy Cheshareck*

Manager, digital production: *Janean A. Utley*

Media project manager: *Cathy L. Tepper*

Cover design: *Srdjan Savanovic*

Interior design: *Srdjan Savanovic*

Typeface: *10/12 New Aster LT STD*

Compositor: *Laserwords Private Limited*

Printer: *R. R. Donnelley*

Cover credit: © *Kjpargeter/Dreamstime.com*

Credits: The credits section for this book begins on page ACC.1 and is considered an extension of the copyright page.

### Library of Congress Cataloging-in-Publication Data

O'Leary, Timothy J., 1947-

Microsoft Access 2010 : a case approach / Timothy J. O'Leary, Linda I. O'Leary.—

Complete ed.

p. cm.—(The O'Leary series)

Includes index.

ISBN-13: 978-0-07-733135-1 (pbk.)

ISBN-10: 0-07-733135-4 (pbk.)

1. Microsoft Access. 2. Database management. I. O'Leary, Linda I. II. Title.

QA76.9.D3O3874 2011b

005.75'65—dc23

2011027550

The Internet addresses listed in the text were accurate at the time of publication. The inclusion of a Web site does not indicate an endorsement by the authors or McGraw-Hill, and McGraw-Hill does not guarantee the accuracy of the information presented at these sites.



● Introduction to Microsoft Office 2010	IO.1	● Lab 5: Creating Custom Forms	AC5.1
● Lab 1: Creating a Database	AC1.1	● Lab 6: Creating Custom Reports, Charts, Pivot Charts, and Mailing Labels	AC6.1
● Lab 2: Modifying and Filtering a Table and Creating a Form	AC2.1	● Working Together 2: Linking and Splitting Databases	ACWT2.1
● Lab 3: Querying Tables and Creating Reports	AC3.1	● Command Summary	ACCS.1
● Working Together 1: Exporting Data	ACWT1.1	● Introduction to Office Glossary	IOG.1
● Lab 4: Importing and Querying Tables	AC4.1	● Access Glossary of Key Terms	ACG.1
		● Index	ACI.1

## Contents

### INTRODUCTION TO MICROSOFT OFFICE 2010 IO.1

<b>Objectives</b>	IO.1
<b>What Is Microsoft Office 2010?</b>	IO.2
<b>Word 2010</b>	IO.2
Word 2010 Features	IO.2
<b>Excel 2010</b>	IO.5
Excel 2010 Features	IO.5
<b>Access 2010</b>	IO.7
Access 2010 Features	IO.7
<b>PowerPoint 2010</b>	IO.10
PowerPoint 2010 Features	IO.10
<b>Instructional Conventions</b>	IO.12
Commands	IO.12
File Names and Information to Type	IO.13
<b>Common Office 2010 Features</b>	IO.13
Common Interface Features	IO.14
Common Application Features	IO.28
Using Office Help	IO.60
Exiting an Office 2010 Application	IO.65
<b>LAB REVIEW</b>	IO.66
Key Terms	IO.66
Command Summary	IO.66

<b>LAB EXERCISES</b>	IO.68
Hands-On Exercises	IO.68
Step-by-Step	IO.68
On Your Own	IO.70

### LAB 1 CREATING A DATABASE AC1.1

<b>Objectives</b>	AC1.1
<b>Case Study</b>	AC1.2
<b>Concept Preview</b>	AC1.4
<b>Designing a New Database</b>	AC1.4
Planning the Club Database	AC1.5
<b>Creating and Naming the Database File</b>	AC1.6
Exploring the Access Window	AC1.9
Using the Navigation Pane	AC1.10
<b>Creating a Table</b>	AC1.10
Defining Table Fields	AC1.11
Entering Field Data	AC1.12
Changing Field Names	AC1.13
Defining Field Data Type	AC1.14
Using the Quick Add Feature	AC1.17



Using Field Models	AC1.18	Step-by-Step	AC1.94
Deleting a Field in Datasheet View	AC1.21	On Your Own	AC1.108
<b>Modifying Field Properties</b>	AC1.22		
Switching Views	AC1.22		
Setting Field Size	AC1.24		
Changing Data Type	AC1.26		
Editing Field Names	AC1.27		
Defining a Field as a Primary Key	AC1.28		
Entering Field Descriptions	AC1.29		
Deleting a Field in Design View	AC1.31		
Creating a Field in Design View	AC1.31		
Creating an Attachment Field	AC1.34		
<b>Entering and Editing Records</b>	AC1.34		
Verifying Data Accuracy and Validity	AC1.35		
Using AutoCorrect	AC1.37		
Attaching Files to Records	AC1.39		
Moving between Fields	AC1.44		
Zooming a Field	AC1.45		
<b>Changing Column Width</b>	AC1.47		
Resizing a Column	AC1.48		
Using Best Fit	AC1.49		
<b>Navigating among Records</b>	AC1.54		
Moving Using the Keyboard	AC1.54		
Moving Using the Navigation Buttons	AC1.55		
Moving to a Specific Record	AC1.56		
<b>Deleting Records</b>	AC1.57		
<b>Creating a Table in Design View</b>	AC1.59		
Inserting a Field	AC1.59		
Moving a Field	AC1.61		
Copying Field Content	AC1.64		
<b>Creating Relationships</b>	AC1.65		
Closing Tables	AC1.67		
Viewing Relationships	AC1.67		
Defining Relationships	AC1.69		
Opening Tables	AC1.70		
<b>Closing and Opening a Database</b>	AC1.72		
Closing a Database	AC1.73		
Opening a Database	AC1.73		
<b>Setting Database and Object Properties</b>	AC1.75		
Documenting a Database	AC1.76		
Documenting a Table Object	AC1.77		
<b>Previewing and Printing a Table</b>	AC1.78		
Previewing the Table	AC1.78		
Printing a Table	AC1.80		
Changing the Page Orientation and Margins	AC1.80		
<b>Exiting Access</b>	AC1.83		
<b>FOCUS ON CAREERS</b>	AC1.83		
<b>CONCEPT SUMMARY</b>	AC1.84		
<b>LAB REVIEW</b>	AC1.86		
Key Terms	AC1.86		
Command Summary	AC1.87		
<b>LAB EXERCISES</b>	AC1.90		
Screen Identification	AC1.90		
Matching	AC1.91		
True/False	AC1.91		
Fill-In	AC1.92		
Multiple Choice	AC1.92		
Hands-On Exercises	AC1.94		

## LAB 2 MODIFYING AND FILTERING A TABLE AND CREATING A FORM AC2.1

<b>Objectives</b>	AC2.1
<b>Case Study</b>	AC2.2
<b>Concept Preview</b>	AC2.4
<b>Customizing Fields</b>	AC2.4
Setting Display Formats	AC2.6
Setting Default Values	AC2.7
Defining Validation Rules	AC2.10
<b>Hiding and Redisplaying Fields</b>	AC2.14
Hiding Fields	AC2.14
Redisplaying Hidden Fields	AC2.16
<b>Creating a Lookup Field</b>	AC2.17
Using the Lookup Wizard	AC2.18
<b>Searching for, Finding, and Replacing Data</b>	AC2.23
Searching for Data	AC2.23
Finding Data	AC2.25
Replacing Data	AC2.30
<b>Sorting Records</b>	AC2.32
Sorting on a Single Field	AC2.33
Sorting on Multiple Fields	AC2.34
Formatting the Datasheet	AC2.36
Changing Background and Gridline Colors	AC2.36
Changing the Text Color	AC2.39
<b>Filtering a Table</b>	AC2.40
Using Filter by Selection	AC2.41
Removing and Deleting Filters	AC2.42
Filtering Using Common Filters	AC2.43
Filtering on Multiple Fields	AC2.45
<b>Creating a Simple Form</b>	AC2.46
Using the Form Tool	AC2.47
Using the Multiple Items Tool	AC2.48
Using the Form Wizard	AC2.48
<b>Modifying a Form</b>	AC2.54
Using Form Layout View	AC2.54
Moving Controls	AC2.55
Applying a Layout	AC2.56
Sizing and Moving Controls in a Layout	AC2.58
Splitting a Layout	AC2.60
Removing Rows from a Layout	AC2.61
Inserting, Merging, and Splitting Cells	AC2.63
Adding Existing Fields	AC2.68
Changing the Design Style	AC2.69
<b>Using a Form</b>	AC2.71
Navigating in Form View	AC2.71
<b>Searching in Form View</b>	AC2.72
Sorting and Filtering Data in a Form	AC2.74
Adding Records Using a Form	AC2.75
<b>Organizing the Navigation Pane</b>	AC2.76
<b>Previewing and Printing a Form</b>	AC2.78
Printing a Selected Record	AC2.78



<b>Identifying Object Dependencies</b>	AC2.79
<b>FOCUS ON CAREERS</b>	AC2.81
<b>CONCEPT SUMMARY</b>	AC2.82
<b>LAB REVIEW</b>	AC2.84
Key Terms	AC2.84
Command Summary	AC2.85
<b>LAB EXERCISES</b>	AC2.88
Matching	AC2.88
True/False	AC2.88
Fill-In	AC2.89
Multiple Choice	AC2.90
Hands-On Exercises	AC2.92
Step-by-Step	AC2.92
On Your Own	AC2.102

<b>Compacting and Backing Up the Database</b>	AC3.69
<b>FOCUS ON CAREERS</b>	AC3.71
<b>CONCEPT SUMMARY</b>	AC3.72
<b>LAB REVIEW</b>	AC3.74
Key Terms	AC3.74
Command Summary	AC3.75
<b>LAB EXERCISES</b>	AC3.78
Matching	AC3.78
True/False	AC3.78
Fill-In	AC3.79
Multiple Choice	AC3.80
Hands-On Exercises	AC3.82
Step-by-Step	AC3.82
On Your Own	AC3.88

## LAB 3 QUERYING TABLES AND CREATING REPORTS

AC3.1

<b>Objectives</b>	AC3.1
<b>Case Study</b>	AC3.2
<b>Concept Preview</b>	AC3.4
<b>Refining the Database Design</b>	AC3.4
Evaluating Table Design	AC3.5
Creating a Table List Lookup Field	AC3.10
Deleting a Table	AC3.13
<b>Defining and Modifying Relationships</b>	AC3.13
Deleting Relationships	AC3.15
Editing Relationships to Enforce Referential Integrity	AC3.18
<b>Creating a Query</b>	AC3.19
Using the Query Wizard	AC3.20
Filtering a Query	AC3.23
Using Query Design View	AC3.25
Adding a Second Table to the Query	AC3.25
Adding Fields	AC3.27
Specifying Query Criteria	AC3.29
Hiding and Sorting Columns	AC3.32
Rearranging the Query Datasheet	AC3.34
Finding Unmatched Records	AC3.35
Finding Duplicate Records	AC3.39
Creating a Parameter Query	AC3.41
<b>Displaying a Totals Row</b>	AC3.45
<b>Creating Reports</b>	AC3.46
Using the Report Tool	AC3.47
Viewing the Report	AC3.48
Using the Report Wizard	AC3.50
Modifying the Report in Layout View	AC3.53
Changing the Report Theme	AC3.56
Modifying a Report in Design View	AC3.56
Formatting Controls	AC3.60
Deleting a Field	AC3.63
Sorting and Filtering Data in a Report	AC3.64
<b>Preparing Reports for Printing</b>	AC3.65
Modifying the Page Setup	AC3.65
Previewing and Printing Reports	AC3.67
Printing a Relationships Report	AC3.68

## WORKING TOGETHER 1: EXPORTING DATA

ACWT1.1

<b>Case Study</b>	ACWT1.1
<b>Exporting Data</b>	ACWT1.1
Exporting to Excel 2010	ACWT1.2
Exporting to Word 2010	ACWT1.6
Copying a Query Object to Word 2010	ACWT1.7
Copying a Report	ACWT1.9
<b>LAB REVIEW</b>	ACWT1.13
Key Terms	ACWT1.13
Command Summary	ACWT1.13
<b>LAB EXERCISES</b>	ACWT1.14
Hands-On Exercises	ACWT1.14
Step-by-Step	ACWT1.14

## LAB 4 IMPORTING AND QUERYING TABLES

AC4.1

<b>Objectives</b>	AC4.1
<b>Case Study</b>	AC4.2
<b>Concept Preview</b>	AC4.4
<b>Importing Data</b>	AC4.4
Importing an Access Table	AC4.5
Importing Data from Another Application	AC4.8
Using a Saved Import	AC4.13
<b>Controlling Field Input</b>	AC4.15
Changing Field Properties	AC4.15
Creating an Input Mask	AC4.21
Testing the Field Properties	AC4.27
<b>Using Action Queries</b>	AC4.29
Using an Append Query	AC4.29
Using a Delete Query	AC4.32
Creating a Select Query in Design View	AC4.34
Using an Update Query	AC4.35
Establishing Relationships	AC4.37



<b>Adding a Multivalued Field</b>	AC4.39
<b>Using Memo Fields</b>	AC4.42
Creating a Memo Field	AC4.42
Displaying the Revision History	AC4.44
<b>Using Calculations in Tables and Queries</b>	AC4.45
Adding a Calculated Field in a Table	AC4.46
Setting Up the Query	AC4.49
Adding a Calculated Field in a Query	AC4.51
<b>Creating a Top-Values Query</b>	AC4.53
<b>FOCUS ON CAREERS</b>	AC4.55
<b>CONCEPT SUMMARY</b>	AC4.56
<b>LAB REVIEW</b>	AC4.58
Key Terms	AC4.58
Command Summary	AC4.58
<b>LAB EXERCISES</b>	AC4.60
Matching	AC4.60
Multiple Choice	AC4.60
True/False	AC4.62
Fill-In	AC4.63
Hands-On Exercises	AC4.64
Step-by-Step	AC4.64
On Your Own	AC4.71

<b>Creating Page Headers and Footers</b>	AC5.53
Adding Page Header and Footer Sections	AC5.53
Creating a Border Line	AC5.53
Inserting the Date	AC5.54
<b>Previewing a Form</b>	AC5.56
<b>Deleting a Form</b>	AC5.58
<b>FOCUS ON CAREERS</b>	AC5.59
<b>CONCEPT SUMMARY</b>	AC5.60
<b>LAB REVIEW</b>	AC5.62
Key Terms	AC5.62
Command Summary	AC5.62
<b>LAB EXERCISES</b>	AC5.64
Matching	AC5.64
Multiple Choice	AC5.64
True/False	AC5.66
Fill-In	AC5.67
Hands-On Exercises	AC5.68
Step-by-Step	AC5.68
On Your Own	AC5.75

## LAB 5 CREATING CUSTOM FORMS AC5.1

<b>Objectives</b>	AC5.1
<b>Case Study</b>	AC5.2
<b>Concept Preview</b>	AC5.4
<b>Creating a Split Form</b>	AC5.4
<b>Creating a Datasheet Form and Subform</b>	AC5.6
<b>Creating a Form for Multiple Tables</b>	AC5.9
Using Form Layout View to Create a Form	AC5.10
Rearranging Controls	AC5.13
Testing the Form	AC5.17
<b>Changing Control Properties</b>	AC5.20
Using the Property Sheet	AC5.20
Modifying Form Controls	AC5.22
<b>Editing, Adding, and Formatting Label Controls</b>	AC5.26
Editing a Label Control	AC5.26
Adding a Form Title	AC5.27
Adding Label Controls	AC5.27
Changing Font, Font Size, and Color	AC5.29
<b>Adding Subforms</b>	AC5.32
Using Control Wizards	AC5.33
Modifying the Subform	AC5.36
Aligning Controls	AC5.38
Adjusting Control Padding	AC5.41
<b>Setting Tab Order</b>	AC5.42
<b>Using Command Buttons</b>	AC5.45
Creating Command Buttons	AC5.45
Spacing Controls	AC5.50
Using a Command Button	AC5.51

## LAB 6 CREATING CUSTOM REPORTS, CHARTS, PIVOT CHARTS, AND MAILING LABELS AC6.1

<b>Objectives</b>	AC6.1
<b>Case Study</b>	AC6.2
<b>Concept Preview</b>	AC6.4
<b>Creating a Grouped Report</b>	AC6.4
Planning the Report	AC6.4
Running and Modifying the Source Query	AC6.4
<b>Using the Report Wizard to Create a Grouped Report</b>	AC6.6
Checking the Summary Calculations	AC6.11
<b>Customizing the Report Layout</b>	AC6.13
Resizing and Rearranging Controls	AC6.14
Aligning Controls	AC6.16
Changing Control Formatting	AC6.22
<b>Enhancing the Report</b>	AC6.23
Changing Background Shading	AC6.23
Working with Lines and Borders	AC6.27
Adding a Page Header	AC6.30
<b>Changing the Record Source</b>	AC6.32
<b>Using Calculated Controls in a Report</b>	AC6.32
Creating a Calculated Control	AC6.33
Creating and Modifying a Text Box Control	AC6.36
Using the Expression Builder	AC6.39
Applying Conditional Formatting	AC6.39
Specifying Conditions	AC6.42
<b>Printing a Grouped Report</b>	AC6.43
<b>Creating a Chart in a Report</b>	AC6.45
Using Chart Wizard	AC6.48
Formatting the Chart	AC6.48
Changing Chart Layout	AC6.51



<b>Using PivotChart View</b>	AC6.53
Creating a Pivot Chart	AC6.54
Changing the Chart Type	AC6.57
<b>Creating Mailing Labels</b>	AC6.58
Using the Label Wizard	AC6.59
<b>Creating a Startup Display Form</b>	AC6.62
<b>Securing a Database</b>	AC6.63
<b>Using Database Templates</b>	AC6.65
<b>FOCUS ON CAREERS</b>	AC6.67
<b>CONCEPT SUMMARY</b>	AC6.68
<b>LAB REVIEW</b>	AC6.70
Key Terms	AC6.70
Command Summary	AC6.71
<b>LAB EXERCISES</b>	AC6.74
Matching	AC6.74
Multiple Choice	AC6.74
True/False	AC6.76
Fill-In	AC6.77
Hands-On Exercises	AC6.78
Step-by-Step	AC6.78
On Your Own	AC6.87

<b>Splitting a Database</b>	ACWT2.8
Using Linked Table Manager	ACWT2.12
Restricting Changes to the Front-End Database	ACWT2.13
<b>LAB REVIEW</b>	ACWT2.15
Key Terms	ACWT2.15
Command Summary	ACWT2.15
<b>LAB EXERCISES</b>	ACWT2.16
Hands-On Exercises	ACWT2.16
Step-by-Step	ACWT2.16

Command Summary	ACCS.1
Introduction to Office Glossary	IOG.1
Access Glossary of Key Terms	ACG.1
Index	ACI.1

## WORKING TOGETHER 2: LINKING AND SPLITTING DATABASES

ACWT2.1

<b>Case Study</b>	ACWT2.1
<b>Linking to External Data Sources</b>	ACWT2.2
Creating a Link to a Database Table	ACWT2.2
Creating a Link to an Excel Workbook	ACWT2.6



# Acknowledgments

We would like to extend our thanks to the professors who took time out of their busy schedules to provide us with the feedback necessary to develop the 2010 Edition of this text. The following professors offered valuable suggestions on revising the text:

**Joan Albright**  
*Greenville Technical College*

**Wilma Andrews**  
*Virginia Commonwealth University*

**Robert M. Benavides**  
*Collin College*

**Kim Cannon**  
*Greenville Technical College*

**Paulette Comet**  
*The Community College of Baltimore County*

**Michael Dunklebarger**  
*Alamance Community College*

**Joel English**  
*Centura College*

**Deb Fells**  
*Mesa Community College*

**Tatyana Feofilaktova**  
*ASA Institute*

**Sue Furnas**  
*Collin College*

**Debbie Grande**  
*The Community College of Rhode Island*

**Rachelle Hall**  
*Glendale Community College*

**Katherine Herbert**  
*Montclair State University*

**Terri Holly**  
*Indian River State College*

**Mark W. Huber**  
*University of Georgia*

**Joyce Kessel**  
*Western International University*

**Hal P. Kingsley**  
*Trocaire College*

**Diane Lending**  
*James Madison University*

**Dr. Mo Manouchehripour**  
*The Art Institute of Dallas*

**Sue McCrory**  
*Missouri State University*

**Gary McFall**  
*Purdue University*

**Margaret M. Menna**  
*The Community College of Rhode Island*

**Philip H. Nielson**  
*Salt Lake Community College*

**Craig Piercy**  
*University of Georgia*

**Mark Renslow**  
*Globe University/Minnesota School of Business*

**Ann Rowlette**  
*Liberty University*

**Chakra Pani Sharma**  
*ASA Institute*

**Eric Weinstein**  
*Suffolk County Community College*

**Sheryl Wright**  
*College of the Mainland*

**Laurie Zouharis**  
*Suffolk University*

We would like to thank those who took the time to help us develop the manuscript and ensure accuracy through painstaking edits: Brenda Nielsen of Mesa Community College–Red Mountain, Kaari Busick, Candice Spangler of Columbus State Community College, and Kate Scalzi.

Finally, we would like to thank team members from McGraw-Hill, whose renewed commitment, direction, and support have infused the team with the excitement of a new project. Leading the team from McGraw-Hill are Tiffany Russell, Marketing Manager; and Developmental Editor Alaina Tucker.

The production staff is headed by Marlana Pechan, Project Manager, whose planning and attention to detail have made it possible for us to successfully meet a very challenging schedule; Srdjan Savanovic, Designer; Michael McCormick, Production Supervisor; Kevin White, Digital Developmental Editor; Jeremy Cheshareck, Photo Researcher; and Betsy Blumenthal, copyeditor—team members on whom we can depend to do a great job.



**T**he 20th century brought us the dawn of the digital information age and unprecedented changes in information technology. There is no indication that this rapid rate of change will be slowing—it may even be increasing. As we begin the 21st century, computer literacy is undoubtedly becoming a prerequisite in whatever career you choose.

The goal of the O’Leary Series is to provide you with the necessary skills to efficiently use these applications. Equally important is the goal to provide a foundation for students to readily and easily learn to use future versions of this software. This series does this by providing detailed step-by-step instructions combined with careful selection and presentation of essential concepts.

Times are changing, technology is changing, and this text is changing too. As students of today, you are different from those of yesterday. You put much effort toward the things that interest you and the things that are relevant to you. Your efforts directed at learning application programs and exploring the Web seem, at times, limitless.

On the other hand, students often can be shortsighted, thinking that learning the skills to use the application is the only objective. The mission of the series is to build upon and extend this interest by not only teaching the specific application skills but by introducing the concepts that are common to all applications, providing students with the confidence, knowledge, and ability to easily learn the next generation of applications.

## Instructor’s Resource Center

---

The Online **Instructor’s Resource Center** contains access to a computerized Test Bank, an Instructor’s Manual, Solutions, and PowerPoint Presentation Slides. Features of the Instructor’s Resource are described below.

- **Instructor’s Manual** The Instructor’s Manual, authored by the primary contributor, contains lab objectives, concepts, outlines, lecture notes, and command summaries. Also included are answers to all end-of-chapter material, tips for covering difficult materials, additional exercises, and a schedule showing how much time is required to cover text material.
- **Computerized Test Bank** The test bank, authored by the primary contributor, contains hundreds of multiple choice, true/false, and discussion questions. Each question will be accompanied by the correct answer, the level of learning difficulty, and corresponding page references. Our flexible EZ Test software allows you to easily generate custom exams.
- **PowerPoint Presentation Slides** The presentation slides, authored by the primary contributor, include lab objectives, concepts, outlines, text figures, and speaker’s notes. Also included are bullets to illustrate key terms and FAQs.



## Online Learning Center/Web Site

---

Found at [www.mhhe.com/oleary](http://www.mhhe.com/oleary), this site provides additional learning and instructional tools to enhance the comprehension of the text. The OLC/Web Site is divided into these three areas:

- **Information Center** Contains core information about the text, supplements, and the authors.
- **Instructor Center** Offers the aforementioned instructional materials, downloads, and other relevant links for professors.
- **Student Center** Contains data files, chapter competencies, chapter concepts, self-quizzes, additional Web links, and more.

## Simnet Assessment for Office Applications

---

Simnet Assessment for Office Applications provides a way for you to test students' software skills in a simulated environment. Simnet is available for Microsoft Office 2010 and provides flexibility for you in your applications course by offering:

- Pretesting options
- Post-testing options
- Course placement testing
- Diagnostic capabilities to reinforce skills
- Web delivery of tests
- MOS preparation exams
- Learning verification reports

For more information on skills assessment software, please contact your local sales representative, or visit us at [www.mhhe.com](http://www.mhhe.com).

## O'Leary Series

---

The O'Leary Application Series for Microsoft Office is available separately or packaged with *Computing Essentials*. The O'Leary Application Series offers a step-by-step approach to learning computer applications and is available in both brief and introductory versions.

## Computing Concepts

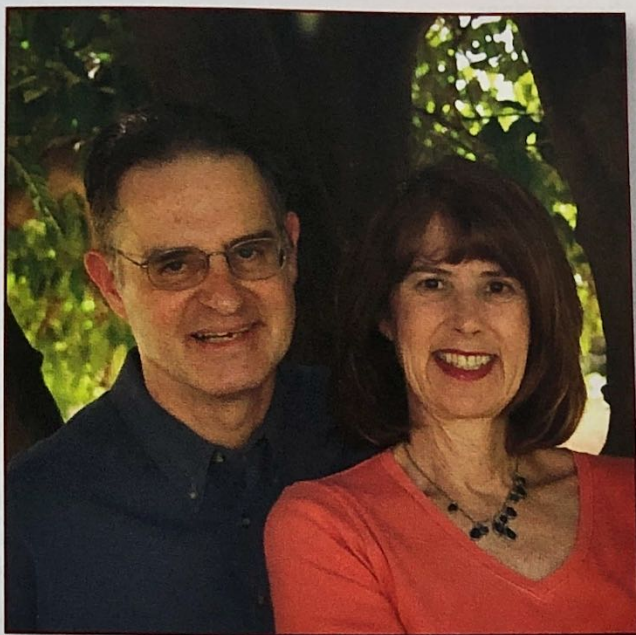
---

*Computing Essentials 2013* offers a unique, visual orientation that gives students a basic understanding of computing concepts. *Computing Essentials* encourages "active" learning with exercises, explorations, visual illustrations, and inclusion of screen shots and numbered steps. While combining the "active" learning style with current topics and technology, this text provides an accurate snapshot of computing trends. When bundled with software application lab manuals, students are given a complete representation of the fundamental issues surrounding the personal computing environment.



## About the Authors

---



Tim and Linda O'Leary live in the American Southwest and spend much of their time engaging instructors and students in conversation about learning. In fact, they have been talking about learning for over 25 years. Something in those early conversations convinced them to write a book, to bring their interest in the learning process to the printed page. Today, they are as concerned as ever about learning, about technology, and about the challenges of presenting material in new ways, in terms of both content and method of delivery.

A powerful and creative team, Tim combines his 30 years of classroom teaching experience with Linda's background as a consultant and corporate trainer. Tim has taught courses at Stark Technical College in Canton, Ohio, and at Rochester Institute of Technology in upstate New York, and is currently a professor emeritus at Arizona State University in Tempe, Arizona. Linda offered her expertise at ASU for several years as an academic advisor. She also presented and developed materials for major corporations such as Motorola, Intel, Honeywell, and AT&T, as well as various community colleges in the Phoenix area.

Tim and Linda have talked to and taught numerous students, all of them with a desire to learn something about computers and applications that make their lives easier, more interesting, and more productive.

Each new edition of an O'Leary text, supplement, or learning aid has benefited from these students and their instructors who daily stand in front of them (or over their shoulders). The O'Leary Series is no exception.

## Dedication

---

We dedicate this edition to our parents—Irene Perley Coats, Jean L. O'Leary, and Charles D. O'Leary—for all their support and love. We miss you.