

ESSENTIAL
LibreOffice
Tutorials for Teachers

by

Bernard John Poole
Associate Professor Emeritus
University of Pittsburgh at Johnstown
Johnstown, PA, USA

Copyright © Bernard John Poole, 2016
All rights reserved

Dedicated to my wife

Marilyn Giorgio-Poole, PhD

For 36 years she has
supported me,
sustained me,
and loved me,
as I love her.

And to the “warm heart of Africa,”
the good people of Malawi,

for whom these *LibreOffice* tutorials have been prepared.

Brief Contents (page numbering to be amended)

Introduction	1
Lesson 1 INTRODUCTION TO <i>WRITER</i>	4
Writing a Conference Call letter	
Lesson 2 MORE ON WORD PROCESSING.....	31
Working with larger documents	
Lesson 3 THE <i>LIBREOFFICE</i> DRAWING TOOLS.....	72
Lesson 4 INTRODUCTION TO THE <i>CALC</i> SPREADSHEET	108
Preparing a gradebook	
Lesson 5 MORE ON THE USE OF THE SPREADSHEET.....	140
Making changes to existing spreadsheets	
Lesson 6 INTRODUCTION TO THE <i>BASE</i> DATABASE	179
Keeping student records	
Lesson 7 MAIL MERGE AND RELATED OPERATIONS.....	203
Form letters and mailing labels	
Lesson 8 MORE ON DATABASE USE	238
Manipulating the data in the database	
Lesson 9 <i>IMPRESS</i> PRESENTATIONS.....	268
Creating Slide Shows and related teaching materials	
Lesson 10 <i>IMPRESS</i> BEYOND THE BASICS	293
<i>LibreOffice</i> Shortcuts	336
Index	337

Detailed Table of Contents

INTRODUCTION	1
I.1 THE OBJECTIVES OF THIS TEXT	1
I.2 WHY <i>LibreOffice</i> ?	1
I.3 WHAT IS SPECIAL ABOUT THIS TEXT?	1
I.4 THE STATUS OF COMPUTING IN SCHOOLS	2
I.5 TEACHING IS A COOPERATIVE ENDEAVOR	3
I.6 ACKNOWLEDGMENTS	3
Lesson 1 INTRODUCTION TO WRITER	4
LEARNING OUTCOMES	4
BEFORE YOU BEGIN	4
1.1 OPENING, NAMING & SAVING A NEW <i>Writer</i> DOCUMENT	6
Opening a new <i>Word</i> document	6
Naming and saving a new <i>Word</i> document	7
Creating a new folder on a disk	8
1.2 SOME HELPFUL HINTS WHILE USING <i>Writer</i>	9
Word processing is <i>not</i> the same as using a typewriter	9
Removing unwanted Returns (using the Show ¶ option)	10
Undoing unintended actions	11
Scrolling through a document	11
Shortcuts or quick keyboard commands	13
Renaming a document	14
1.3 CREATING AND SAVING A DOCUMENT	14
Typing the Conference Call letter	14
1.4 UPDATING AND SIMPLE FORMATTING OF A DOCUMENT	15
Inserting the date	16
Adding text to an existing document	17
Removing text	18
Changing text	18
Selecting (highlighting) a block of text	20

	Using the <i>Writer</i> Indent Markers	21
1.5	CHECKING THE DOCUMENT FOR SPELLING ERRORS	25
	Accessing the spelling checker	25
1.6	PRINTING A FIRST DRAFT OF THE DOCUMENT	26
	Print Preview-ing your work.....	26
	Removing your document from the printer	27
	Always proofread your writing	28
1.7	RUNNING OFF A FINAL COPY	28
1.8	MAKING A BACKUP COPY OF THE DOCUMENT	28
	LOOKING BACK	29
	LOOKING FORWARD	29
	SKILL CONSOLIDATION	29
Lesson 2	MORE ON WORD PROCESSING.....	31
	Working with larger documents	
	LEARNING OUTCOMES	31
	Setting up for the tutorial.....	32
2.1	INSERTING PAGE NUMBERS.....	33
2.2	MORE TOOLS FOR FORMATTING TEXT	36
	A word about default settings	36
	A word about WYSIWYG	36
	Setting the margins.....	36
	Aligning text	37
	Choosing font faces.....	38
	Changing the point size of text	39
	Inserting page breaks.....	40
	Changing the layout of the Skill or Concept table	41
	Spacing before and after paragraphs	42
2.3	BULLETS AND NUMBERED LISTS.....	43
	Numbered lists	43
	Bulleted lists	45
2.4	SETTING OFF A BLOCK OF TEXT WITH A BORDER.....	45
2.5	USING TAB STOPS.....	47
	Inserting Tab stops	47
	Removing Tab stops.....	50
2.6	STYLE OF TEXT AND LINE SPACING.....	50

	Text Styles	50
	Line Spacing	52
2.7	INDENTING TEXT.....	53
	Adjusting (moving) the Indent Markers	53
	Indenting the first line of paragraphs	54
	Hanging indents	55
2.8	CREATING SECTIONS AND COLUMNS OF TEXT	57
2.9	FINDING AND REPLACING TEXT	58
	Finding a text string.....	59
	Replacing a multiple occurrence of a text string	62
2.10	MOVING AND COPYING TEXT WITHIN A DOCUMENT	62
	Moving text within a document	63
	Copying text within a document	64
2.11	SPELLING AND GRAMMAR CHECKING	65
2.12	ADDING DROP CAPS.....	66
2.13	CREATING A TABLE OF CONTENTS	68
	LOOKING BACK	70
	LOOKING FORWARD	71
	SKILL CONSOLIDATION	71
Lesson 3	THE <i>LIBREOFFICE</i> DRAWING TOOLS	72
	LEARNING OUTCOMES	72
3.1	GETTING STARTED.....	72
3.2	OVERVIEW OF THE <i>LIBREOFFICE</i> DRAWING TOOLS.....	73
	Working with Shapes and Lines	74
	Grouping and Aligning objects on the page	74
	Working with your own Pictures	74
	Bullets and Numbering.....	75
	Fontwork.....	75
	3D-Settings	75
	Changing the Page Orientation	76
	Using the Zoom tool.....	77

3.3	DRAWING, MOVING, ROTATING, RESIZING, AND OTHERWISE EDITING SIMPLE SHAPES AND LINES	78
	Line Style	79
	Line Width	80
	Line Color	80
	Area	80
	Area Style / Filling	80
	Drawing lines	80
	Working with lines	81
	Working with rectangles and ellipses	81
	Rotating objects	81
	Drawing a perfect square or circle	82
	Moving drawing objects	83
	Resizing drawing objects	83
	Editing (changing) straight lines or arrows	84
3.4	OTHER DRAWING SHAPES	85
3.5	USING COLORS, PATTERNS, AND OTHER VISUAL EFFECTS	87
	Transparencies	87
	Area Fill Effects	89
	Rounding corners and applying a Shadow effect on images	90
	3D Effects	92
3.6	GROUPING, ORDERING, AND ALIGNING OBJECTS	94
	Grouping drawing objects	96
	Resizing objects	98
	Ungrouping objects	98
	Ordering the drawing objects	99
	Aligning drawing objects	100
3.7	USING THE TEXTBOX TOOL AND <i>FONTWORK</i>	101
	Using the Textbox tool	101
	Using the <i>Fontwork</i> tool	102
	LOOKING BACK	105
	LOOKING FORWARD	105
	SKILL CONSOLIDATION	105
Lesson 4	INTRODUCTION TO THE <i>CALC</i> SPREADSHEET	108
	Preparing a gradebook	
	LEARNING OUTCOMES	108
4.1	GETTING STARTED	109
	Some background about spreadsheets	109

Templates.....	111
4.2 HELPFUL HINTS WHILE USING THE SPREADSHEET	112
A spreadsheet is a grid divided into rows and columns	112
Moving around in the spreadsheet	113
Identifying the active cell's coordinates	113
Selecting a range (group) of cells	113
Location of the active (selected) cell after entering data into a cell	114
Blanking out a cell or cells in the spreadsheet.....	115
Editing the data in the Entry bar	115
Editing data after they have been entered into a cell	115
4.3 SETTING UP LABELS FOR YOUR GRADEBOOK TEMPLATE.....	115
Aligning data in spreadsheet cells.....	116
Entering the column and row labels.....	117
Entering "dummy" scores	118
Adjusting the width of columns	118
Adjusting the column width by dragging	119
Adjusting the column width in non-adjacent cells.....	120
Changing the alignment of the column labels	120
4.4 CREATING AND COPYING FORMULAS	122
The difference between functions and formulas	122
Creating a formula.....	122
Copying and pasting formulas	123
Relative references	125
Filling down (copying the formula down the TOTAL column).....	125
Setting up the Percentage formula	126
Setting the Cell Attribute for the PERCENTAGE column	127
Checking out the formulas.....	127
4.5 ENTERING NAMES AND SCORES FOR EACH STUDENT	130
Changing the name of the template document.....	130
Entering the student names	130
Entering the scores for each student.....	131
4.6 MAKING CHANGES TO YOUR GRADEBOOK.....	132
Adding a student to the roster (Inserting rows)	132
Inserting columns	133
Deleting (cutting) rows and columns	133
4.7 PRINTING YOUR GRADE BOOK.....	134
4.8 SAVING A BACKUP COPY OF YOUR WORK	137

4.9	A WORD ABOUT TEMPLATES AND STATIONERY DOCUMENTS.....	137
	LOOKING BACK	138
	LOOKING FORWARD	138
	SKILL CONSOLIDATION	138
Lesson 5	MORE ON THE USE OF THE SPREADSHEET	140
	Making changes to existing spreadsheets	
	LEARNING OUTCOMES	140
5.1	GETTING STARTED.....	141
5.2	RECAPITULATION AND REINFORCEMENT	141
	Moving from cell to cell in the spreadsheet.....	141
	More cell selection commands.....	142
5.3	UPDATING AN EXISTING SPREADSHEET	143
	Dividing up the spreadsheet to make it easier to read.....	144
	Adding formulas to the spreadsheet.....	145
	Calculating an average for each of the Grade columns.....	146
	A word about automatic calculation.....	146
	Displaying the MAX and MIN scores for each column of scores	150
	Protecting (locking) important cells.....	151
	Dividing the spreadsheet into panes.....	153
5.4	MAKING CHANGES TO THE LOOK OF THE SPREADSHEET.....	154
	Putting a border around a cell or set of cells	154
	Removing grid lines and column and row headings	155
	Updating the Grades Template spreadsheet	156
5.5	USING THE LOOKUP FUNCTION	159
	The concept of the LOOKUP function.....	159
	Building the LOOKUP Table	160
	Using the clipboard to copy cells from one document to another	161
	Entering the LOOKUP function into the GRADE column	162
	Copying the LOOKUP function into the rest of the GRADE column....	165
5.6	PRINTING THE UPDATED SPREADSHEET.....	168
	Selecting a section of the spreadsheet for printing	168
5.7	CREATING CHARTS BASED ON SPREADSHEET DATA.....	170
	The <i>LibreOffice</i> charting capability.....	170
	Creating a column chart.....	170

	Creating a pie chart	174
	Creating a Bar chart.....	176
	LOOKING BACK	177
	LOOKING FORWARD	177
	SKILL CONSOLIDATION	177
Lesson 6	INTRODUCTION TO THE <i>BASE</i> DATABASE.....	179
	Keeping student records	
	LEARNING OUTCOMES	179
6.1	AN OVERVIEW OF THE DATABASE CONCEPT	179
	How is a database organized?.....	180
	The general terminology used to describe data storage	181
	<i>Base</i> Database terminology	181
6.2	LET’S GET PRACTICAL	182
6.3	PLANNING A NEW DATABASE	184
6.4	CREATING THE DATABASE TEMPLATE	188
	Entering field names for the database	188
	Using a Format example to control the format for a field.....	191
6.5	COMPLETING PREPARATION OF THE DATABASE TEMPLATE	193
	Creating a Form for the new database.....	193
6.6	ADDING RECORDS TO A NEW OR EXISTING DATABASE.....	197
	Creating a new database based on a Template database	197
	Entering the data for the records in the database document	197
	Adding a New Record to the database	198
6.7	VIEWING THE DATA IN THE DATABASE.....	198
6.8	UPDATING ENTRIES AND RECORDS IN THE DATABASE	199
	Updating the contents of a field (one item of data in a student record) ..	199
	Deleting (clearing) a record.....	199
	Deleting several records at once	200
6.9	SAVING A BACKUP COPY OF YOUR WORK	201
	LOOKING BACK	201
	LOOKING FORWARD	201
	SKILL CONSOLIDATION	202

Lesson 7	MAIL MERGE AND RELATED OPERATIONS	203
	Form letters and mailing labels	
	LEARNING OUTCOMES	203
7.1	PREPARING AN ADDRESS LIST IN <i>CALC</i>	204
	Entering the data for the Address List spreadsheet	204
7.2	CONVERTING THE <i>CALC</i> SPREADSHEET TO A BASE DATABASE	205
7.3	CREATING THE FORM LETTER (THE FIELD TRIP NOTICE)	208
	Inserting the date	210
	Viewing the Data Source for the Field Trip Notice	210
	Inserting fields (placeholders) into your form letter	211
7.4	PRINTING THE FIELD TRIP NOTICE	213
	Previewing your letters on screen	215
	Editing (further customizing) the recipient’s letters	216
	Saving a PDF version of the merged Field Trip Notices	216
	Printing the PDF version of the Field Trip Notices	217
	A summary of the <i>LibreOffice Writer</i> Mail Merge features.....	218
7.5	PREPARING MAILING LABELS	218
	Deciding on the data for the mailing label	218
	Previewing your mailing labels on screen	222
	Saving a PDF version of the merged mailing labels	224
	Printing the PDF version of the mailing labels	225
7.6	PREPARING A NEW FORM LETTER USING AN EXISTING DATABASE	226
	Registering the Roster 2014 database	226
	Creating the Mid Term Report form letter	228
	Pasting a chart into the letter.....	230
	LOOKING BACK	236
	LOOKING FORWARD	236
	SKILL CONSOLIDATION	237
Lesson 8	MORE ON DATABASE USE	238
	Manipulating the data in the database	
	LEARNING OUTCOMES	238
8.1	GETTING STARTED.....	238

8.2	REVIEWING THE BASICS	240
	Viewing the data in the database.....	241
	Adding a record to the database	241
	Clearing a field in a record	243
	Deleting (clearing) a record, or a set of records.....	243
	Changing the data in a field	244
8.3	SEARCHING AND QUERYING A DATABASE	244
	Finding a single record using data from a specific field	245
	Finding two or more records based on data from a single field	247
	Using the AutoFilter.....	247
	Using the Standard Filter	250
8.4	SORTING RECORDS	251
	Sorting on a single field.....	252
8.5	CREATING QUERIES AND REPORTS	254
	A word about the <i>Base</i> database reporting facility.....	254
	Initial definition of the layout or report.....	254
	Creating a Query	254
	Creating a Report based on the Query.....	257
8.6	PRINTING REPORTS	265
	LOOKING BACK	266
	LOOKING FORWARD	266
	SKILL CONSOLIDATION	267
Lesson 9	<i>IMPRESS</i> PRESENTATIONS	268
	Creating slide shows and related teaching materials	
	LEARNING OUTCOMES	268
9.1	INTRODUCTORY THOUGHTS ABOUT PRESENTATIONS.....	269
9.2	<i>IMPRESS</i> AT WORK	270
	Different ways to view the slides in your presentation	270
	Features to look out for in the demonstration presentation	274
9.3	BUILDING A NEW PRESENTATION	277
	Preparation of the outline	277
	Typing the outline entries	278
	Switching levels	281
	Adding pictures to the slides.....	283
9.4	ADDING BELLS AND WHISTLES TO THE PRESENTATION	286
	Resizing the Screenbeans on each of the slides	286

	Adding Transitions, Speed and Sound effects, and Timings	287
	Choosing a Master Page	288
9.5	PRINTING PRESENTATION HANDOUTS	290
	LOOKING BACK	290
	LOOKING FORWARD	291
	SKILL CONSOLIDATION	291
Lesson 10	<i>IMPRESS BEYOND THE BASICS</i>	293
	LEARNING OUTCOMES	293
10.1	CREATING A MASTER PAGE TO ADD ADDING SLIDE ACTION- BUTTONS CONTROLS TO AN EXISTING PRESENTATION.....	294
	Creating Slide Controls	294
	Adding Slide Controls to an existing presentation.....	297
	Copying the Slide Controls to other slides	300
	Adding an Acknowledgements slide	300
10.2	USING HIDDEN SLIDES	302
10.3	ANIMATION SCHEMES.....	305
10.4	INTERACTIVE <i>IMPRESS</i> AT WORK	308
	Features to look for in the demonstration presentation	308
	Slide Controls and Hyperlinks	310
10.5	BUILDING AN INTERACTIVE, NON-LINEAR PRESENTATION ..	311
	Title slide, Intro slide and Directions slide	311
	Get to know the keyboard shortcuts.....	314
	Question and feedback slides.....	314
10.6	MAKING THE PRESENTATION INTERACTIVE	317
	Creating Text Objects for the Slide Controls on the Question slides	317
	Hyperlinking the Text Objects to the appropriate Feedback Slides.....	319
	Adding Slide Controls to the remaining slides	322
	Making the Text Object backgrounds invisible	323
	Forcing the user to click on a Slide Control to advance to another slide	325
10.7	FORMATTING YOUR PRESENTATION	326
	Selecting a Master Page.....	326
	Tips on color choices for printing	327
	Applying different Master Pages to certain slides in a show	327
	Creating customized, self-designed Master Page Templates	327

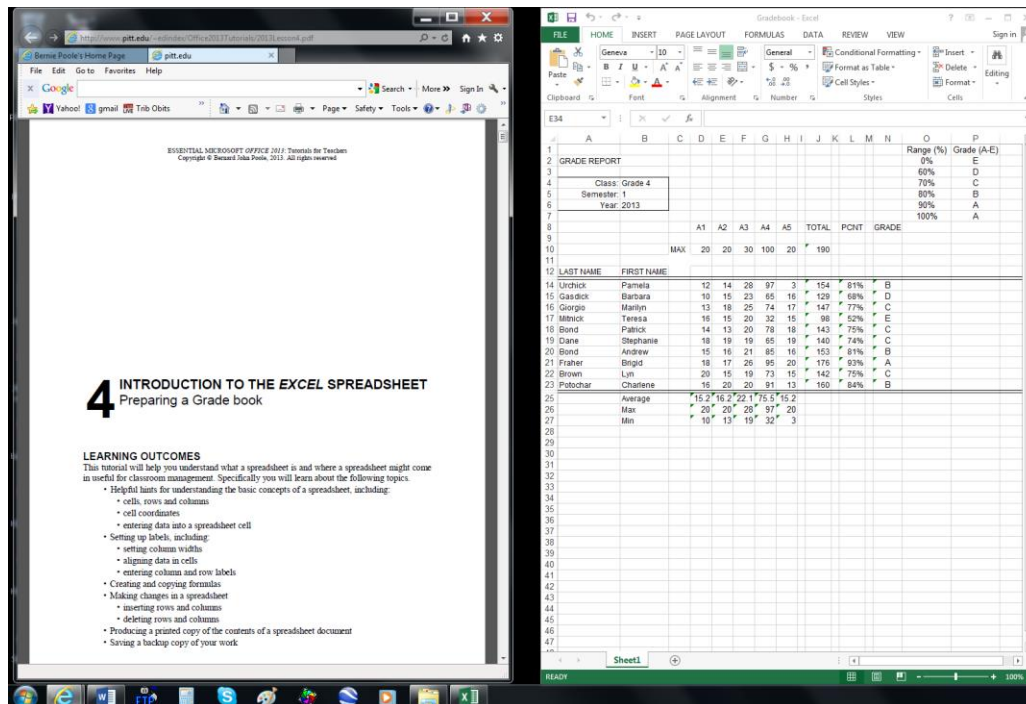
10.8	INSERTING CLIP ART AND OTHER CONTENT	328
	Inserting clip art	328
	Inserting other pictures or pictures of your own.....	329
	Inserting sound.....	330
	Inserting videos or animations	332
10.9	SOME FINAL THOUGHTS ABOUT PRESENTATIONS	332
	LOOKING BACK	333
	LOOKING FORWARD	334
	SKILL CONSOLIDATION	334
	<i>LibreOffice</i> Shortcuts.....	336
	Index	337

TIPS ON HOW TO USE THESE TUTORIALS

Option 1: You are an Instructor using these lessons with your students as a component of a course in an Elementary, Secondary, College, or other learning environment.

No need to print a hardcopy of the tutorials if:

1. Each of the students in your class has access to a computer that has a large screen (15" or larger) on which they can work their way through the lesson(s).
In this scenario, the student would display a tutorial on one side of the screen while working on the appropriate *LibreOffice* application on the other, as illustrated in the Figure below. **No need for a hard copy of the tutorials** with this scenario.



2. Each of the students in your class has access to a laptop or desktop computer in the classroom itself, *and* they each have an iPad, Kindle, Nook, or other device on which they can read a digital version of the tutorials while working at the lessons on the laptop or desktop.

In this scenario, there should be **no need for a hard copy of the tutorials**.

3. You are able to take your class to a computer lab with one-to-one access to a computer, *and* each student has an iPad, Kindle, Nook, or other device on which they can read a digital version of the tutorials while working at the lessons on the lab computer.

In this scenario, there should be **no need for a hard copy of the tutorials**.

You probably should make a hardcopy of the tutorials available to your students if:

4. Each of the students in your class has access, in the classroom itself, to a laptop or a desktop computer with a smaller screen, but no digital e-reader such as an iPad, Kindle, Nook, etc. on which the tutorials could be stored and used in lieu of a hardcopy.

Here it would be **best for each student to have a hard copy of the tutorials**, since it is both distracting and inconvenient to switch back and forth between the tutorial window and the working window on a smaller screen. In such a case, the Elementary or Secondary school has permission to go ahead and make as many hard copies of the tutorials as required. The College or University also has

permission to go ahead and make as many hard copies of the tutorials as required, and to sell them at cost to the students through the bookstore. The bookstore may only sell them at a profit, as long as all profits are used to support scholarships or other charitable endeavors.

5. You are able to take your class to a computer lab with one-to-one access to a computer, but no other digital e-reader device such as an iPad, Kindle, Nook, etc.

Here again it would be **best for each student to have a hard copy of the tutorials**, since it is both distracting and inconvenient to switch back and forth between the tutorial window and the working window on a smaller screen. In such a case, the Elementary or Secondary school has permission to go ahead and make as many hard copies of the tutorials as required. The College or University also has permission to go ahead and make as many hard copies of the tutorials as required, and to sell them at cost to the students through the bookstore. The bookstore may only sell them at a profit, as long as all profits are used to support scholarships or other charitable endeavors.

6. Each of the students in your class has access to a computer at home, but some or all of them do not also have an e-reader such as an iPad, Kindle, Nook, etc.

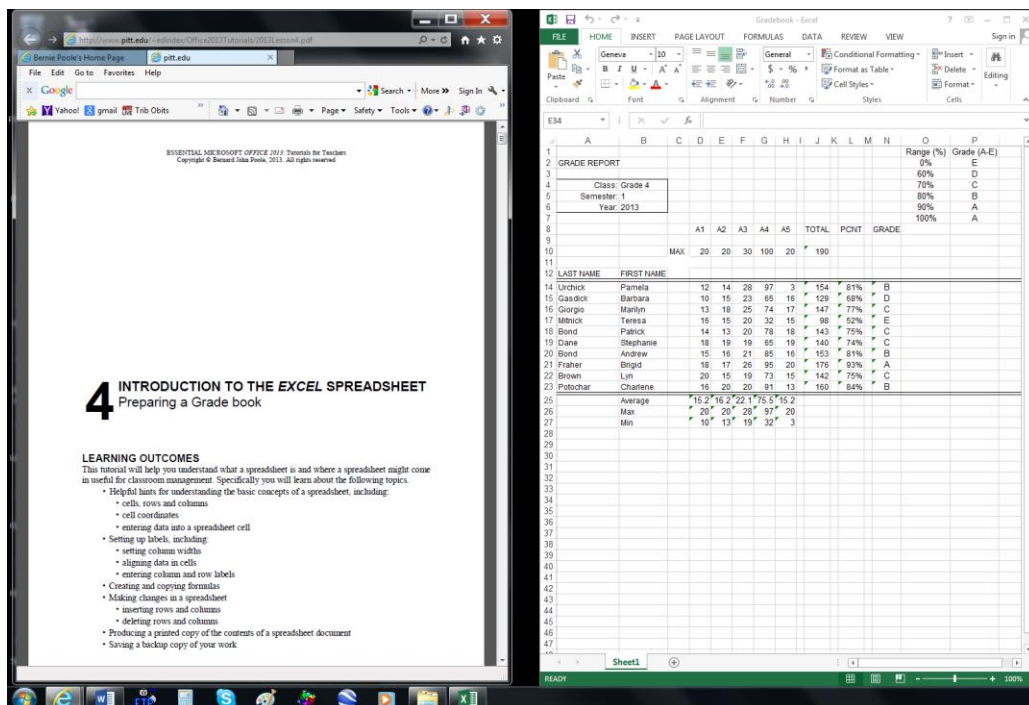
It would be **best for those students who do not have an e-reader such as an iPad, Kindle, Nook, etc. to have a hard copy of the tutorials**. In such a case, the Elementary or Secondary school has permission to go ahead and make as many hard copies of the tutorials as required. The College or University also has permission to go ahead and make as many hard copies of the tutorials as required, and to sell them at cost to the students through the bookstore. The bookstore may only sell them at a profit, as long as all profits are used to support scholarships or other charitable endeavors.

Option 2: You are a teacher, or any other individual, using these lessons to improve your own *LibreOffice* skills.

The following possible scenarios present themselves:

1. You have access to a computer that has a large screen (15" or larger) on which you can work your way through the lesson(s).

In this scenario, you would display a tutorial on one side of the screen while working on the appropriate *LibreOffice* application on the other, as illustrated in the Figure below. **No need for a hard copy of the tutorials.**



2. You have access to a laptop or desktop computer in the classroom itself, *and* you have an iPad, Kindle, Nook, or other device on which you can read a digital version of the tutorials while working at the lessons on the laptop or desktop.

In this scenario, there should be **no need for a hard copy of the tutorials**.

3. You have access to a laptop or a desktop computer with a smaller screen, but no digital e-reader such as an iPad, Kindle, Nook, etc. on which the tutorials could be stored and used in lieu of a hardcopy.

Here it would be **best for you to work from a hard copy of the tutorials**, since it is both distracting and inconvenient to switch back and forth between the tutorial window and the working window on a smaller screen.