

PREFACE

Twenty-Five Years' Experience

I don't know about you, but for over 25 years I have read and looked at hundreds of statistics textbooks. Some are better than others, but there seems to be one common denominator. They all look pretty much the same.

Many students complain, among other things, about the pace of a statistics class. They tell me it is too rapid for them. While they are taking notes from one part of the board, I have moved to another part of the board with new information. About three years ago, I wrote a series of notes for my classes at TCU. I began passing them out to the students before my lectures. After the first semester, many students complimented me (even after grades were in) about how helpful the notes were. I continued to pass out the notes from semester to semester as a student aid. The notes tend to slow down the pace of the class, since the notes often reflect what I am writing on the board. I probably win the award for most notes in any class in any school in any country but can't empirically demonstrate that to be true (just a gut feeling).

One semester about a year ago, I began thinking. Maybe, just maybe, my notes could be converted to a textbook I could publish and actually make a buck or two. About six months ago, Kendall/Hunt showed up in my office soliciting me to write, of all things, a statistics textbook. I thought about it for a few days, reviewed their contract, and came to the conclusion "this could work." So I began converting my notes to a textbook, a task that was more formidable than I had envisioned. The result of the conversion is what you are holding in your hand right now—my textbook.

Clever Marketing

On the cover you will notice some clever marketing phrases. One of them claims this textbook is "*like no other.*" That is really a true statement. I have written the textbook as if I were speaking with my classes at TCU. The book has a logical flow to it and is in a conversational tone. I often use contractions because I speak in contractions as do many of us. Using those gave the editor fits, but I finally reminded her that the book was "conversational." She would edit them out, and I would put them back. I finally won the argument or she just gave up.

Why This Book?

You might ask, "*Why should I choose this textbook over another, especially since I already have one that works pretty well?*" Good question, I respond. Apart from the fact that I need the royalties to

retire to the Bahamas, I think there are better reasons. This textbook has a logical and continuous flow of material written in language which allows the student to follow a clear, concise explanation of basic concepts and processes. Most textbooks are written in a staccato style where the thought process is interrupted by a multitude of examples. I call that clutter. For me, it is sometimes hard to follow the logical flow, even if it is well written. I use examples but tend to keep them constant throughout the entire chapter.

Over the past 20 years of teaching, I think I have heard all of the questions a student can possibly ask, so I have inserted the most often-repeated questions at appropriate times to keep the thought process flowing logically and consistently.

My wife suggests to me one of the shortfalls of the textbook is that I tend to insert my dry sense of humor. While some of these insertions are rarely spoken aloud in a class, I certainly think them from time to time. Some of you may actually grow to like my sense of humor.

Miracles for the Professor?

My approach can work miracles for the professor because it relieves the professor from repeating explanations on basic material. I think the consistent and logical flow of my explanations will lead to more students understanding the basic material with less help from the professor. Don't get me wrong, the professor will not be worked out of a job with my textbook; however, oftentimes the professor is kept from moving beyond the basics into other important areas because of the ubiquitous doctrine of repetition. There is a saying I have heard repeated from my youth. Only by iteration and reiteration can an alien concept be imparted to a reluctant mind. I have no clue who said this originally, but think it is most apropos for many statistics students.

By using my textbook, students will achieve a level of basic understanding (if they read it). This leaves room for professors to supplement the basic material with other material they believe is important. This will, in turn, provide an opportunity for the professor to challenge the student with other aspects of statistical knowledge. My intent is to cover the basics yet leave room for expansion. Think about it for a moment. If the professor had the basic material covered in an understandable and logical format, then there would be freedom to raise the bar, add additional material, or emphasize the material the professor deems to be the most relevant. By raising the bar, the course takes on new meaning and value to the student and the university as the student matures into a valued member of the business community. There is ample room for professors to expand the course and make it their own.

Are All Subjects Covered?

This leads to the question, "*Do you cover all subjects?*" Simply said, nope, but I do cover the basics in great detail and touch on many subjects in lesser detail. Many statistics textbooks move from formula to answer without intervening steps. This can be very frustrating for most students. Often the biggest challenge for the student is to remember the order of operation. To solve this issue, I work all example problems on a step-by-step approach. I also dwell on interpretation. I often tell my students that the numbers are really meaningless unless you know what to do with them (read "interpret them"). Interpretation should include a detailed

decision. It is not enough to say you reject the null hypothesis unless you can tell someone in manufacturing or marketing or management what this means to them directly.

My Dry and Warped Sense of Humor

I am a Texan by natural birth, so you will also find my sense of humor poking fun at my fellow Texans and me. Each chapter ends with a Jeff Foxworthy approach “you know you are a Texan if.” My source for that material was the Internet. In your search engine, type in the phrase “you know you are a Texan if” and you will be surprised at how many sites appear. I was surprised. Multiple sites contain similar quotations so to identify the originating source is quite impossible. Fellow Texans, please do not take offense at my stereotyping Texans. In reality, you can regionally stereotype most Americans in some fashion. As a native Texan, I am poking fun in this insanely politically correct world where you have to be careful not to offend anyone at the expense of forgetting to laugh at ourselves. Have fun, laugh, and take it the way I intend it.

At the beginning of each chapter, I have inserted some actual courtroom humor. I figure if you begin a chapter with humor and end the chapter with humor, perhaps you won't be totally grossed out by the stuff in between. This material comes from a book written by Charles M. Sevilla entitled “Disorder in the American Courts.” Numerous attorneys contributed to his book, so attorneys are poking fun at themselves. Some of the stuff is really funny and at the same time a bit scary, since most of our politicians are lawyers. Wow.

In-Class Problems

Included at the end of each chapter (except Chapter 1) are In-Class Problems which are used by me at the end of each lecture to help solidify what has been discussed during the lecture. The Supplemental Workbook provided with this textbook has a section showing the detailed solutions to these problems.

Homework Problems

At the end of each Chapter (1-15), there is a section of Homework Problems. These should be worked by the student outside of the class setting to aid in learning the material presented in each chapter. The Supplemental Workbook provided with this textbook has a section showing the detailed solutions to these problems. The student should attempt the problems before looking at the detailed solutions.

Typical 15-Week Lecture and Lab Schedule

Listed below is my typical schedule for a 15-week course (16 including spring/fall break). Notice I give five examinations plus the final. For me, this breaks the material into enough subsets so I can cover more material. It is very difficult to properly test a student in 1 hour and 20 minutes, when you only give a mid-term and a final. Since I have up to four sections, I use scantrons for grading. I also give pop quizzes from time to time. The pop quizzes are meant to

Schedule of Classes ** Tuesday/Thursday ** 1 hour 20 minute All Day Classes

Week	Class #	Day & Date	Chapter	Material	Test Wt.
Week 1	1	Tu Jan 17	1 & 2	Introduction	
	2	Th Jan 19	3	Ungrouped Data	
Week 2	3	Tu Jan 24	3	Grouped Data	
	4	Th Jan 26	4	Probabilities	
Week 3	5	Tu Jan 31	Lab	Lab	
	6	Th Feb 2	Test	Test #1	10%
Week 4	7	Tu Feb 7	5	Return Graded Test #1 Probability Distributions	
	8	Th Feb 9	6	Sampling Distribution of Sample Means	
Week 5	9	Tu Feb 14	7	Confidence Intervals	
	10	Th Feb 16	Lab	Lab	
Week 6	11	Tu Feb 21	Test	Test #2	10%
	12	Th Feb 23	8	Hypothesis Testing—1 Pop.	
Week 7	13	Tu Feb 28	8	Return Graded Test #2 Hypothesis Testing—1 & 2 Pop	
	14	Th Mar 2	9	Hypothesis Testing—2 Pop	
Week 8	15	Tu Mar 7	9	Lab	
	16	Th Mar 9	Test	Test #3	25%
Week 9	No	Tu Mar 14	Spring	Spring Break—No Class	
	Class	Th Mar 16	Break	Spring Break—No Class	
Week 10	17	Tu Mar 21	9.9 & Notes	Return Graded Test #3 F and Chi-Square as a Parametric Test	
	18	Th Mar 23	10	ANOVA	
Week 11	19	Tu Mar 28	11	Simple Regression	
	20	Th Mar 30	12 & Notes	Multiple Regression Chi-Square (nonparametric)	
Week 12	21	Tu Apr 4	Lab	Lab	
	22	Th Apr 6	Test	Test #4	15%

Week	Class #	Day & Date	Chapter	Material	Test Wt.
Week 13	23	Tu Apr 11	13	Return Graded Test #4 Index Numbers	
	24	Th Apr 13	13	Time Series & Smoothing	
Week 14	25	Tu Apr 18	15	Quality Control	
	26	Th Apr 20	Lab	Lab	
<i>Week 15</i>	27	<i>Tu Apr 25</i>	<i>Test</i>	<i>Test #5</i>	10%
	28	Th Apr 27	Review	Return Graded Test #5 Review for Final	
Week 16	29	Tu May 2	Review	Review for Final – Last Class Day	
Final		Per Below	Final	Date & Time Per TCU Schedule	25%
Five Examinations from the Solutions Manual—Cumulative Percentage					5%
Total Test Weights					100%

encourage attendance since they cannot be made up. You take them or get a zero. Before each examination, I like to set aside time which I refer to as lab time. During this time, I can interact more easily with many of the students. This schedule shows how I am able to cover the material included in this textbook. It might provide a useful guide for any professor and, then again, it may not. I am certain there are other excellent ways in which this material may be covered just as effectively.

Supplemental Workbook—In-Class & Homework Problems

At the end of each Chapter in the textbook, example problems are broken into two types: In-Class Problems and Homework Problems. In Chapters 6, 7, 8 and 9 there is a set of Extra Problems. I use the In-Class Problems after my lecture to reinforce what has been taught in the lecture. I assign the Homework Problems to be worked outside of class. The Extra Problems are to be worked by the student who needs additional material. The Supplemental Book is split into two problem-solutions sections: one section for In-Class Problems and one section for Homework Problems. Additionally, Chapters 6, 7, 8 and 9 have a special answer section for those problems.

One of the problems most professors have is how to handle homework. Working homework in class takes away from lecture time. If you are like me, there is never enough time in class to lecture and do homework problems on the board. This means the student must come to your office one at a time (usually) and tell you the sad story as to why they can't work some (or any) of the homework problems. The solution has been to prepare a very detailed homework solutions book. Most statistics textbooks will provide the answer to the odd or even problems in the back of the book, but usually it is just that—a one-line answer. There is no

attempt to show the detailed step-by-step solutions (order of operation). There is absolutely no attempt to interpret the results. Most students have difficulty with the order of operation and really need a step-by-step solution. The homework solutions manual provides just that. For each problem in the book, there is a detailed solution on a step-by-step basis. And, more importantly, there is an “interpretation” of the results. Both my textbook and the homework book will really give any professor a head start handling the routine and repetitive process of teaching statistics. Both will be provided as a package or sold separately.

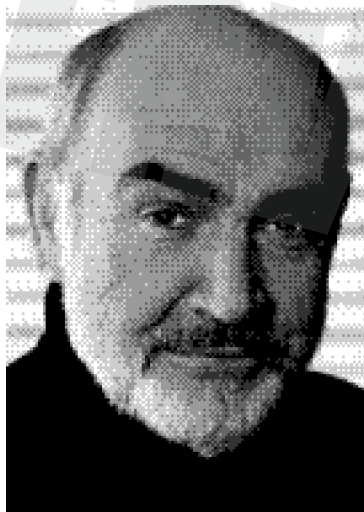
Tables

In the back of the textbook are eight tables. I find one of the most interesting challenges is to explain to a student how to properly read a table. I write some great explanations. This instruction alone is worth the price of the textbook—well, maybe not that much, but it will provide reference material that just might keep students from asking the same question over and over again. Isn't it strange how, as the professor, you answer a question only to have a second student ask the same question again within a span of 30 seconds? I think one of Murphy's Law has been uncovered. I just need a name for it.

That's about all I can think of right now for a preface. Oh, I guess I should thank everyone without whose help this book would not be possible, but in reality that is me, so I think thanking myself is really irrelevant, don't you? I could thank my publisher, my wife, my daughters, my cat and dog, and my proofreader (to whom you can attribute any errors not caught, since professors never make errors, right?).

However, this does bring up a question about who I am

I will start with a picture.



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Okay, okay!!! So the picture may not really look like me. Okay, I guess I better tell you something about myself. This stuff you can believe, well . . . mostly!

Work Experience

I have worked for large to medium sized corporations in various financial capacities including financial analyst, controller, and vice president of development. I have successfully worked for myself for the past 25+ years in various capacities which include general contracting, land development, restaurant owner, and as an insurance agency owner. My wife and I have a securities and embroidery business in Dallas, Texas. I have a very strong entrepreneurial background but have also worked for multi-million dollar corporations. I prefer the entrepreneurial side of the equation.

Teaching Experience and Publications

I currently teach four sections of statistics for TCU each semester. I have been with them for over ten years. I taught at the University of Dallas for over 20 years such courses as statistics, marketing management, financial accounting, and risk management. I have taught quantitative analysis and statistics for Dallas Baptist University and managerial accounting and accounting for Texas Women's University (TWU). I have taught in both live classroom and asynchronous online settings. I have written two online courses, two books and two articles.

Education

I have an undergraduate degree in business from TCU as well as a Masters Degree from TCU. I have two earned Doctorates. One is from Louisiana Baptist Theological University. Both advanced degrees are in Eschatology (look it up, if you want to know).

Personal

My wife and I have five daughters and nine grandchildren between us. My wife is an attorney licensed in Illinois, Missouri and Texas and practices in the area of civil litigation. Two of our daughters are stay-at-home moms; another owns her own business and another daughter is a paralegal. My wife and I live in Southlake, TX with our youngest daughter (a student), one cat and one dog. The dog and cat do not get along with each other very well, but they do seem to tolerate each other. Well that is not entirely true. Oh yes, we have one NOISY bird. The dog thinks it is playtime with the cat. The cat views it differently, as a life and death match. Luckily for the dog, the cat has no front claws.

Well, I guess that about does it for me. For copies of my full story forward your check to me for \$5.00 and I will expand the story to a couple of more pages of boring and dull reading. I am not serious about the \$5.00 since \$1.00 will get you the same expanded write-up.

L. Van Jones, Ph.D.