Preface

WHAT MAKES THIS BOOK DIFFERENT FROM OTHER TEXTS?

Approximately four years ago, I was asked by my academic department to develop an online version of research methods for the National Online Master of Public Administration – Inspector General Program at John Jay College of Criminal Justice (CUNY). As part of this process, I developed narrated media lectures that would substitute for traditional in class lectures. Research methods is inherently difficult for students to grasp. I thought of straightforward ways to convey esoteric and abstract concepts using only PowerPoint and the sound of my voice. The process of developing these media lectures was quite rewarding in terms of better honing my teaching skills. It also caused me to reflect on “how” research methods can be taught more effectively.

This book is designed to teach research methods more effectively, relying heavily on concrete examples and making the jargon of research methods more accessible. There are, from my personal and vicarious experiences, two fundamental obstacles to teaching research methods. The first is the abstract nature of the subject area. In order to effectively teach methods, one must translate the abstract into something tangible. Making the abstract tangible requires many examples. It is through examples that these esoteric concepts become real. It is also important to remember that everyone learns and processes information differently. An example that effectively conveys a concept to 80 percent of the class is only 80 percent successful. You need multiple examples so that you can reach everyone in the class. This book uses numerous and concrete examples, many of which are derived from my research papers, to teach the art and science of research methods.

The second obstacle is relevancy. In order for this material to stick, the course needs to be framed through a lens of relevancy. In other words, if you teach from the perspective that these skills are scarce and can be applied to many—if not all—career areas, then you have a better chance that the student will learn rather than memorize, regurgitate, and soon thereafter forget. At the end of each chapter, the relevancy of the material from a public administration practitioner point of view is underscored to show students that these skills are transferable to the workplace.

This book differs from most research methods textbooks given an emphasis on using visual aids. The process of research methods is not conducive to painting pictures with words so to speak. The abstract nature of research methods requires a significant number of visuals to accompany the text. For example, this text not only describes the process of drawing a random sample, but also visually shows the reader how to draw a random sample through the use of website screen captures. These screen captures illustrate the random sampling process step-by-step. The extensive use of visuals—diagrams, flow charts,
Preface

and figures to convey the finer points of social science research methods—makes this book unique pedagogically. Research methods texts, especially those designed for novice level courses, are too text heavy. They rely too much on their writing to convey these concepts. The use of visuals along with text does a better job from an explanatory point of view. Less text and more visuals is an overarching theme within this book. I believe organizing a research methods text in this fashion is beneficial for the student in that it presents the material in a concrete manner.

CONTENT AND STRUCTURE OF THE BOOK

In Chapter 1, “The Tools of Social Science Research,” students are introduced the concept of empiricism. The six empirical tools used to collect information in a social scientifically valid way are discussed briefly. The difference between deductive and inductive research is also discussed (i.e., hypothesis testing versus hypothesis generation), as are the empirical tools that are paired to deductive and indicative research methods. Chapter 1 is the jumping off point so to speak. It introduces the primary methods by which information can be collected social scientifically. When and how one uses these empirical tools is discussed throughout.

In Chapter 2, “The Deductive Research Question and the Literature Review,” students are taught how to transition from a broader research topic to a specific, deductive research question. Emphasis is placed on showing students how to formulate a “researchable” research question. The concept of a hypothesis is discussed, as is how to formulate a hypothesis from a properly crafted deductive research question. Subsequent to this, the reader is introduced the concept of a literature review. What a literature is (and more importantly, what it is not) is discussed in the context of a hypothetical research question presented by the author. Students are taught how to search for scholarly articles and how to determine which articles to include. Additionally, how to organize and write-up a literature review is presented.

In Chapter 3, “The Unit of Analysis and Variables,” we begin discussing concepts that will eventually comprise the methodology section of a research proposal or a scholarly article. The concept of what unit of analysis is, and why it is important to be able to identify the unit of analysis is discussed. Moreover, students are introduced to the three most common types of variables—dependent, independent, and extraneous (or control). The second half of Chapter 3 explains how researchers go about defining the variables we just identified. Several examples are used to illustrate these points.

In Chapter 4, “Measuring Variables,” students learn the fundamentals of measuring variables associated with a deductive research question. Students are presented with examples that illustrate when it is most appropriate to use surveys, experiments, or existing data to measure one’s variables. Surface explanations of writing survey questions, designing a social scientific experiment, and identifying existing data sources are discussed.

Chapters 5-7 focus on the deductive empirical tools of data collection in far greater depth than what is presented in Chapter 4. In Chapter 5, “Writing and Delivering Survey Questions,” students learn the nuances of writing survey questions from scratch. Examples of poorly crafted questions are compared to more soundly written questions. The importance and process of survey pre-testing is touched upon, as are the various ways surveys questions are delivered. The strengths and weaknesses of each delivery method are presented as well.
In Chapter 6, “Designing Experiments,” the classic experimental design is presented, as are four distinct and often used quasi-experimental designs. The benefits and burdens of the classic and quasi-experimental designs are discussed, as are concepts such as random selection, generalizability, treatment and control groups, pre- and post-test measurement of the dependent variable, and internal validity. This chapter extensively uses diagrams and figures to illustrate the experimental process.

In Chapter 7, “Existing Data as a Measurement Tool,” the process of locating existing data is discussed in the context of three distinct examples. Sequential written roadmaps are provided that show how the data were collected. The roadmaps are augmented by website screen capture images that illustrate this process.

Chapters 8-9 discuss applied social science research – that is, more practical applications of the empirical tools discussed in Chapter 5-6. In Chapter 8, “Program Evaluation,” students are presented with the fundamentals of program evaluation, specifically what program evaluation is, how one goes about completing an evaluation, and the importance of stakeholders in the evaluation process. It also examines the different types of program evaluations and concludes with a discussion of ethical conduct for program evaluators. In Chapter 9, “Policy Analysis,” terms such as action forcing event, policy question, environmental scan, policy options, and options assessment are discussed in depth. Real world examples are used to further underscore each step in the policy analysis process.

In Chapter 10, “Qualitative and Mixed Method Approaches,” the inductive research tools are discussed, specifically in-depth interviews, focus groups, and field observation. How one goes about analyzing qualitative data collected via interview, focus group, or observation is proffered as well. The dovetailing of deductive and indicative methods is then discussed. That is, students are shown through various examples how inductive methods can be used to generate hypotheses that are subsequently tested using deductive methods, or alternatively how after using deductive methods to test a hypothesis inductive methods can be used to better explain “why” a hypothesis was confirmed of rejected. The dovetailing and interdependence of deductive and inductive research methods is underscored.

Chapter 11, “Sampling,” examines the methods of choosing which units of analysis that represent a broader population will be included in a study. Multiple probability and non-probability sampling techniques are discussed, as is how to draw a random sample through the use of a random numbers generator and a hypothetical sampling frame. The inherent advantages of probability sampling methods compared to non-probability methods are explored, as are concepts such as sampling frame, generalizability, margin of error, and confidence level.

Chapter 12, “Practical Data Analysis,” discusses what to do once data has been collected deductively. The chapter begins with data coding, data cleaning, and levels of measurement. What follows is a discussion of basic univariate, bivariate, and multivariate data analysis techniques, including forms of regression analysis. These techniques are presented so that students with limited statistical backgrounds can understand and actually use them. Numerous examples are illustrated through the use of a hypothetical dataset. The results derived from this dataset are interpreted and explained to the students in a visual manner. Chapter 12 is not meant to be survey of all possible statistical techniques. It provides a limited but foundational and useful explanation of a select number of techniques that all students can later employ in their respective fields. Working knowledge of basic statistics is central to this chapter.

In Chapter 13, “Research Ethics,” the many ethical dilemmas that can potentially confront social science researchers are explored. The protection of human subjects and maintaining the integrity of the research process are central to this chapter. Both of these principles are discussed in the context of popular culture and past transgressions of researchers, specifically the film Ghostbusters, the Tuskegee experi-
Preface

ments, and Milgram experiments. Chapter 13 provides a foundational yet important understanding of what researchers must do to protect their human subjects, as well as the integrity of the research process.

Each chapter includes a chapter recap and relevancy—which stresses how the information in each chapter can be used by public administration practitioners—as well as key terms, student exercises, and review questions. The appendices include a model syllabus, an explanation of what elements should be included in a student research proposal, as well as teaching tips for each chapter.

It is ultimately my hope that this book improves student understanding of the processes by which we gather information social scientifically.

Richard W. Schwester
City University of New York, USA
2014