Introduction

What's the purpose of this book?

Being able to understand and interpret research findings is an essential skill for all education practitioners, and being able to conduct a research study from start to finish is part of what we expect from our education scholars. For all of these professionals, finding
reliable, helpful guidance on how to effectively approach research can be difficult — a serious challenge in an age when research is ever-more-loudly praised as the hopeful solution for education's and society's afflictions.

Don't get me wrong, there are several great education research books on the market, and novice scholars would greatly benefit from reading them. These include such titles as *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* by Creswell & Guetterman (2018) and *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* by Mertens (2020), along with others. Many of these books are in their fifth and sixth editions and have guided generations of scholars through their first steps of becoming prolific education researchers. They are great books that should be highly valued.

Yet, reliable, openly-licensed materials on the topic of education research remain surprisingly limited. This presents access barriers to students wishing to learn about this topic and who are unable to afford an expensive textbook, while also limiting the reusability, interactivity, up-to-dateness, and usefulness of such materials for those of us involved in advanced education on research methods.

This textbook attempts to remedy this problem by providing a high-quality learning resource that documents modern approaches to education research and seeks to bring together all of the most important aspects of textbook quality — accuracy, usability, readability, helpfulness — into a single, free package.

As such, I've written this textbook with new scholars in mind, attempting to break down difficult concepts into understandable language and providing both explanatory examples and real-world connections to published research articles. In other words, I've written this textbook for my students in an attempt to drive down
their costs and to improve their learning opportunities both while they are in my class and as they move beyond it. Furthermore, as an open, living work, my hope is that this textbook will continually evolve and be refined to better address the changing needs of education researchers in a world where the students, institutions, and societies we serve are ever-changing and always in need of professionals who are well-trained in this difficult craft.

To do this, the book is broken into the following sections: Groundwork, Paradigms, Methodology, Data Collection, Data Analysis, and Reporting Results.

In Groundwork, I lay necessary foundations for moving forward by defining a host of terms and grappling with age-old problems impacting how we approach research enterprises, such as what it means to know. This ensures that readers will understand the vocabulary that I use in subsequent chapters and sets the stage for exploring diverse approaches to research that might have fundamentally different assumptions on foundational issues.

In Paradigms, I then highlight some of the dominant approaches to doing education research today, exploring what the foundational assumptions of each seem to be, how this influences what researchers within each paradigm will do, and what this means for us as consumers and producers of such paradigm-directed work.

After exploding the reader's vision to these various approaches, I will then in Methodology begin shifting to more concrete matters that influence research design and the day-to-day activities of the researcher, such as establishing rigor, designing protocols, and ensuring ethical behavior. As I do this, I will continually circle back to the various paradigms discussed in the previous section to help the reader to understand how such considerations would either be approached differently or uniformly between paradigms.

From that point on, chapters will remain concrete and will focus on
what good practice in education research looks like in the areas of **Data Collection**, **Data Analysis**, and **Reporting**. By starting off in the abstract and becoming increasingly concrete, I hope to give the reader both a birdseye, philosophical view of education research and also very practical, actionable guidance in how to do it well.

Also, I think it's worthwhile here to point out (in case you haven't noticed) that this book takes a less formal tone than may be normally used in other textbooks. For instance, I will use colloquialisms, contractions, and the first-person pronoun "I" with abandon. I do this to make the treatment of difficult concepts more approachable and to shed the deceptive cloak of the third-person, which academics often don to prevent the careful scrutiny of their ideas by making their very biased opinions look unbiased as they filter them through unnamed, third-person others (e.g., "one might conclude" vs. "I think"). If such frankness and lack of ceremony feel unnerving to you, dear reader, then I apologize for my impropriety at the outset, but I will nonetheless proceed in this fashion, believing that clarity and directness are more important for learning than is putting on airs of inhuman objectivity.

It is also important to acknowledge here that this book heavily reflects a U.S.-centric (or at least a North American-centric or Anglo-centric) exploration of the presented topics. Whenever I use historical examples or trends, for instance, I will generally draw upon those that have occurred in the U.S. Readers in other contexts may find such examples less useful for understanding the presented content, but hopefully the learning objectives and content will still generally be understandable to non-U.S. learners despite such culture-specific trappings.

Let's get started!
References


Education Research