Breaking the Tyranny of Numbers

IN A NATION where education and social policy are so intertwined, the role of educational leaders has become increasingly complex and externally driven. To meet these challenges as an educational leader, you need a mindset and a capacity for designing and implementing valid research. Education experts debate what constitutes effective, evidence-based practice for educational leaders and the kinds of research that these educators should conduct in schools, districts, and other organizations. We wrote *Applied Research for Sustainable Change: A Guide for Education Leaders* in response to these debates and challenges.

This book makes the case for applied **qualitative research** in schools, districts, and other educational organizations. Applied research integrates theoretical research and actual practice, enabling educators to assess their practices and improve them in light of context-specific data. In applied research, questions emerge from practice, and practitioners design research studies to collect and analyze data (often in relation to existing quantitative data) that respond to these questions within their organizational or institutional contexts. A primary goal of applied research is to generate useful knowledge to inform decision-making and change efforts. Throughout the book, we describe applied research that educational leaders can conduct with their colleagues to better understand

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and to improve their own practice as leaders and their schools, districts, and systems. This kind of research must be efficient to be sustainable. For this reason, we ground our discussion in concrete examples and, at the end of each chapter, suggest practices that you can use to get started.

Our suggested approach to educational leadership is supported by, and contributes to, applied research. This approach, like qualitative research more broadly, emphasizes critical listening, authentic engagement, a broad and receptive perspective, humility, empathy, ethics, collaboration, and curiosity. Using applied research to drive local (site-based) educational change means understanding and valuing local knowledge, experiences, and priorities. Through this research, educational leaders can use contextualized, site-generated data to help shift the current neoliberal, top-down approach to schooling that is foisted on US educators (even those working in independent and private schools). Throughout the book, we explore the primary role of collaboration in educational innovation.

This book focuses on how you and other educational professionals can champion and conduct applied research. There is scant literature on how leadership-level practitioners (particularly school and district leaders) and their colleagues conduct site-based research and how this research influences these educators' leadership practices.[1]

This book is the outgrowth of twenty-plus years of our own work teaching, conducting, and facilitating practitioner-led research in public schools, districts, and independent schools and our close work with other educators as they studied their own educational situations and contexts. We worked together for many years at a school-based applied research center with a mission to use this research to cultivate local educational change. The examples in the book are based on our experiences working with a variety of educational leaders in multiple educational settings, and the resources provided at the end of this book (and online) have been developed from these experiences.

Leaders can use applied research to push against the norms and power dynamics that create staleness and powerlessness in their schools and to increase respect, trust, and buy-in from colleagues and other stakeholders.

Applied research can generate data that address how schools—and the people who work within them—are being pressured and constrained by the tyranny of numbers. We view this constraint as a tyranny because the current education system in many ways forces professionals to ostensibly paint by numbers (gathered by others) rather than giving them the freedom to build knowledge creatively. We seek to interrupt the current deprofessionalization that pervades much of the educational system in the United States and to promote a hopeful, critical, and substantive approach to more effective schooling practices. This book presents a way to shift the ethos in most schools. Today, leaders typically feel forced to accept metrics that are unconnected to their own circumstances and that are employed in sloppy, sometimes deleterious ways. We instead focus on how applied qualitative research can help you and other educational leaders build a more holistic understanding of schools and the range of stakeholder priorities and experiences within them.

As the term implies, applied research seeks to have a direct application. The approach can combine quantitative, qualitative, and **mixed methods research**. In this book, *applied research* refers primarily to qualitative approaches in combination with preexisting quantitative data because schools and other educational institutions are already awash with numerical data and metrics. You may have heard of other applied research approaches, including action research, practitioner research, and practitioner action research. The approach we put forth in this book is similar to those approaches, but also varies. Our approach to sustainable change involves a collaborative team that is a part of all the applied research processes and outcomes. Another key aspect of our approach is professional development. We present ways for applied research to be integrated into professional development opportunities; the research findings inform and are informed by professional development practices. This is why we refer to our approach as applied research.

Applied research fosters sustainable change, that is, lasting change that benefits all stakeholders, in at least three ways. First, it helps people develop a more contextualized and holistic understanding of an issue. Second, it seeks out multiple perspectives from educational stakeholders. Finally, it offers

a continuous cycle of improvement, so that the actions that result from the research and the original presenting issues are monitored to make sure they are addressing the desired goals.

THE STRUCTURE OF THE BOOK

In this book, we aim to help you and other educators use applied research to gather issue-specific information to make sustainable changes in your own areas of concern. To make this process accessible, we describe in every chapter one or two real-world examples of educational leaders engaging in applied research. Although these examples come from our work with school leaders, we use pseudonyms and fictitious names of schools and districts to protect the individuals' identities. The leaders have various positions and include superintendents, assistant superintendents, principals, assistant principals, district coaches, directors of instruction, heads of independent schools, teachers, and school counselors. We looked at leaders in a variety of settings throughout the United States, including suburban and urban districts, charter schools, underserved public districts, and elite independent schools. The issues that these educational leaders address through applied research vary widely, for example, a districtwide focus on school discipline, faculty resistance to pedagogical change, and a persistent plateau in standardized test scores. Other applied research topics include the creation of a dual-credit program, low parent attendance at conferences, preparation for a school accreditation, ways to incorporate conceptual teaching practices, and an assessment of a district's professional development offerings and how dialogue is facilitated.

At the beginning of each chapter, we present questions for you to consider, and we address these throughout the chapter. We try to show you, in a straightforward way, what applied research is and what it looks like in practice. To that end, we present many illustrations of the processes we describe in each chapter and include concrete tips for putting these into practice. Furthermore, at the end of each chapter, we detail ways for you to get started applying what we have just discussed. The appendix includes all these practices for your reference.

Key terms are in bold at their first mention and are defined in the text. For your convenience, we include a glossary of these boldfaced terms at the end of the book. Finally, we include a resources section at the end of the book, where you will find reproducible templates, examples, further readings, and more information about specific topics. These resources are action oriented, specific, and easily customizable.

OVERVIEW OF CHAPTERS

Chapter 1 defines the concepts of applied research for sustainable change and leadership through collaboration. We overview the major applied research processes and, to show how this research is developed, describe how a superintendent involved principals in an applied research project and in individual projects at their schools. We discuss four mindsets that are vital for educational leaders to cultivate if they want to engage in applied research for sustainable change. Leaders need to situate themselves as learners, reconsider data and research, view collaboration as integral to professional excellence and development, and recognize and challenge the status quo. The chapter concludes with practices you can use to cultivate these mindsets with your colleagues and staff.

Chapter 2 helps educational leaders consider the important roles of culture and norms in their organization in a way that can help leaders both anticipate barriers to change and design applied research projects that are more relevant, collaborative, and sustainable. The chapter presents multiple practices that you, as an educational leader, can use to examine aspects of your organization.

Chapter 3 describes important considerations for applied research design. For example, leaders need to decide on the research topic and goals, develop guiding research questions, understand the existing knowledge about an issue, choose appropriate research methods, select the participants in a study, and plan for the **validity** of the research. They also have to allocate the time and resources for the research. In this chapter, we also detail ethical considerations that leaders and research teams need to actively plan for, and we describe ways to align applied research with existing data sources. Examples provided in this

chapter make these various considerations more concrete. The chapter concludes with three practices to guide leaders through the design of sustainable applied research.

Chapter 4 discusses collaborative research teams. We describe three key processes for collaborative research, including a multiple-perspective approach, a commitment to shared learning and knowledge exchange, and an openness to change. This chapter discusses important considerations for forming an effective **applied research team** and examines how collaboratively defining and revisiting the goals, roles, and norms of a team is central to leading such a team. We also present an example of how a director of curriculum and instruction facilitates and successfully leads an applied research ream with competing priorities. The chapter concludes by detailing several practices for building trust and fostering **reflexivity** among team members.

In chapter 5, we examine how a study's research questions determine the methods of data collection needed. We describe the primary data collection methods used in applied research, such as focus groups, **photovoice**, and mapping. The chapter also discusses the **research instruments** for gathering data. Revisiting the example of an assistant principal and his applied research team who were studying plateaued test scores, the chapter describes how the team collected data to answer their research questions. Chapter 5 also discusses methods for promoting research validity during data collection. For example, you can check in periodically with the participants in your study, incorporate multiple perspectives and data sources, use reflexive strategies, and collaborate with your team members. We also show how a superintendent uses these validity processes during her applied research study. The chapter concludes with specific practices to help your team begin to collect useful and valid data.

Chapter 6 defines data analysis and discusses three main processes of data analysis for applied research. The chapter also describes how teams can collaboratively develop thematic findings. Throughout the chapter, you will find tips to make these processes easier and will see examples of analysis in action. We will also show you how one research team analyzed its data and developed findings. We'll outline some practical steps you and your team can take in

analyzing your data. The chapter concludes with specific practices to help you and your team get started analyzing data.

Chapter 7 focuses on the central question of what to do with your research. To answer this question, we revisit the goals of applied research (and this book): local, sustainable change. We then detail ways to disseminate your research, present your data and findings, and implement action. We describe how one research team accomplished these goals. This chapter also describes different ways to structure reports and presentations, invite feedback, and address dissent.

We conclude this book by reflecting on the importance of applied research to generate sustainable educational change. The conclusion also discusses how the applied research processes themselves provide numerous professional development opportunities in addition to the opportunities stemming from the focus of the research.