Amanda Datnow
Vicki Park

Data-Driven Leadership

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More Praise for Data-Driven Leadership

> “As we enter into the era of Common Core, the need to view data in an organic and systemic lens is required to understand future trends and student needs. Datnow and Park introduce the four Ps context-focused approach to understanding the implementation of data use, which enables district leaders and teachers to move beyond simple questions of whether it is effective or useful for teaching and learning. This book is a must read for schools and districts ready to move beyond the PLC paradigm.”
>
> —Francisco Escobedo, superintendent, Chula Vista Elementary School District

> “Wisdom and experience are what set this book apart. Datnow and Park have the wisdom to recognize that successful data use is less about technology and more about integrating it into the everyday practices of schools. And they have the experience, drawn from their careful studies of how real schools and districts use data, to describe the essential conditions necessary to harness the power of data. If you’re looking for practical insights into how data can make a difference in your organization, this book is an essential resource.”
>
> —Jonathan Supovitz, co-director, Consortium for Policy Research in Education, and associate professor, Graduate School of Education, University of Pennsylvania

The Jossey-Bass Leadership Library in Education

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Andy Hargreaves

Consulting Editor

THE JOSSEY-BASS LEADERSHIP LIBRARY IN EDUCATION is a distinctive series of original, accessible, and concise books designed to address some of the most important challenges facing educational leaders. Its authors are respected thinkers in the field who bring practical wisdom and fresh insight to emerging and enduring issues in educational leadership. Packed with significant research, rich examples, and cutting-edge ideas, these books will help both novice and veteran leaders understand their practice more deeply and make schools better places to learn and work.

ANDY HARGREAVES is the Thomas More Brennan Chair in Education in the Lynch School of Education at Boston College. He is the author of numerous books on culture, change, and leadership in education.

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Vicki Park

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Cover design by Jeff Puda

Cover image: © Thinkstock

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Published by Jossey-Bass

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One Montgomery Street, Suite 1200, San Francisco, CA 94104-4594—
www.josseybass.com

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Library of Congress Cataloging-in-Publication Data has been applied for and is on file with the Library of Congress.

ISBN 978-0-470-59479-7 (pbk); ISBN 978-1-118-22060-3 (ebk); ISBN 978-1-118-23408-2 (ebk)

The Authors

Amanda Datnow is a professor in the Department of Education Studies at the University of California, San Diego, where she also served as department chair. Since receiving her PhD at UCLA, she has spent the past two decades conducting research on educational reform, particularly focusing on issues of equity and the professional lives of educators. Her goals are to both improve policy and practice in education and advance theory about educational change. She is the author or editor of seven books and over sixty articles and book chapters.

Vicki Park is an assistant professor in the Department of Educational Leadership, Connie L. Lurie College of Education at San José State University. Her work broadly focuses on urban school reform, data-informed leadership for equity, and the ways in which class, race, and gender shape the academic development of low-income youth. She earned her PhD in urban education policy with an emphasis on K–12 leadership and administration from the University of Southern California. Prior to earning her doctorate, she worked as an elementary and middle school teacher in California.

Acknowledgments

Some of the work reported in this book was supported by a grant from the NewSchools Venture Fund, with funding received from the Bill & Melinda Gates Foundation and the William and Flora Hewlett Foundation. We are grateful to our colleagues at NewSchools for assisting us in this effort. However, the contents of this book do not necessarily reflect the positions or policies of NewSchools or of the foundations.

We express our sincere thanks to the incredibly thoughtful, committed, and pioneering educators who gave generously of their time and effort to participate in this study. We also thank our research team colleagues at the Center on Educational Governance at the University of Southern California. We acknowledge the anonymous reviewers for their thoughtful feedback on an earlier version and, most notably, Andy Hargreaves, the series editor, for his tremendous insights that helped us transform our writing. We also wish to thank our former and current students, as these highly committed educators help enlighten us about the daily successes and challenges of using data in educational improvement. We give special thanks to Karen Jarsky for her superb editing of this manuscript. Finally, we thank Marjorie McAneny and Kate Gagnon at Jossey-Bass for supporting us in moving this book to completion.

Chapter 1
The Promise and Pitfalls of Data-Driven Decision Making

Data are ubiquitous in our lives. Using the latest technologies, we can now quickly calculate how many steps we took in a day, how many calories we consumed, and how much money we spent and on what. Knowing this information will ideally help us make better decisions that will improve the quality of our lives. Businesses, health and education organizations, and governments can now quickly crunch big data to help them understand phenomena in ways never before possible.[1] The power of data use is simple: armed with data, people will make better choices and organizations will function more effectively. This is the thinking behind a hot topic in educational reform: data-driven decision making.

A decade ago, data-driven decision making wasn't on the radar of most educators or policymakers. Now it is difficult to imagine an educational reform agenda that does not include data use as a key pillar. The use of data has the potential to change teaching and learning. Teachers now have wider access to information about students' learning and can address learning gaps before students fall behind. Data use can also build collective responsibility for all students. As student achievement results and teaching strategies are shared among teachers within and across grades, school cultures and routines are changing as well. Transparency is increasing and the culture of individualism that used to characterize classroom teaching is decreasing.

But how do we find the time to incorporate data use into the already incredibly busy professional lives of leaders and

teachers? What gets pushed aside if teachers focus on data? How much training and support do educators need to use data effectively? How does data use fit with other reform agendas? Are we in danger of chasing the numbers and forgetting the central purpose of data use, which is to improve teaching and learning?

Are we in danger of chasing the numbers and forgetting the central purpose of data use, which is to improve teaching and learning? Data-driven decision making is very popular in schools and districts across the United States, and there is also increasing emphasis on data use in other countries, including the Netherlands, Canada, Belgium, South Africa, Australia, and New Zealand.[2] Although each place may take a different approach, the common idea is that when leaders and teachers become knowledgeable about how to use data in their work—when they collect and analyze data to guide educational decisions—they will become more effective in reviewing their existing capacities, identifying weaknesses, and charting plans for improvement. In the classroom, data can inform how teachers plan lessons, identify concepts for reteaching, and differentiate instruction.[3]

The push for educators to systematically gather and use data has brought with it a need to develop new competencies, skills, and cultures. But using data is not as straightforward as it seems. Leadership is essential in this endeavor. We can’t simply use data and expect good things to happen. Educational leaders play a critical role in shaping how and why data are used, what counts as data, and what people are aiming for when they push the use of data in schools. Although we titled this book *Data-Driven Leadership*, we strongly believe that data do not drive decisions by themselves. Individuals use data to engage in inquiry around current practices and inform courses of action. *Data-informed leadership* is thus a more

appropriate term for what we're asking leaders to do.[4] And although the term *data-driven decision making* is commonly used in the field, from here onward we will refer to the practice as *data-informed decision making* to signal this important shift in thinking about data use. Leaders, we argue, should use data carefully to inform thoughtful decision making as part of an ongoing process of continuous improvement. Data use should not be seen as a passing fad or fancy. Leaders must take the initiative to assess what types of data are useful and for what purposes. Data-informed leadership aims to contribute to improving student achievement and teacher professionalism rather than threatening them.[5]

This book is written primarily for educational leaders at the school and district levels. It is geared toward leaders who are interested in becoming more data informed, as well as those who are well on the way and already feeling confident in their approach. Our aim is to provide a guide that will help build the reflective skills of leaders rather than offer a set of prescriptions about putting data use into practice. In order to help leaders get smarter about data use, we share research-based lessons learned from educators about how they have approached data use in their school systems. We examine how district and school leaders can create structures and cultures that support thoughtful engagement with data for continuous improvement. We also expose some of the potential land mines on the road to productive use of data for continuous learning and equity. Our intention is to help leaders avoid those problems and use data effectively and strategically in their decision making.

Perils and Perverse Incentives

All schools are already data informed in one sense or another. In the United States, the existing accountability system and its evaluation of schools based on student performance data expects and ensures it. Behind government accountability policies is the notion that educators need to know how to analyze, interpret, and use data so that they can make informed decisions about how to improve student achievement on state or national assessments. Within this, there is a strong policy emphasis on reducing the achievement gap, especially for historically underserved, low-income students of color.

Data can be very powerful, but they also have hazards.[6] There are some perverse incentives inherent in using accountability data within a high-stakes, limited-resource environment, which have led to some perilous practices and pitfalls, including these:

- Cheating on state tests
- Implementing quick fixes
- Targeting resources to students just below accountability thresholds
- Narrowing the curriculum
- Data overload

Cheating on State Tests

Accountability policies "invest faith in ever-increasing and voluminous amounts of numerical data collection. They can create an evidence base for an Orwellian system that can see everything, know everyone, and judge just when and where to intervene with any student, school or classroom, at any time."[7] Continual surveillance and high-stakes tests have resulted in a great deal of fear among many educators struggling to help their students show progress on state