CERTIFIABLE

Teaching, Learning, and National Board Certification

David Lustick

Certifiable

Teaching, Learning, and National Board Certification

DAVID LUSTICK

ROWMAN & LITTLEFIELD EDUCATION
A Division of
ROWMAN & LITTLEFIELD PUBLISHERS, INC.
Lanham • New York • Toronto • Plymouth, UK

Published by Rowman & Littlefield Education
A division of Rowman & Littlefield Publishers, Inc.
A wholly owned subsidiary of The Rowman & Littlefield Publishing Group, Inc.
4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706
http://www.rowmaneducation.com

Estover Road, Plymouth PL6 7PY, United Kingdom

British Library Cataloguing in Publication Information Available

Library of Congress Cataloging-in-Publication Data

Lustick, David, 1962–
Certifiable : teaching, learning, and National Board certification / David Lustick.
p. cm.
Includes bibliographical references.
ISBN 978-1-60709-894-2 (cloth : alk. paper) — ISBN 978-1-60709-895-9 (pbk. : alk. paper) — ISBN 978-1-60709-896-6 (electronic)
1. National Board for Professional Teaching Standards (U.S.) 2. Teachers—Certification--United States. I. Title.
LB1771.L87 2009
371.120973—dc22

2010034055

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48-1992.

Printed in the United States of America

To my Mother and Father
who gave me a foundation
all the way down the line.

Contents

Preface

Some years ago, during an early phase of this work, my oldest son, Dakota, was a second grader. One cold winter evening around the dinner table, he shared a story with the whole family about what happened at school earlier in the day. He said they learned about the different types of jobs grown-ups have.

"When it was my turn, I told everyone that my Daddy is writing a book."

"I am?" I asked.

"Yes. You work downstairs every day writing your book."

"What kind of book?" I asked.

"It's your autobiography," he answered.

I had never considered the research and writing that occupied my time in my basement "office" as anything other than interesting work. But my son saw it as something more. To him, it was the story of my life. I was so struck with his perception of what "Daddy does" while pursuing a Ph.D. that the conversation has stayed with me.

This work in some respects is my "autobiography." It is the story of how a researcher tries to find an answer to a question that has both personal and professional value. In the most difficult and trying moments through this long process, my son's idea that it was a story helped me to stay on task to find an answer.

For me, teaching has always been part of how I define myself. Since elementary school, I worked to teach others. When teaching became my chosen

career, the classroom was like a second home for me. Through the blur of day-to-day challenges trying to teach students about the world through the lens of science, I discovered the creative and often spontaneous power of purpose in the work of a teacher. I excelled at the practice. I pushed the boundaries of curriculum and technology. While preparing lessons, I would review textbooks and lab manuals to try to find the best vehicle for bringing about learning with my classes of students for that particular year. Often, I would think, "Is this the best way to teach this particular skill or concept?"

My dissatisfaction with the status quo curriculum or prepackaged labs resulted in my creating new approaches for my students. Sometimes they were successful and sometimes not. But with each attempt to improve, my reflective practice became richer in scope, more effective for my students, and, for a time, more interesting for me.

After seven years of this type of intensive teaching, I found myself getting stale, worn down, and maybe a little depressed. What had once been new had become tired. What was once a challenge had become routine. I was feeling the beginnings of the notorious "teacher burnout."

I had witnessed colleagues in New York City suffer for years with advanced stages of the affliction. One teacher in particular I remember used to come to work, walk into the teacher's lounge, and announce for all to hear: "673 days 15 hours until retirement." I knew I had to avoid this syndrome at all costs. With the threat of burnout hanging over my career, I heard President Clinton's State of the Union Address in 1997. It turned out to be a life-changing event.

During the speech, he said the following about teachers:

> To have the best schools, we must have the best teachers. Most of us in this chamber would not be here tonight without the help of those teachers. I know that I wouldn't be here. For years, many of our educators, led by North Carolina's Governor Jim Hunt and the National Board for Professional Teaching Standards, have worked very hard to establish nationally accepted credentials for excellence in teaching. Just 500 of these teachers have been certified since 1995. My budget will enable 100,000 more to seek national certification as master teachers. We should reward and recognize our best teachers. And as we reward them, we should quickly and fairly remove those few who don't measure up, and we should challenge more of our finest young people to consider teaching as a career.

His words rang in my head like a bell. "Reward and recognize our best teachers" and "credentials for excellence in teaching" piqued my interest and curiosity. What was the "National Board for Professional Teaching Standards"?

I took the president's words as a direct challenge to be one of those 100,000 teachers. In his plan to address the needs of schools, President Clinton described his ideas as a "Call to Action for American Education." I took that phrase in a literal sense: my president was calling on me to be one of those 100,000 master teachers. It was the first time in my life that a political figure had inspired me to do more with my life. I felt it was my duty as a good American to try to achieve what the President found important.

The next day I investigated the National Board for Professional Teaching Standards (NBPTS) through the brand new World Wide Web. I read the five core propositions and thought, "This is me. This is my kind of teaching." Within a month, I was preparing for certification and lobbying my administration for support. The next year, I successfully completed the certification process and became a National Board Certified Teacher in Adolescence and Young Adult Science.

The experience proved a high-water mark in my classroom teaching career. I put my entire heart, soul, and mind into it. I had the unusual experience of pursuing National Board certification while teaching at the American School in São Paulo, Brazil. Despite the intense isolation from others in my National Board certification cohort, I made connections with resource personnel online. In addition, I was able to solicit valuable assistance from some of my colleagues, students, and parents as I attempted to construct the entries of the portfolio. For the assessment center exercises, I had to fly from São Paulo to Miami, Florida, to take the two-day computerized assessment exercises.

After months of requests for financial assistance to cover the costs associated with National Board certification, my administration finally agreed to pay for half my travel expenses to Miami. All other costs associated with the certificate—the $300 registration fee, $1,700 certification fee, hotel, food, and so on—were my responsibility. I would also not enjoy any benefit to my salary or any financial gain if successful in my attempt to attain the coveted national certification.

For reasons that remain a mystery to me, my administration was not enthusiastic about my independent efforts to pursue the "new" form of certification. Likewise, my colleagues who were for the most part supportive and

helpful, did not understand, appreciate, or necessarily approve of my ambitions. I felt that some of the teachers viewed National Board certification as a threat to the idea that, as teachers, we are all in it together. Trying to distinguish one's self from within this cultural value might have been perceived as an affront to what they viewed the teaching profession to be.

From their perspective, anyone who was "crazy" enough to pursue a career as a teacher should be given equal respect for the sacrifice. Whether they were effective in the classroom was secondary to the choice they made to dedicate their lives to helping young people learn. They were not in education for the money. They were not in education for the prestige. They were not teachers for the paperwork and requirements of the administration. All teachers are special because of what they sacrifice to work with learners.

National Board threatens this particular model of the teaching profession. It sends a message that deciding to be a teacher is not the distinguishing factor; rather, how effective one is at bringing about learning in the classroom becomes the primary consideration. In other words, some teachers may be better than others and National Board certification provided the first systematic means for verifying this assertion. Such an approach to the teaching profession is extremely threatening to a generation of educators raised under the auspices of the union-dominated, egalitarian view.

Teachers demonstrated this kind of apprehension by questioning why I was doing what I was doing. From their perspective, it seemed a little crazy to sacrifice so much for apparently so little. Why would anyone want to work so hard on something that seemed so unnecessary? Why would I want to prove that I was somehow better than everyone else? Why couldn't I be satisfied with the intrinsic rewards from the students I taught and their parents? Some teachers thought that they, too, could be successful with National Board certification if they wanted to work as much as it required and if they had the financial ability to cover all the costs.

Just because I was paying for this experience and committing extra hours of work after school and on weekends did not mean that I was a better teacher than someone who chose not to accept the extra responsibilities. For most of my colleagues at the time, National Board certification was an exercise in vanity. If I was successful, the experience would only benefit my ego and not translate into anything meaningful for the teacher, students, or the school as a whole.

I must admit that at the beginning of the experience, these ideas may very well have applied to me. I did want to prove to my community, as well as to myself, that I was an accomplished teacher as judged by an outside authority. Maybe I felt that I was not receiving the respect I felt I was due. Maybe the intrinsic rewards were not enough to validate the amount of work and time I put into my teaching. Maybe I was dissatisfied with the egalitarian model because it equated me with others who I was sure were far inferior to me at bringing about learning in the classroom.

I remember one teacher in particular who was an experienced teacher with a Ph.D. in chemistry. His content knowledge was far superior to mine in every respect, but he knew relatively little about how to teach that content to a diverse group of learners. It was true that for the high achievers, his traditional direct approach to instruction was quite effective as evidenced by the standardized test scores at the end of the year, but to the majority of average achievers, his pedagogy left much to be desired.[1] I knew this because many of them would come to my office hours for extra help because they knew I would employ different strategies and approaches to address their needs.

My colleague, though intelligent and experienced, was at a loss as to how to help these struggling students. To be fair, some of my higher-end students would seek him out during his office hours because I could not answer their advanced content questions to their satisfaction. However, we were hired to teach high school science, not college, and the needs of a secondary student go beyond just advanced content. I knew I was more effective than my traditional teaching counterpart at helping the majority of students not only appreciate and enjoy the experience of chemistry, but also succeed at learning the required concepts.

My knowledgeable colleague would probably find the National Board certification experience to consist of foreign ideas and silly tasks. He had little appreciation of the students as resources in the learning equation. He did not value the power of collaboration in learning nor in providing innovative and meaningful assessments. As is true with many traditional educators in science, he relied on lectures, note taking, didactic "discussions" (Q and A with the students asking questions and the teacher giving answers), and assessments based on memorization and problem-solving ability.

In many respects, I saw myself as a mirror opposite of this approach to teaching. For me, teaching and learning was a collaborative and evolving

process. Assessment could involve memorization and problem solving, but it could also be open-ended and authentic. Students' ideas of natural phenomenon were assets to be mined in class, not obstacles to be overcome.

After reading the National Board's standards of accomplished science teaching, I knew that the standards described my approach to teaching and learning and not that of my esteemed colleague. The National Board's standards were the first documents to articulate and speak directly to my abilities and values as a science educator.

Faced with colleagues whose approach to instruction was traditional and who were not accepting of alternative pedagogies, I felt the teaching experience closing in on me in an unwelcome manner. National Board certification provided me with an opportunity to address this problem in an innovative and enticing way. Little did I know that its impact on me both professionally and personally would go far beyond these motivating factors.

If my decision to pursue National Board certification started out as an exercise in vanity, it ended as professional learning experience still impacting me to this day. The idea that the process would only benefit me and not my students was proved blatantly false. I knew that my intense and honest efforts at a critical self-reflection had changed some of my approaches to teaching and reaffirmed others.

For example, I gained a new appreciation for the learning experience as seen through the eyes of different students. For some, learning science was second nature and for others it was like pulling teeth. Appreciating how painful and difficult learning can sometimes be enabled me to anticipate problems with individual learners before they became big and weighty issues.

I also learned about the value of parents as a resource in a student's successful learning experience. Prior to certification, I mainly saw parents as a nuisance at their worst and as a hedge with student discipline problems at their best. However, after certification, I saw every parent as having a unique child with a different set of priorities and values. Addressing those differences allowed me to develop more prosperous and appreciably better relationships with those parents and their children.

I think I learned the most in my actual daily practice. After analyzing videotapes of my work, I quickly realized that I talked more than I listened. I missed important comments and questions between students. I was too easily

drawn into the "sage on the stage" role of teaching. Finally, what I thought was "wait time" was really more like a one-second pause.

There is nothing more humbling than watching a video of one's teaching for the first time. The reality of the video confronts directly one's self-perception as a teacher. The disconnect between perception and reality can be quite disturbing. What I had thought was pretty good work proved to be awful, and what I had considered awful turned out to be not so bad. The video analysis forever changed me as a teacher and a person. Every time I stepped into a classroom, I was reminded of those horrible images I was forced to confront in the video. I was determined to address every identified weakness and turn it into strength.

After I achieved certification, I began thinking seriously about why I found the experience such a profound and productive professional development. When I arrived at Michigan State University to pursue a Ph.D. in Curriculum, Teaching & Educational Policy, I quickly discovered in the literature that there were many teachers who had had similar experiences with National Board certification and had written about it in journals and magazines.

An idea began to form that the mounting anecdotal evidence might constitute a legitimate phenomenon worthy of investigation. The literature had great breadth, but relatively little depth. When asked what they learned by going through National Board certification, the typical answer was an unfulfilling "I'm more reflective" type of response. Very few pieces went into any kind of detail about what "more reflective" might actually mean.

If I had been asked what I learned, I would have found it difficult to answer, too—not because I didn't learn anything, but because I had learned so much that it was impossible to sort out the complex nature of the outcomes and their respective influence upon my practice. I wanted to know what I and others learned from certification and the best way to find out was through research.

The study presented here is my attempt to answer the question, "What are teachers learning from the certification process?" The value of this research is not just for the educational policy community, classroom teachers, and the National Board, but for me. On a very personal level I wanted to understand the experience more thoroughly and be able to discuss learning outcomes beyond the "more reflective" rhetoric. If the research could answer some of my

own questions, it might help other teachers decide whether to pursue Board certification and help other candidates understand their own experiences more thoroughly.

The decision to pursue an empirical approach to this question was based on two factors: (1) the policy community's desire for information based on empirical studies and (2) the unique opportunity to attempt to measure outcomes using the National Board's own rubrics and scoring procedures.[2] The idea to use the Board's own assessment tools to evaluate candidate learning from certification signifies the moment when this research became possible.

As I did this work on how and what others might be learning, I was constantly aware at every step what it was that I might be learning. I was conscious of my role in the process and how my ideas and perceptions were shaping and were shaped by the events I experienced. I approached this project with an intellectual curiosity and professional honesty. What, if anything, would the data reveal was learned from the process of certification? Was my experience common or uncommon? How would demonstrated professional knowledge among candidates change from before to after certification? When I began this investigation, I did not know the answers to these questions. Now I have a much better understanding. My learning is documented in this work.

As I reflect on this effort, two learning outcomes stand out. The first idea deals with the process of research in education and the other pertains to National Board. Before this investigative endeavor, I had no appreciation for the arduous work that goes into education research. Research was always something presented to me in its finished form that identified new knowledge or questioned existing consensus on one point or another. Now, I see it as a unique human endeavor prone to all the weaknesses and strengths of the people involved. Technology is a wonderful tool for conducting research, but in the end it is the investigator collaborating with a team of diverse individuals that makes a project come to life.

My other specific learning outcome is about the National Board. I went into this work with a rather naïve notion of the Board as a solitary institution dedicated solely to the identification and assessment of exceptional teachers. While I still think this is true, I now see the Board as an outsider; it is like a renegade entity fighting against ill-defined forces for a rightful and integrated position in American education. I have come to a point where I am both hopeful and apprehensive about the organization's prognosis.

National Board has been a central part of my life for the last twelve years. In 1998, I was part of the first cohort of Board-certified teachers in Adolescence and Young Adult Science. Later I served on the Board's committee to teach America about accomplished teaching. In preparation for this research, I also became an assessor during the summer for the Board scoring the Whole Class Discussion in Science entry in Pittsburgh, Pennsylvania.

In 2008 I successfully completed my Profile in Professional Growth as required to be recertified for another ten years. I have participated in many National Board–sponsored events at both the state and national levels. Through all this experience, I have come to know and admire many of the people who work tirelessly every day to make the work of the Board possible.

Because of my extensive experience with the National Board, I am susceptible to attacks of bias. In response, I approached this work from a critical disposition that manifests itself in both the rigor of my analysis and the presentation of possible implications of this work to prospective candidates, the National Board, and our educational system. In the words of Richard Feynman, I have "bent over backwards" to model "utter scientific integrity" about this work in an effort not to delude myself into discovering answers I wanted to find (1974, 12).

If some interpret this transparency as evidence of weakness, that is their prerogative. The harshest critics of the Board will find ideas in this book that, if taken out of context, will support their position. Those who blindly support anything the Board does will discover that an informed understanding is more effective than unquestioning loyalty. I am of the belief that total disclosure can only strengthen the important findings and implications associated with this work. The results are quite clear: National Board provides an excellent opportunity to become a more accomplished teacher.

National Board certification seems to accomplish the impossible. It identifies exceptional teachers while simultaneously fostering effective professional learning. For some, the idea that an assessment could also serve as an effective learning opportunity will go against their traditional conceptualization of each. Hopefully, this book will help such individuals come to a more integrated understanding of how teacher evaluation can lead to teacher learning. While I do not try to hide my affection for the organization or the promise it holds for exceptional educators both in the United States and around the world, I also see its weaknesses and liabilities.

The story told in this work began life as my dissertation at Michigan State University. In my efforts to adapt it for a more general audience, I bring to bear all my knowledge and experience with the Board to produce the highest quality discussion about teaching, professional learning, and National Board possible.[3]

If Boshier (1994, 73) is correct when he suggests that "good research emerges as the perfect intersection between socio-historical circumstances and one's own biography," then the chapters that follow tell a story worth sharing. If this is my autobiography, as my son suggests, then the work presented here represents only the first chapter. I consider my ongoing efforts to achieve knowledge and understanding as a "work in progress" requiring many more years and a career of study.

NOTES

1. Coincidentally, my students did just as well if not better on the same exams. So regardless of teaching philosophy, both teachers facilitated excellent test results, but the learning experiences for our respective students were quite different.

2. There is another important reason for this research. I submitted a proposal for research in response to a request for proposal from the NBPTS. After a thorough review of more than one hundred proposals submitted, the RAND Corporation recommended that my study be one of the twenty-one proposals selected for funding. While my budget of $187,000 was the smallest amount awarded by the Board during this particular round, it is hard to imagine anyone who was happier than me at the time. While I thank the RAND Corporation and NBPTS for giving me the opportunity to do research, I am quite cognizant of the appearance of bias this relationship might represent. My interactions with the NBPTS were always of the highest professional integrity. Never once did anyone ever ask me to alter, revise, or change anything about my results. My findings, whether flattering or problematic for the Board, were always received with great respect.

3. Portions of this work have previously been published in Lustick and Sykes, "National Board certification," 2006.

Acknowledgments

Though much of the work that goes into writing a book is done in seclusion and near isolation, I could not have initiated, worked through, and successfully completed this endeavor without an inspiring collective of friends and professionals from around the world. With far too many to name, I will do my best to focus on the individuals who were most important to the development of this project. The work that went into this book spans across my time at two different institutions. The initial research took place at Michigan State University (Go State!) while much of the writing took place at the University of Massachusetts Lowell (Go River Hawks!). Therefore, I find my acknowledgments divided between these two institutions.

First, I need to acknowledge the expertise and foresight of Tom Koerner, my editor at Rowman & Littlefield. Without Tom's encouragement, insightful comments, and understanding, I would not have been able to bring this work to completion. I will forever feel a debt of gratitude toward Tom and his staff for giving me this opportunity at the best possible moment.

My professors and friends at Michigan State University were an invaluable source of wisdom and guidance. It is a good thing that tuition covers the cost of an education, because if I had to give a nickel every time I sought out help or an answer to a question, I might have paid twice as much. From this perspective, my doctoral education at the Graduate School of Education was a bargain.

No other person has taught me more about excellence in teaching and scholarship than Gary Sykes. Gary is an intellectual force of nature. Our discussions about National Board and research were punctuated episodes of exhilaration. When confronted with a problem, Gary starts off slow and builds up a head of steam. Before long, he churns out ideas like a train chugging down the tracks. I left every one of our meetings literally shaking with energy and inspiration. I am forever in debt to the generosity of intellect, trust, and spirit he showed me as my chair, advisor, role model, and friend. An exceptional teacher, Gary's voice and perspective remain a permanent part of my psyche. If I could be a quarter the professor Gary is, I would be immensely satisfied.

Michigan State was an amazing place for me to learn and I need to thank Jim Gallagher and Bruce Burke who recognized the potential match and dragged me away from the classroom and into the world of academia. The quality of this study was greatly enhanced by the insightful and effective critiques provided by Mary Kennedy, Mark Reckase, and David Labaree. Their respective areas of expertise were a constant reminder of the level of excellence I continue to strive toward. A heartfelt thanks also to Susan Melnick, Bob Floden, and Yong Zhao for their consistent support, understanding, and wisdom. I am grateful for the assistance above and beyond the call of duty from Richard Houang who insisted that I slow down and think more about my work. He is not only a gifted statistician, but also a good friend.

At the University of Massachusetts Lowell, I want to thank Don Pierson who convinced me that UMass Lowell was the place for me to begin my academic career. He was right. The support and guidance given to me by my colleagues and the administration goes above and beyond my expectations. In particular, Anita Greenwood and Jay Simmons have been so helpful in their encouragement and open-door policies. It is an honor to have such personable and gifted colleagues who are always willing to listen and offer advice.

While my teachers taught me how to think about research in education, it was my friends who gave me the support and confidence to complete the task. Thanks to my very good friends, Cindy Kendall and Dan Copeland, who showed me what it means to be educated, intelligent, and caring. Their impact on me reverberates over time like thunder. And a heartfelt thanks to Joseph Flynn for listening when he didn't have to, talking when he needed to, and showing up whenever he wanted. My deepest gratitude goes to my colleague and friend, Jill Lohmeier, for her unwavering belief in my ability to succeed.

Thanks to Dean Grosshandler, Misty Sato, and my brother Ian for their willingness to provide honest feedback when it was most needed. They each went above and beyond in their respective ways to make this effort the best it could be. Friends and family like these are rare and precious. They have each enriched my life more than they will ever know, and to them all, I am grateful.

In addition to teachers and friends, individuals from across the country helped in ways too numerous to list. Thanks to all the teachers who gave their time and energy to discuss teaching and learning with me for this study. Thanks to the assessors who contributed their experience and expertise to the analysis of data and to the transcribers, secretaries, and support personnel who improved the quality of my work through their individual efforts and professionalism. It has been my pleasure to collaborate with such a talented group of professionals. I am humbled and honored by the awesome commitment to excellence that they shared with me.

In the last few months, Brandis Kelly has worked as my copy editor for this book. Like an angel, she appeared at my office willing and able to provide the critical eye of an English major. For the many hours she spent pouring over drafts and finding mistakes I am most appreciative and grateful.

When I think of exceptional classroom teaching, Mrs. Slocum, my fifth grade teacher comes to mind. Back at Wiley Elementary School in Watertown, New York, she showed me what it means to focus on the whole child and not just the outcomes. Without her insight and skill, I might never have found my way back to the way of learning.

Last, but certainly not least, I wish to thank my family. My wife, Doreen, has been a constant source of encouragement and understanding that has made my work possible. Her love, beauty, and unending patience have enriched my life immeasurably. Our three children, Dakota, Avalon, and Troy, never made me feel too guilty about sacrificing time together for time on this book. The days and months spent completing this work have made me cherish their company even more.

Foreword

Gary Sykes

This volume comes at a welcome time in our nation's continuing efforts to improve teaching and learning in the schools, and to build a teaching corps with the needed knowledge and skills to face the demands and challenges of the twenty-first century. By some accounts, we are on the verge of transformational changes in education, ushered in via technology, charter schools, and new accountability arrangements. Perhaps schools will disappear in the face of online teaching, districts will wither in the face of assemblies of independent chartered schools, education schools will be challenged by a medley of alternative providers, and teachers will be held accountable for their students' learning as measured by new tests and assessments.

Perhaps. But any reading in the history of educational reform gives pause to some of the more audacious claims made by the current round of reformers. These new developments and more are likely to unfold in the coming decades, but it seems unlikely that they will replace traditional schools, districts, education schools, or teachers; it is equally unlikely that the reforms will fully realize their ambitions while steering clear of a range of unanticipated and adverse consequences.

One current reform, however, has navigated the tricky waters of change to produce some widespread and positive results. Launched in 1986, the National Board for Professional Teaching Standards (NBPTS) will soon celebrate its twenty-fifth anniversary, a quarter decade of substantial achievements. What is

most striking about the National Board is its insistence that good teaching is the heart of the matter, that it can be identified, and, as a result, that good teachers can both be "found" and "made." Board certification may simply draw highly qualified teachers to its ranks, in which case certification simply signals competence; or the process of certification may itself constitute a form of professional development that actually cultivates and enhances teaching. It is undeniable that Board certification is a rigorous and demanding course of examination and study that constitutes a mark of distinction among teachers.

In his splendid study, David Lustick explores the meaning of accomplished teaching in some depth, providing rich cases to consider together with evidence on the question of Board certification as professional development. As with almost all of the many studies accumulating about Board certification, the evidence is mixed, but in the numbers and the narrative may be discerned positive indications that teachers learned from the process itself on at least some important dimensions of teaching.

The volume constitutes a reflection on three matters that are central to the debates today about teaching. One is the nature of teaching itself: Is this a complex practice? Can it be easily routinized? Is teacher planning and decision making important and do teachers differ from each other in the ways they go about their work? And most important, are there dimensions of good teaching that are not easily captured either in standard evaluation protocols or in attention just to the value added by teachers to student achievement? Lustick supplies thoughtful commentary on these questions, generally noting the subtleties and complexities in discerning aspects of good teaching.

A second issue of note concerns how to study teaching in order to get at its qualities and its effects. The book may be read as a cautionary tale about the difficulties in the conduct of such investigations, taking the reader behind the scenes in ways that most studies fail to do. What we can conclude from this excursion into the frailties of the research process is that no single study can be definitive on the important issues because all such studies are flawed, even the most rigorously designed field experiments. In this case, a cunning quasiexperimental design was employed (meaning that there was not random assignment of teachers to the "intervention" being studied, nor use of fully constituted control groups), but a variety of practical problems emerged to challenge the findings.

One argument might be that these problems constituted fatal flaws to the study. Another argument, one that comes closer to the truth of inquiry, is that all such studies contain these difficulties, but few investigators fully reveal them. This volume, then, serves as a valuable contribution to the literature on the conduct of inquiry on teaching. Originating as a doctoral dissertation, this volume's account of the inquiry itself will make valuable reading for graduate students who are learning the research process.

Finally, the latter chapters of the volume take up the future of the National Board itself, considering a range of options to ensure its continuing vitality and relevancy to American education. The theme of professionalism in teaching that emerged in the 1980s and 1990s has been eclipsed by a new set of reforms that pay scant attention to teaching itself, preferring to concentrate just on outcomes as measured by tests. What is needed is better balance between efforts to cultivate the teaching profession as well as holding it to reasonable account.

The reform pendulum continues to swing, in the midst of which the National Board is an indispensable reform because it maintains focus on qualities of "good to great" teaching at a time when such emphasis is missing in the dominant reforms of the day. Considering the role of the National Board in the future of the teaching occupation is of central importance, and the NBPTS continues to fight the good fight in keeping teaching central in the mission of education. Lustick's thoughts on these matters are carefully considered and worth attending.

In sum, this volume makes a fine contribution to the literature on one of the most significant reforms in American education. Board certification has become part of the institutional fabric of the education system, with influence that extends beyond the growth in numbers of Board-certified teachers. State and local policy makers are weaving National Board certification into new roles for teachers, pay for performance, schoolwide initiatives, and others. Lustick's study helps us understand in detail the nature of this reform and its implications for the future. It deserves wide and close reading.

Introduction

This book will mean different things to different groups of people. First and foremost, this book illustrates why National Board certification represents such a significant achievement for each of the 80,000-plus candidates who were successful. For the other 60,000 or so candidates who were not successful, this book explores why the experience may still have been worth the effort. For every teacher who thinks National Board certification might be in their future, this book addresses some of the fundamental questions regarding the kinds of practice and types of evidence that reflect well upon a candidate.

While the book examines the experiences of secondary science teachers, most of the ideas and insights shared will be relevant to any K–12 educator interested in learning about practice. Finally, for those educators who are unfamiliar with the National Board, the discussion presented here provides an overview and sense of the potential certification offers the individual and the profession.

For educational researchers, the book is a detailed account of a sophisticated investigation into a meaningful question. What are teachers learning from National Board certification? The narrative compares the ideal intentions of a study with the actual products of research. Research involving human behavior is rarely neat and tidy. Any principal investigator who claims otherwise should be approached with a healthy dose of skepticism.

The story of research in these pages is one of planning, unexpected obstacles, and innovative compromises that move the effort forward toward finding an answer. For education researchers who face a serious challenge (either methodological or theoretical), the accounts of both quantitative and qualitative methodologies may provide insight, solace, and hope during those moments when all efforts teeter on the brink of failure. Mistakes, errors, and unanticipated events are part of the research experience. It is how they are dealt with that marks one's skill as a researcher. With a little luck, they can become opportunities rather than barriers to excellence.

Lastly, for education policy makers who look at the Board as an intriguing and potentially meaningful reform to improve the quality of teaching and learning in schools, this book offers suggestions on how to move forward. The educational system faces great challenges ahead. From ensuring equitable learning opportunities for all to making public education a valued and respected institution, the problems are significant.

National Board represents one small step toward a system that acknowledges the complexity and richness of exceptional teaching. Policy makers, educational leaders, and politicians can learn from this book that accomplished teaching is more than simply improving student achievement. To acknowledge and reward the very best teachers is to point a way forward to a future that benefits teachers, parents, and their children. The real issue is how one defines "best."

Great teaching is about the positive ways teachers impact the lives of students. Talented teachers foster understanding of content and mastery of skills with learners in ways that are meaningful to both the individual and the community. Because it involves so many facets of human experience, exceptional teaching is difficult to define. Because the outcomes of exceptional teaching are not always explicit or immediate, it is a real challenge to accurately evaluate. And because a sense of the mysterious is associated with this kind of practice, it is not easy for most teachers to achieve this level of effectiveness.

National Board represents the best effort to date for defining, identifying, and fostering accomplished teaching. At an immediate level, this book is about the learning candidates for National Board experience. From a big-picture perspective, this book explores what it means to be a professional educator in a world where expertise is defined by those who do not teach. While

this book is more analytical than persuasive, it is hard to avoid the potential solutions the Board offers for some real and meaningful problems in schools.

The National Board faces an uncertain future. After a brief childhood and an abbreviated adolescence, it is time for the National Board to become an adult. No longer can it depend upon government funds to underwrite its efforts. No longer can its annual survival depend solely upon the actions of state legislatures. The Board must figure out how to be an asset for the work of all teachers and a valued resource for schools. By carving out a purpose for itself as a reform that solves important problems, the National Board for Professional Teaching Standards (NBPTS) may someday reach its full potential. If in some small way this book helps facilitate the Board's maturation process, then it will have been a success.

OVERVIEW

This book is a means of addressing a few central questions about teaching and learning for a generation of educational stakeholders wanting to provide a quality educational experience for all learners. What is exceptional teaching? How might it be defined and assessed? How can the assessment of accomplished teaching actually foster improvements to teacher quality?

The important findings from this research are presented in an accessible style for a diverse audience of educational stakeholders. From parents to policy makers, educators faced with issues about exceptional teaching and professional learning should find the discussion relevant.

The research reported on here comes out of a national study completed in 2006 that examined candidates for National Board certification in Adolescence and Young Adult Science. More specifically, the project asked the question, "What are candidates learning from National Board certification?" To determine possible answers, a quasiexperimental investigation with 140 secondary science teachers from forty-two states was conducted.

The presentation is divided into three parts aligned with each aspect of the book's secondary title: *Teaching, Learning*, and *National Board Certification* respectively. Each part is further divided into three supporting chapters. Part I provides context and raises questions, and Part II describes the methods used and the answers found. Part III looks at how the findings from this investigation might impact the quality of teaching, certification, and the future of the National Board.

Part I: *Teaching* considers the problem with exceptional teaching and identifies the major concepts examined in the book's argument. While defining, assessing, and fostering great teaching might appear like a reasonable endeavor, education has been slow to adopt reforms that challenge the egalitarian ideal that all teachers are good in their own ways.

After chapter 1 presents three key assumptions upon which National Board certification rests, chapter 2 presents five candidates' descriptions of a successful lesson. They all try to teach the same objective, but their styles, approaches, and beliefs cover a wide range. Using standards of performance to make evidence-based judgments regarding a teacher's classification as "accomplished" or "not accomplished" illustrates both the difficulty and necessity of a robust teacher assessment process.

While not always clear or pretty, the example represents a radically new way to gauge the quality of teaching and learning. The five science teachers presented in chapter 2 provide an opportunity to appreciate and understand the difficult tasks associated with both the work of the Board and the investigation into candidate learning.

Chapter 3 outlines the work of the Board, including the development of the five core propositions, standards, assessments, and evaluative procedures. By developing valid and reliable assessment instruments, rubrics, and procedures, the National Board effectively compares a teacher's work against a set of professional standards in order to arrive at a meaningful measure of quality. This process is central to understanding the data presented and discussed in the next three chapters.

Part II: *Learning* describes the research that identified, quantified, and substantiated what candidates learn from the certification process. Chapter 4 outlines the design and procedures used to collect data. To make precise and accurate measurements of teacher learning, the procedures and protocols used by the Board to evaluate accomplished teaching were adapted to measure changes in teachers' understanding about individual standards. By comparing what teachers know before and after certification, significant changes become observable learning outcomes.

Chapter 5 presents the results of the pre- and postcertification comparisons. The strategies for analysis that resulted in the identification of specific learning outcomes are discussed. Observed gains at the overall-, set-, and individual-standard levels identified assessment of student learning, reflec-

tive abilities, and the use of inquiry to promote in-depth understanding as the three standards associated with the most candidate learning. The limitations of these findings are also discussed within the challenges faced by such a complex investigation.

Chapter 6 examines the rich and abundant qualitative data to further substantiate the observed learning outcomes. The chapter considers the evidence for learning associated with assessment, reflection, and inquiry through candidate comments and responses to specific interview prompts. The curriculum and resources available to candidates are then considered to see how certification might foster professional learning in these specific areas.

Part III examines National Board certification from several perspectives informed by this investigation. It considers how the conclusions might impact teacher quality, the certification process, and the future work of the Board. Does teacher learning from certification translate into improved classroom instruction? How might the conclusions inform and improve the certification process? What lessons can the National Board take away from this work that could improve its relevancy as a significant and lasting education reform?

Chapter 7 considers the possible connections between observed teacher learning and changes to teacher quality. Understanding how Board certification may possibly impact the classroom teaching of candidates informs public discourse around issues of teacher quality and the ways professional development might be leveraged to produced desired changes.

Just because National Board candidates acquire new knowledge and skills does not necessarily translate into changes in practice. From this position, "learning" is not of much value if it fails to improve the quality of teaching and learning in the classroom.

By grouping candidates from this study into "dynamic," "technical," and "deferred" categories of learning, a proposed relationship between the certification experience and its impact upon the quality of practice is described. Roughly half of all candidates make immediate changes to their teaching based upon what they learn (dynamic) while the other half direct their learning toward becoming better candidates for certification (technical). Interestingly, the observed learning outcomes and possible impacts on practice apply both to candidates who were successful and to those who were not successful at achieving Board certification.

Chapter 8 considers how the findings from this research may impact the work of the National Board. The chapter develops suggestions regarding how to improve the quality of the Board's assessment process and the viability of the organization in the face of significant challenges from both within and outside the education community.

The book closes with a final commentary that ties the results of this investigation to the future of the National Board. This investigation offers many insights into how the Board might adapt to a changing policy environment and the dangers it must avoid. After almost two decades and the certification of nearly one hundred thousand teachers, the National Board finds itself at a crossroad. The future of the Board may rest on the relationship it establishes with the broader community of teachers. For teachers, administrators, and policy personnel, this concluding chapter may help stimulate discussion regarding innovative and sustainable means of maintaining the NBPTS.

If this book helps the reader develop a more thorough understanding of the National Board, the certification process, and what candidates learn from the experience, then it will have achieved its primary explicit goals. However, the argument laid out in these chapters also makes the case for a richer vision of what accomplished teaching means in an era of high-stakes accountability. This more implicit point has implications that reach far beyond the National Board and go to the heart of the character and quality of this nation's educational system.

As this book goes to press, states across the country are implementing or considering measures that would significantly change their support for National Board certification. In Florida, the state with the second most National Board–certified teachers, the Legislature is considering a bill that would end yearly bonuses for Board-certified teachers and institute a merit-pay initiative based on student test scores.

Ohio has ended its yearly bonus program for Board-certified teachers, but made National Board an option for teachers to obtain their highest-level professional license. Legislation at the state level pays for most of the costs of certification and the yearly bonuses enjoyed by successful candidates. These fiscal commitments function as the lifeblood for the Board's mission. Without this support, the future of the National Board is uncertain.

Ironically, this change in the policy environment comes at a time when the value of certification as an effective professional development is just being

established. This book argues for a vision of teaching and learning that has become overshadowed by a myopic obsession with education based solely on improving student achievement. While the two may not be mutually exclusive, policy discourse tends to polarize the issue.

The states' diminished ability to support National Board is not necessarily a bad thing. In state budgets, the line item dedicated to Board incentives does just as much to provoke animosity among taxpayers as it does attract teachers into certification. As states search for ways to integrate National Board certification into their licensure systems, the teaching community can decide whether the National Board represents the knowledge and skills of their most accomplished members. The future of the Board may depend on the degree to which all teachers wish to support its mission of defining, assessing, and fostering accomplished practice.