Preface

CONTEXT AND PURPOSE

Professional development is the development of a person in his or her professional role and is important in any field. For teachers and those seeking to become teachers, professional development is essential to acquiring new knowledge and remaining current in the field. Professional development can take many forms. Conferences, workshops, seminars, Professional Learning Communities, observations of peers, independent reading, participation in formal professional development models, etc. are all forms of professional development that enrich the practice of teachers. Before deciding upon a certain professional development model, several factors need to be considered. These include, but are not limited to: the audience, what needs to be gained from the experience, who will be impacted by the experience, time needed to complete the experience, resources available to implement what is learned from the experience and the administrative support that will be provided to encourage and extend the ideas and goals of the experience to the school and classroom.

In public schools, effective professional development affects all students in classrooms across the world. Therefore, effective professional development is essential for teachers to focus on skills needed to address major learning challenges and for student learning and achievement to increase. While many professional development experiences are available, it is important for teachers to participate in experiences that are sustained, relevant and revisited over time.

The contributions of this book are important to a wide audience. Certainly pre-service and practicing teachers could gain insightful information from the chapters presented in this book. Administrators could learn much from what others have done in the area of professional development for teachers and how it has worked in those contexts. Higher Education faculty could gain insight from chapters on pre-service teacher professional development and other chapters that highlight model professional development experiences. Policy makers could learn about important professional development experiences that are important to the field so that they could fight for funding or continued funding of such programs.

OVERVIEW OF CHAPTERS

The first section of this handbook is titled Professional Development for Quality Teaching and Learning. In these chapters, a variety of professional development experiences are discussed. Two studies regarding National Board Certification are highlighted. The Response to Intervention framework is examined in

one chapter. Various other professional development models are presented. The section concludes with a chapter that focuses on the potentials and challenges of one professional development model.

National Board Certified Teachers Speak on the Certification Process, presents findings from a recent study of 496 National Board Certified teachers in North Carolina. This study investigates what National Board Certified teachers say they learned through the certification process. Teachers talk about the importance of daily reflection of their teaching practice, lifelong learning, a sense of gained confidence and an increased focus on students and learning outcomes. In chapter 2, The Role of Inquiry in Teachers' Learning from the National Board Certification Process, Tracy Coskie and Nancy Place present a framework for teacher inquiry. Drawing on data from two multiple-year qualitative studies of National Board candidates, the authors use case study methodology and document analysis to develop an understanding of the National Board as a site for inquiry in teacher learning. Three teachers' experiences, representing a range of inquiry stances, are explored to provide an opportunity to understand important elements of inquiry in teacher learning and how the National Board certification process may (or may not) support such learning. Amber Benedict, Mary Brownell, Cynthia Griffin, Jun Wang and Jonte Myers examined the role professional development (PD) plays in preparing teachers to teach within Response to Intervention (RTI) frameworks, and how future PD efforts might be leveraged to strengthen the preparation of general and special education teachers to coordinate instruction and teach more effectively within multi-tiered instructional systems. Leveraging Professional Development for General and Special Education Teachers Teaching within Response to Intervention Frameworks: Professional Development for Response to Intervention Frameworks highlights two PD approaches that directly address these issues.

In Chapter 4, Examining What Elementary School Teachers Take Away from Mathematics Professional Development, Drew Polly documents an examination of a professional development project that was designed around the principles for Learner-Centered Professional Development and addressed components of the Mathematical Knowledge for Teaching framework. Results describe participants' learning in relation to the exploration of mathematical tasks, the planning of mathematics lessons using a new format, and strategies to teach specific mathematics concepts. A Meta-Synthesis of WBT and Active Learning Pedagogies: Faculty Development, Give Brainpower a Boost, written by David George Brobeck, Alan J. Digianantonio, and Michelle J Elia, synthesizes information on cognitive research, neuroscience, and brain theory as applied to active learning. Specific examples of one method, Whole Brain Teaching, are supplied with direct applicability to the college classroom and adult-leaning situations to help readers develop and investigate their own practices in this area.

The remaining chapters in this section relate to traits of teachers beyond content knowledge. *Teachers as First Responders: Executive Function Knowledge Improves Instruction by Sheri G. Lederman and Bruce Torff. Lederman and Tarff discuss how* effective instruction begins at the level of each individual student in a classroom. Teachers should have knowledge of executive functions (EF), the cognitive processes associated with active learning and work production while being prepared with the tools and strategies to assess the foundational EF capacities of working memory, inhibition, and cognitive flexibility that are essential to the learning process. Additionally, a teacher's ability to manage stress is studied in Chapter 7, *Stress Management Framework to Enhance Teaching Quality and Teaching Effectiveness: A Professional Development Framework, by* Elizabeth Hartney. The author presents that teaching has been identified as one of the most stressful professions, with a high attrition rate due to teacher stress and burnout. This chapter addresses how to enhance teaching quality and effectiveness through providing

teachers with a model of professional development in stress management that is specific to the stressors of teaching. Finally, also related to professional development of teachers, Chapter 8, Potentials and Challenges of a *Situated Professional Development Model*, by Dante Cisterna, Amelia Wenk Tara M Kintz, John Lane, and Edward Roeber, describes a statewide professional development program designed to improve teachers' knowledge and practices around formative assessment. The authors describe three key characteristics that guided the program design: (1) providing a framework for formative assessment; (2) providing opportunities for flexible implementation; and (3) providing support for capacity development.

Section 2, Teacher Preparation and Professionalism, discusses professional development with both preservice and practicing teachers. The section also addresses self-efficacy and how this influences teacher candidates as well as classroom teachers. This section begins with *Mathematics Teacher Education and edTPA: Complex Assessing* by Diane S. McCarthy and Barbara A. Burns where the development of the educative teacher performance assessment (edTPA) is considered. Professional teaching organizations such as the National Council of Teachers of Mathematics, the National Board of Professional Teaching Standards, industry, and government agencies have been seeking ways to improve teaching. To achieve this, complex, performance-based assessment is necessary. McCarthy and Burns propose edTPA could lead the way. Chapter 10, *Not Too Young to Lead: Preparing Pre-Service Teachers to Lead* by Tanya Judd Pucella, is a review of the case for leadership development opportunities for pre-service educators. The chapter discusses the various curricular approaches to developing the knowledge, skills, and dispositions needed for effective teacher leadership while providing a comprehensive review of the various knowledge, skills, and dispositions that can begin to be developed during an undergraduate teacher preparation program.

Chapter 15 is related to the professional leadership of teachers. The chapter, titled *Using Self-Mentoring to Increase Teacher Efficacy and Confidence as Leaders*, is written by Marsha L Carr. The focus of this chapter is how to use self-mentoring to increase confidence and teacher efficacy as a leader. Nancy P. Galavan's chapter, *Mediating the Sources and Benefits of Teacher Self-Efficacy for Systemic Transformative Meaning-Making*, continues the conversation related to teachers' self-efficacy. Educating the whole teacher candidate is essential for teacher educators to emphasize and facilitate in their work in teacher preparation to optimize candidates' knowledge, skills, and dispositions. From this research, teacher candidates provide insights and inspirations beneficial for both teacher candidates and teacher educators to improve their practices and increase their self-efficacy evident in their teacher preparation programs and future P-12 classrooms.

Self-efficacy of teacher candidates is also the focus of the Chapter 17, *Multi-Semester Community Building in Higher Education: Examining the Impact on Teacher Education Candidates' Development and Teaching Self-Efficacy* by S. Michael Putman and Laura Handler. Putman and Handler present that within the current educational context, teacher preparation programs are under increasing pressure to demonstrate their effectiveness in producing teachers that impact P-12 student learning. As a result, programs must investigate organizational features that are powerful for preparing preservice candidates to enter the classroom. This research examined how the practice of having one teacher educator instruct courses over multiple semesters to the same group of students can be used to support the development of teacher candidates. Kelly Anderson also discusses the preparation of teachers, in her chapter, *Preparing Teachers in the Age of Equity and Inclusion*. Preparing high quality teachers for practice in P-12 schools has been an extensively debated and controversial topic for many years. This chapter explores historical

to more recent perspectives of teacher education and related issues surrounding the absence of a universally accepted profile of teacher quality and includes illustrations of contemporary teacher preparation programs that have thoughtfully redesigned traditional models into integrated extensive clinical based approaches to preparing teachers.

Section 2 continues with a discussion of preparing teachers, specifically to teach history. In Chapter 12, *Preparing Teachers to Teach Historical Thinking?: An Interplay Between Professional Development Programs and School-Systems' Cultures*, Bruce VanSledright and Liliana Maggioni, explore the learning outcomes for teachers involved in three different federally-funded Teaching American History grant development programs. Data were drawn from a multi-scale assessment instrument administered in a time-series design and from classroom observations of and interviews with participating teachers. Chapter 14 is related to the professional development of history teachers. In *Teaching with Primary Sources: Moving from Professional Development to a Model of Professional Learning*, Scott M. Waring, describes the development and facilitation of the Teaching with Primary Sources program, where the Library of Congress has incorporated these elements to create a cohesive, collaborative, and engaging model for Professional Learning. An examination of a retention program that is a school/university partnership, called Teacher Fellows, follows. Barbara H. Davis and Terri Cearley-Key describe the program which provided comprehensive mentoring and induction support to more than 400 teachers over the past 20 years. The program is grounded in social-constructivist, cognitive-developmental and teacher development theories.

Finally, the section ends with Chapter 18, What Counts as Quality Teaching?: Diverging Pathways in the Dis-United Kingdom by Moira Hulme. She describes how professional development of teachers has attracted much critical attention in each of the four nations of the United Kingdom since 2010. This chapter offers a 'home international' comparison of policies to support the initial qualification and continuing education of teachers in the period following political devolution while offering a rationale for cross-national comparison in this small and closely linked system.

Preparing Teachers to Work with Diverse Populations is the third section of this book. The section highlights efforts within teacher preparation programs and through professional development of practicing teachers to prepare educators to effectively teach an increasingly diverse student population. The section begins with *A National Crisis and a Call to Action: Preparing Teachers to Teach Children from Poverty*, co-authored by H. Carol Greene and Jane C. Manner. Acknowledging soaring poverty rates and the challenges teachers face in working with children from impoverished backgrounds, the chapter shares a variety of perspectives and understandings specific to children of poverty. In concludes with a description a program for practicing teachers and teacher education candidates that is designed to prepare them to work with children living in poverty.

In Chapter 20, Revising a Teacher Education Program for Diversity and Social Justice Through Culturally Responsive Coursework and Professional Collaboration, Gayle Y. Thieman reports on a case study of revisions made within a graduate teacher preparation program to better prepare teacher candidates for a diverse student population. Results and implications are discussed with direct reference to the revisions, which included an emphasis on culturally responsive teaching and content area literacy, as well as clustered placements, co-teaching assignments, and lesson study. In Preparing Urban Educators to Address Diversity and Equity through Field-Based Teacher Education: Implications for Program Design and Implementation, Adam S. Kennedy and Amy J. Heineke share research on field-based teacher

education and developing community partnerships as an impetus for one field-based teacher education program to be designed around mutually beneficial partnerships to enhance the preparation of effective urban educators. Descriptions of the experience and recommendations highlight the need for continuous evaluation and redesign of programs with direct participation by community partners.

Nicole Webster, Heather Coffey, and Anthony Ash highlight the need to prepare teachers of urban students to engage and appreciate these learners within Chapter 22. In #UrbanLivesMatter: Empowering Learners Through Transformative Teaching the authors discuss the need for professional development embedded in culturally responsive teaching, multicultural education, and critical literacy to incite social action, subsequently empowering and engaging urban learners in meaningful ways. In Chapter 23, Culturally Sustaining Pedagogy and Hip-Hop Based Education: A Professional Development Framework in Rap Cypher and Battle to Promote Student Engagement and Academic Achievement, Azure Camille Covington, Ayana Allen, and Chance W. Lewis present a professional development design to help teachers understand the nuances of the hip-hop culture and shift their practice to engage today's youth who are immersed in the culture. Incorporating elements of hip-hop based education, the professional development serves as the beginning of teacher knowledge construction in frameworks directed towards culturally sustaining pedagogy.

In *Teacher Quality in the Twenty-First Century: Developing Globally Competent Teachers* Erik Jon Byker, Tingting Xu, and Juan Chen note the ongoing necessity of preparing teachers to develop learners' skills for successfully engaging in an interconnected world. Within this context, the chapter describes the results of empirical studies conducted to develop international perspectives and global competence in teacher candidates, with related practitioner-oriented recommendations to address developing these skills within practicing teachers.

Finally, in Chapter 25, Ruth Baker-Gardner examines the factors that have influenced the implementation of teacher induction programs in the Caribbean. Her chapter, *Induction of Teachers in the English Speaking Caribbean*, follows these descriptions with a discussion of program evaluations as well as considerations for implementation and the related potential impact on program effectiveness.

Examining Outcomes of Teacher Preparation and Practice is the fourth and final section of this book. The section discusses evaluation of teacher preparation programs, induction program evaluation, teacher evaluation programs, as well as the evaluation of various professional development programs. In the first chapter of this section, Ann Cash presents current and future approaches to evaluating teacher preparation programs as well as a review of available assessments and common preparation pathways. Obstacles to conducting evaluation for the purposes of continuous improvement are described while recommendations are provided for using quantitative and qualitative methods to identify features of teacher preparation programs that have the strongest impact on graduates' performance and retention, such that teacher preparation programs may act on this knowledge for the purpose of continuous improvement. In Chapter 27, Examining the Relationship Among Teachers' Working Conditions, Stress, and Professional Trajectory, Paul Fitchett, Sally Lineback, Christopher McCarthy and Richard Lambert discuss the Lazarus and Folkman (1984) transactional model of stress as a viable alternative to traditional production-function approaches toward examining teacher working conditions. They also explore the policy and practical implications for the transactional model as a way for school leaders to address the risk for occupational stress and its potential outcomes related to staffing turnover and teacher quality.

Policy Impact on Teacher Induction: Connecticut's Story, Chapter 28, written by Amanda Bozack, focuses on informing policy makers and educational administrators about the broad landscape of induction in the United States and explores how Connecticut's rich history with induction can serve other states considering adoption of a comprehensive induction policy.

In Chapter, 29, *Learning-Centered Teacher Evaluation in Wisconsin*, Steven Kimball, Katharine Rainey, and Mark Mueller review one state's efforts to build a learning-centered teacher evaluation system. Following an overview of the principles embraced during the state's development and roll-out the system, the focus turns to the evaluation design, including how the measures, processes and training build on the principles. Findings from district visits illustrate local implementation opportunities and struggles. The authors describe current statewide training plans in response to preliminary implementation findings and conclude with challenges that will need to be addressed to promote learning-centered evaluation.

In *Taken by the Numbers: How Value-Added Measures Distort Our View of Teachers' Work*, Robert Smith and Scott Imig discuss survey results from 300 principals that illustrate the value of teacher experience and education and question the oversimplified view of teacher performance represented only by value-added measures (VAM). Authors also discuss the limited evidence that VAM supports teacher or school development. Alternative approaches to VAM's focus on individual teacher performance are considered.

In Chapter 31, *Professional Development for Quality Teaching and Learning: A Focus on Student Learning Outcomes*, Cathy Powell and Yasar Bodur present a review, analysis and synthesis of the current literature on teacher professional development, the need for job-embedded professional development, implementation challenges, and the relationship between teacher professional development and student learning outcomes. The authors also examine gaps in the literature and follow that with solutions, recommendations, and future research directions. The final chapter of this section, *Secondary Education and Content Literacy in Inclusive Classrooms*, by Nichole Smith and Dawn Waegerle discussion their examination of the impact on teachers' understanding and use of content literacy strategies at the secondary level. In this study, teachers' perceptions, perspectives, understanding and implementation of content literacy practices were examined over six months to determine study effects. In the voluntary professional development (PD) series, participants completed pre- and post-PD surveys, pre- and post-PD focus group interviews, pre- and post-PD peer and researcher observations, along with online and face-to-face PD sessions.

CONCLUSION

As evidenced in the chapters that follow, professional development continues to be a topic worth researching, analyzing and discussing. The insights provided are important in advancing research in the area of professional development and increasing participation of all stakeholders in rigorous and relevant professional development experiences for both pre-service and practicing classroom teachers. Teachers never discontinue their learning. For them, it is a lifelong endeavor.

In the field of education, there are always new curricula to absorb, new technologies to explore, new methodologies to practice, new assessments to study and new systems to learn. In order for teachers to continue to be successful in the implementation all of these new things, they must be equipped with

Preface

the knowledge and skills to complete these tasks. To acquire this knowledge and skills, professional development experiences such as those mentioned in this book should be considered and implemented. Through professional development experiences, teachers can gain new tools for their toolboxes that should be utilized to positively impact student learning in their classrooms.

Teresa Petty University of North Carolina at Charlotte, USA

Amy Good University of North Carolina at Charlotte, USA

Michael Putman University of North Carolina at Charlotte, USA