

School–University Partnerships

The Journal of the
National Association for
Professional Development Schools

Volume 9, Number 3
Fall 2016

WHAT IT MEANS TO BE A PROFESSIONAL DEVELOPMENT SCHOOL

A statement by the Executive Council and Board of Directors of the National Association for Professional Development Schools, www.napds.org, April 2008

The Nine Required Essentials of a PDS[®] are:

1. a comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. a school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. ongoing and reciprocal professional development for all participants guided by need;
4. a shared commitment to innovative and reflective practice by all participants;
5. engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
6. an articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. a structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
9. dedicated and shared resources and formal rewards and recognition structures.

School–University Partnerships: The Journal of the National Association for Professional Development Schools (NAPDS) is published by the NAPDS as a service to members of the Association and others concerned with partnerships between higher education and P-12 schools and their communities. For association information please refer to <http://www.napds.org>.

School–University Partnerships: The Journal of the National Association for Professional Development Schools is nationally disseminated and blind-refereed. Each issue contains articles written by both university and school educators, usually in collaboration with each other, and highlights policy and practice in the school- university partnership. Please refer to the submission guidelines at the back of this issue for advice to aspiring authors.

SENIOR EDITOR

Kristien Zenkov
George Mason University, Virginia

EDITORS

Audra Parker
George Mason University, Virginia

Seth Parsons
George Mason University, Virginia

Alicia Bruyning
George Mason University, Virginia

Ellen Clark
George Mason University, Virginia

Nisreen Daoud
George Mason University, Virginia

EDITORIAL BOARD

Bernard Badiali
Pennsylvania State University, Pennsylvania

Ron Beebe
University of Houston-Downtown, Texas

Danielle Dennis
University of South Florida, Florida

Eva Garin
Bowie State University, Maryland

Aimee Morewood
West Virginia University, West Virginia

Jim Nolan
Pennsylvania State University, Pennsylvania

Rene Roselle
University of Connecticut, Connecticut

Cathy Siebert
Ball State University, Indiana

Cindy Stunkard
Kutztown University, Pennsylvania

Margaret Vaughn
University of Idaho

Sandra Webb
Georgia College & State University, Georgia

Table of Contents

Why We Must Answer the Question “What Is a Professional Development School?”	1
<i>Kristien Zenkov, James Shiveley, Ellen Clark</i>	
Evidence-Sensitive Synthesis of Professional Development School Outcomes	11
<i>David R. Snow, Siobhan Flynn, Katie Whisenand, and Erin Mohr</i>	
Pathways to Partnership: A Developmental Framework for Building PDS Relationships	34
<i>Audra K. Parker, Seth A. Parsons, Lois A. Groth, and Elizabeth Levine Brown</i>	
Is it Possible to Sustain Innovation, Community, and Responsiveness in Teacher Education when a Unique Pilot PDS Becomes a Program-Wide Model?	49
<i>Linda K. Reece, Alli Roberts, and Keri Smith</i>	
What is a PDS? Reframing the Conversation	64
<i>Janna Dresden, Selena Blankenship, Bob Capuozzo, Allison Nealy, and Mark Tavernier</i>	
Making Muffins: Identifying Core Ingredients of School-University Partnerships	81
<i>Rebecca West Burns, Jennifer Jacobs, Wendy Baker, and Denise Donahue</i>	
Considering Professional Development School Partnerships in Light of CAEP Standard Two	96
<i>Drew Polly</i>	
Cultivating, Connecting, and Capitalizing on our Merged Spaces: Voices from a PDS	111
<i>Jon Yoshioka, Vail Matsumoto, Lori Fulton, and Cescei Nakamura</i>	
Advancing a Professional Development System: Evolution and Evaluation	130
<i>Somer Lewis and Tamara M. Walser</i>	
Revealing Dispositions: A Comparison Study of a Traditional Pathway University Model and a Clinical Pathway University Model	153
<i>Angela Danley, Natalie Tye, Karen Loman, Aprille Barlow, and Nicole Nickens</i>	
Graduate Teaching Fellowships as New Teacher Induction: School-University Partnerships’ Impact on Teaching Self-Efficacy	171
<i>Sara L. Hartman, Christopher Kennedy, and Brian Brady</i>	

Why We Must Answer the Question “What Is a Professional Development School?”

Kristien Zenkov
George Mason University

James Shiveley
Miami University

Ellen Clark
George Mason University

Abstract: In this article the authors first provide a brief overview of the history and recent research pertaining to the Professional Development School movement. They then argue for the need for a more conclusive and widely accepted definition of what constitutes a PDS and what does not. This call becomes the theme for this first online publication of *School-University Partnerships*—specifically “What is a PDS?”. While many in our field may assume that this question is unnecessary to answer or would restrict PDS practitioners and scholars, the authors maintain that the PDS movement is at a key moment in its evolution. It is a moment that requires us to be critical of the nature of a PDS and of its place in teaching, schools, and teacher education. This article argues that if we in the PDS field do not address these questions head on, we leave it for others, not as well positioned, to do so.

KEYWORDS: Professional Development Schools, PDSs, school-university partnerships, PDS research, PDS history, PDS definitions

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
4. A shared commitment to innovative and reflective practice by all participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
9. Dedicated and shared resources and formal rewards and recognition structure

A Brief History of Professional Development Schools

In many ways, the history of the Professional Development School (PDS) movement is not a difficult one to track. Most PDS scholars and practitioners look to the work of the Holmes Partnership—documented quite comprehensively in its trilogy of volumes published in 1986, 1990, and 1995—as providing the founding vision for PDS efforts. The National Network for Education Renewal (NNER), the National Council for the Accreditation of Teacher Education (NCATE)—since merged with the Teacher Education Accreditation Council (TEAC) to form the Council for the Accreditation of Educator Preparation (CAEP)—and the National Association for Professional Development Schools (NAPDS) have historically advocated for and been engaged with such partnerships. More recently other organizations—including the Association of Teacher Educators (ATE) and the American Association of Colleges for Teacher Education (AACTE)—have increasingly highlighted PDS structures as examples of best practice teacher education efforts.

Though the name “Professional Development School” may have risen out of the literature of teacher education reform movements in the 1980s and 1990s, the history of the PDS goes back much further. Today’s PDS, or any similarly named school-university partnership, was yesterday’s lab school, a form of school organization and K-12 and teacher learning that is generally recognized as John Dewey’s invention at the University of Chicago. Colburn (1993) explains that Dewey envisioned schools being run jointly by public schools and colleges of education and that, like today’s PDSs, faculty at these schools would share responsibility for training new teachers and conducting research.

Until the mid-1970s, many such lab schools flourished in the US. Since that time these innovative, partnership-oriented structures have largely succumbed to the criticisms of being too expensive to operate and too atypical from the “real world” of schools. Since the per-student expenditures for lab schools usually exceeded those of public schools and many of the students who attended such sites of pedagogical experimentation were the children of university faculty who did not represent the ethnic, social, or economically diverse student population of the typical public school, this critique seemed justified (Colburn, 1993). The subsequent closing of lab schools reduced the convenient, controlled settings universities desired to train teachers and conduct education-related research. It was presumed that this void could be better filled by the development of close working relationships with nearby public schools. The concept of the Professional Development School emerged shortly thereafter, and, by most counts, PDSs have steadily grown in number and complexity since.

Recent Scholarship and PDSs

Numerous scholarly and policy publications have detailed the development and expansion of the PDS movement. A growing body of literature has examined examples of PDSs and their impact on pre- and in-service teachers, PK-12 student achievement, and educator development. These documents include the *Blue Ribbon Panel Report on Clinical Teacher Preparation* (2010), a seminal publication to which many look as the definitive summary of both the inherent flaws in our teacher education systems and the potential of school-university partnerships for addressing those shortcomings.

Other texts include Goodlad and co-authors' *Education and the Making of a Democratic People* (2008); Basile's *Intellectual Capital: The Intangible Assets of Professional Development Schools* (2009), a collection of stories by the stakeholders in a PDS partnership; Darling-Hammond's *Professional Development Schools: Schools for Developing a Profession* (2005), a historical analysis of PDS partnerships across the United States; and Neapolitan and Berkeley's *Where Do We Go From Here: Issues in the Sustainability of Professional Development School Partnerships* (2006), an analytical review of PDS research and its future. We also count among the recent volumes contributing to this literature Neapolitan's *Taking Stock of Professional Development Schools: What's Needed Now* (2011), a review of the current literature and a call to action; Wong and Glass' *Prioritizing Urban Children, Teachers, and Schools through Professional Development Schools* (2009), a description of an urban PDS partnership written by the educators and researchers involved; and Zenkov and colleagues' *Professional Development Schools and Social Justice* (2013), which offers descriptions of and research into PDS structures that are oriented around an equity perspective.

This list of scholarly considerations of PDSs is, of course, incomplete. Other contributions include Clark's *Effective Professional Development Schools* (1999), a review of the roles a PDS can play in school and teacher education contexts; Guadarrama, Ramsey, and Nath's *Professional Development Schools: Advances in Community Thought and Research* (2005); and Ferrara's *Professional Development Schools: Creative Solutions for Educators* (2014), a detailed report of procedures to make PDS partnerships successful. The array of PDS research is also supplemented by a growing body of journals and other volumes, including *Professional Development Schools and Transformative Partnerships*, *School-University Partnerships*, *The Professional Educator*, and the *Research in Professional Development Schools* series.

PDS Purposes and Relevant Publications

In its foundational tomes, the Holmes Partnership articulated four primary objectives of PDSs, with emphases on the training of pre-service teachers, the achievement of PK-12 students, research on and by school and university educators on PK-12 and teacher education curricula and practices, and the professional development of all of the constituents of these partnerships (Holmes Group, 1990). Other organizations have echoed and expanded upon these purposes. NCATE contributed its own set of PDS Standards in 2001 (NCATE, 2001), and NAPDS introduced its "Nine Essentials" of a PDS in 2008 (NAPDS, 2008). While the intent of this introductory article is not to provide a comprehensive analysis of the similarities and differences between what are arguably these seminal sets of PDS ends, it is reasonable to say that there is significantly more overlap than disagreement amongst these organizations' PDS principles.

Recent and historical discussions of alternative models of teacher education, teacher leadership, and collaborative and teacher-driven professional development activities have been documented as outgrowths of the PDS and the "Professional Learning Communities" (PLCs) movements. Mullen's *Handbook of Leadership and Professional Learning Communities* (2009), Teitel's *The Professional Development Schools Handbook* (2003), and Pine's *Teacher Action Research: Building Knowledge Democracies* (2009) have considered how PDSs and PLCs might best support these leadership practices and impact P-12 student learning. And Craig and Deretchin's *Imagining a Renaissance in Teacher Education* (2008) engages in a broader

discussion of teacher education principles and practices, with clear connections to PDS-related structures and ideals.

In addition, numerous recent texts have influenced thinkers and practitioners in the field of teacher education. These include Cochran-Smith and Zeichner's *Studying Teacher Education* (2005), a comprehensive volume synthesizing the research on teacher education, and Johnston-Parson's *Dialogue and Difference in a Teacher Education Program* (2012), an account of a longitudinal case study at a PDS. Bohan and Many's *A Clinical Teacher Education* (2011), which offers a close-up of urban PDS systems, and Darling-Hammond's *Powerful Teacher Education* (2006), an in-depth description of teacher education programs considered to be successful, are also key volumes in this growing bank of studies and descriptions.

Research literature also makes—and increasingly supports—a variety of claims about the impact of PDSs. Much of the initial PDS research focused on the process of creating a PDS, the lessons learned when working with a PDS, how the PDS setting improved clinical experiences for teacher education candidates, and anecdotal accounts of collaboration and professional development in particular PDSs. More recent research reports illustrate how PDSs champion collaboration within and across schools and universities and help future teachers to integrate the theories they encounter in their university teacher education courses into their developing school-based pedagogies (Cozza, 2010; Henry, Tryjankowski, Dicamillo, & Bailey, 2010; Shroyer, Yahnke, Bennett, & Dunn, 2007). Several studies have documented how PDS-based teacher preparation is superior to teacher training that occurs in non-PDS settings (Castle, Fox, & Souder, 2006; Castle, Rockwood, & Tortorra, 2008; Reynolds, Steven, & Rakow, 2002), particularly in terms of new teacher induction, teacher hiring, and retention in traditionally hard-to-staff schools (Fleener & Dahm, 2007; Latham & Vogt, 2007).

A review of the back issues of *SUP* from the past four years further illuminates the emphasis PDSs and stakeholders place on collaboration and partnership. Research articles in *SUP* from 2012 to the present have addressed problems of resources available for collaboration; the roles of teacher candidates, teacher leaders, and university personnel; and the benefits to all parties. Contributors to this journal have also explored themes of social justice and multiculturalism as they relate to PDSs, as well as the ways PDSs across the country have better prepared teacher candidates to serve in urban school districts. These issues detail the impacts a PDS can have on all constituents in education, from principals to students, and show that while PDSs may vary, the underlying goals and characteristics of these partnerships tend to be more similar than different.

Why We Need a Common Definition of PDS—Now

While the PDS movement is now in its fourth decade and a growing number and range of constituencies look to Professional Development School principles and structures as essential elements of teacher education, educator development, professionalization, PK-12 student achievement, and even social justice education (Cantor, 2002), we contend that this movement is at a critical moment in its evolution. Or, more accurately, we have arrived at *the* moment to be critical of this movement, its nature, and its place in teaching, schools, and teacher education. As veteran PDS practitioners—serving primarily as university-based teacher educators in boundary-spanning PDS roles—we are uniquely positioned to know and name what is perhaps the biggest challenge facing the PDS movement: the collaborative ideals of PDSs have been taken too far,

moving from principles of partnership between school, district, and college/university personnel to an avoidance of discussion and conflict when answering the most foundational of questions, one we consider in this inaugural special issue—“What is a PDS?”.

As the NAPDS begins its tenth year of producing this journal—the only peer-reviewed publication dedicated to research on and in PDSs and school-university partnerships—we are attempting to begin the discussion of this apparently most controversial of queries, to critically consider the collaborations between individuals and institutions that represent the very nature of our work. Our association will soon also revisit its “Essentials” with another national conversation of these foundational notions and structures, but we intend this issue to be the first research-based examination of this “What is a PDS?” question.

Early in the PDS movement the Carnegie Forum on Education and the Economy determined that PDSs would be clinical schools consisting of selected public schools and colleges of education and arts and letters for preparing new teachers (1986). Early in its history the Holmes Group described PDSs as “a new kind of education institution that will be a partnership between public schools and universities” (1990, p. vii). Goodlad called them “schools of pedagogy” (1990), while Colburn named a PDS a “teaching hospital” (1993, p. 9).

This concept was extended by Anderson (1993), who determined that PDSs were induction schools for pre-service teachers’ completion of internships. Levine and Trachtman (1997) echoed many of these notions, describing a PDS as a symbiotic partnership between a school and a college of teacher education. This was similar to the framework proposed by Sykes, who suggested that a PDS was primarily an agreement between K-12 schools and a university (1997). Still, as of 1997, Dolly and Oda repeated the call for a clear definition of PDS partnerships, suggesting that the field did not wish to establish such clarity and that this allowed for schools to use the label according to their own meaning. This variable meaning was acknowledged again in 1999 by Metcalf-Turner.

While we find more intersections than divergences in these various scholars’ and practitioners’ definitions of a PDS, the focus of most descriptions of Professional Development Schools has been as settings for the preparation of teachers. The four core elements of PDSs articulated by the Holmes Partnership are generally recognized as guiding ideals, but across their now thirty-year history, the definition of a PDS has so often varied—often even within a given institutional setting—leading to long and sometimes heated discussions of organizational structure, obstacles, evaluation systems, and appropriate levels of support and compensation for PDS constituents.

Given the contextual nature of a PDS, one could even question whether a common working definition can—or should—be a concern of our field. Indeed, unless the specific context of a PDS is considered, one could argue that it is possible to have an exemplary, high-functioning PDS—one that addresses all of the Holmes tenets—but is still a structure that is dysfunctional in terms of practical benefits to at least some of its partners (Holmes Partnership, 1997; Shiveley & Taylor, 1998). In summary, the very quest to determine a common definition of PDS remains a question, a work in progress.

The fields of teacher education, PK-12 education, and educator professional development continue to evolve quickly and to face shifting accountability pressures. As well, a growing number of practitioners, scholars, and policy makers acknowledge that these fields must be merged—that classroom teachers must be recognized as school-based teacher educators, that teacher candidates must be prepared in the classrooms of the best teachers, and that university

faculty must operate in “boundary-spanning” ways as scholars and practitioners. Yet our field continues to err on the side of caution with regard to determining with any clarity—to delineating with any sort of absolutes—just what is and what is not a PDS.

We contend that the PDS movement can only progress and be professionalized if we dare to answer these questions—first via this special issue and soon we hope on an everyday basis in our work. We would agree with Dolly and Oda (1997) and Higgins and Merickel (1997) that without some predetermined set of defining characteristics, PDS participants will find it difficult to define goals, to determine the required level of commitment of various partners, and to measure progress toward those goals. Little sense of the history of PDSs, coupled with the tendency to include all who wish to participate in such structures, has resulted in a tradition of calling virtually every such organization a PDS and in confusion between institutions, within institutions, and even within teacher education departments.

While the nation’s move toward the PDS model and its reliance on school-university partnerships is necessary and welcomed, too little attention has been given by scholars, practitioners, and policy makers to the foundational questions of this new, merged field. We have called on the authors of this issue to detail research, to suggest novel concepts, and to describe highly impactful practices that address at least one of the following questions:

- What is a PDS? And how do you define PDS in your context?
- How do you document and evaluate progress in the development of your PDS?
- How do you assess the impact of your PDS on its various constituents?
- What criteria do you use to measure the effectiveness, growth, and/or impact of your PDS?
- What are the highlights and challenges you have encountered in documenting and assessing PDS progress and impact?

This Issue

This inaugural, themed, online issue of *School-University Partnerships (SUP)* supplements the bi-annual print editions of the journal. This issue consists of ten articles, in addition to this introductory contribution. Two of these pieces were invited and eight were peer-reviewed by a venerable editorial board. In our call for papers for this issue, we suggested that authors might submit more traditional research articles, briefer and more narrative-focused cases-in-point, or broader considerations of PDS work in the form of articles describing or illustrating conceptual frameworks.

The first group of articles is from the invited authors, followed by a peer-reviewed submission. Snow, Flynn, Whisenand, and Mohr examine the Professional Development School (PDS) research literature and arrive at five outcome claims that are supported by this literature, as well as several other emerging outcomes. Parker, Parsons, Groth, and Brown describe the difficult process of balancing the need to move toward authentic clinical teacher education practices with the need to respect the real and practical needs of all participating partnership stakeholders. And Reece, Roberts, and Smith describe the challenges and benefits associated with a three-year process of moving from a pilot PDS program in a college of education—as defined by the PDS Essentials—to a university-wide PDS program.

The next four articles in this issue focus on the question of defining a PDS in particular settings. After providing a helpful historical context for the definition and purposes of a PDS, Dresden, Blankenship, Capuozzo, Nealy and Tavernier use dialogue to address some of the problems associated with defining—both in theoretical and practical terms—the complexity of any given PDS. The article by Burns, Jacobs, Baker, and Donahue draws from the NAPDS Essentials, the NCATE Blue Ribbon Panel Report, and the NEA Report on Teacher Residencies Guiding Principles to identify seven “core ingredients” of a school-university partnership and then applies these to better link their PDS to clinical practice.

Polly adds to this discussion by using the lens of CAEP Standard 2 (focused on clinical practice and partnerships) and the NAPDS Essentials to share two differing perspectives of what a PDS might look like, with implications for how such standards can be used to help define and align partnership activities. And, finally, Yoshioka, Matsumoto, Fulton, and Nakamura use the PDS Essentials as a framework to share insights from key participants of a school-university, addressing the question of “What is a PDS?” while comparing a PDS orientation to a more traditional approach to preparing teacher candidates.

The next pairing of articles takes a closer look at the task of assessing a PDS. The first of these manuscripts, an article by Lewis and Walser, provides a definition and helpful characteristics of what a PDS is before discussing the creation, implications, and lessons learned of their evaluability assessment process (EA), a system that was created to help clarify how their PDSs were intended to work. This piece is followed by an article by Danley, Tye, Loman, Nickens, and Barlow that compares the growth of key teacher educator dispositions in a traditional PDS teacher preparation model and a more recently developed, clinically-based PDS teacher preparation structure.

This issue concludes with an article by Hartman, Kennedy, and Brady that looks beyond traditional initial licensure programs to examine the effectiveness of using a PDS Teaching Fellowship Program to increase the self-efficacy of teacher candidates across multiple areas of common concern for beginning teachers during the critical induction year.

Via this collection of articles we boldly aim to begin the conversations of “What is a PDS?”; we consider this discussion and the articulation of a vision for PDSs a professional right, opportunity, and responsibility. A movement—such as the PDS tradition with which we have each engaged for more than a decade—must never shy away from articulating its core principles or from engaging in candid, public discussions of what a PDS is and what it is not. We acknowledge that if PDS practitioners, scholars, and advocates do not soon define what is a PDS, someone else will—likely someone who knows and cares less about the promise of this model than we and the many members of NAPDS and the many PDS practitioner and constituents do.

References

- Anderson, C.R. (ed.). (1993). *Voices of change: A report of clinical schools project*. Washington, D.C.: American Association of Colleges for Teacher Education
- Bohan, C. H., & Many, J. (2011). *Clinical teacher education: Reflections from an urban professional development school network*. Charlotte, NC: Information Age Publishing, Inc.
- Basile, C. G. (Ed.). (2010). *Intellectual capital: The intangible assets of professional development schools*. Albany, NY: SUNY Press.

- Cantor, J.S. (2002). Who's teaching the urban poor? Supporting an emerging social justice educator in a Professional Development School. *Equity & Excellence in Education*, 35(3), 225–235. doi:10.1080/713845319.
- Castle, S., Fox, R.K., & Souder, K.O. (2006). Do Professional Development Schools (PDSs) make a difference? A comparative study of PDS and mon-PDS teacher candidates. *Journal of Teacher Education*, 57(1), 65–80. doi:10.1177/0022487105284211
- Castle, S., Rockwood, K.D., & Tortora, M. (2008). Tracking professional development and student learning in a Professional Development School partnership. *School-University Partnerships*, 2(1), 47-60.
- Clark, R. W. (1999). *Effective Professional Development Schools. Agenda for Education in a Democracy Series*. San Francisco, CA: Jossey-Bass, Inc., Publishers.
- Cochran-Smith, M. & Zeichner, K. M. (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Colburn, A. (1993). Creating Professional Development Schools. *Fastback 352*. Bloomington, IN: Phi Delta Kappa.
- Cozza, B. (2010). Transforming teaching into a collaborative culture: An attempt to create a Professional Development School-University partnership. *The Educational Forum*, 74 (3), 227–241. doi:10.1080/00131725.2010.483906
- Craig, C. J., & Deretchin, L. F. (Eds.). (2008). *Imagining a renaissance in teacher education* (Vol. 16). Lanham, MD: Rowman & Littlefield Education.
- Darling-Hammond, L. (2005). *Professional Development Schools: Schools for Developing a Profession*. New York, NY: Teachers College Press.
- Darling-Hammond, L. (2006). *Powerful Teacher Education*. San Francisco, CA: Jossey-Bass.
- Dolly, J. P., & Oda, E. A. (1997). Toward a definition of professional development schools. *Peabody Journal of Education*, 72(1), 178-186.
- Ferrara, J. (2014). *Professional Development Schools: Creative Solutions for Educators*. Lanham, MD: R & L Education.
- Fleener, C., & Dahm, F.P. (2007). Elementary teacher attrition: a comparison of the effects of Professional Development Schools and traditional campus-based programs. *Teacher Education and Practice*, 20(3), 263–283.
- Goodlad, J. I. (1990). *Teachers for our nation's schools*. San Francisco, CA: Jossey-Bass Inc.
- Goodlad, J. I., Soder, R., & McDaniel, B.L. (2008). *Education and the making of a democratic people*. Boulder, CO: Paradigm Publishers.
- Guadarrama, Ramsey, and Nath's *Professional Development Schools: Advances in Community Thought and Research* (2005)
- Henry, J.J., Tryjankowski, A.M., Dicamillo, L., & Bailey, N. (2010). How professional development schools can help to create friendly environments for teachers to integrate theory, research, and practice.” *Childhood Education*, 86(5), 327–331. doi:10.1080/00094056.2010.10521419.
- Higgins, K. M., & Merickel, M. L. (1997). The promise and the promises: Partnerships from a university perspective. *The Teacher Educator*, 32(3), 165-184.
- Holmes Group. (1990). *Tomorrow's Schools: Principles for the Design of Professional Development Schools*. Lansing, MI: Holmes Group.

- Holmes Partnership. (1997). Origins of the Holmes Partnership: 1987-1997. Retrieved from: <http://www.udel.edu/holmes/origins.html>.
- Johnston-Parsons, M. (2012). *Dialogue and Difference in a Teacher Education Program*. Charlotte, NC: Information Age Publishing, Inc.
- Latham, N. I., & Vogt, W.P. (2007). Do professional development schools reduce teacher attrition? Evidence from a longitudinal study of 1,000 graduates." *Journal of Teacher Education*, 58(2), 153–167. doi:10.1177/0022487106297840.
- Levine, M., & Trachtman, R. (1997). *Making professional development schools work: Politics, practice and policy*. New York: Teachers College Press.
- Metcalf-Turner, P. (1999). Variable definitions of professional development schools: A desire or a dilemma? *Peabody Journal of Education*, 74(3&4), 33-41.
- Mullen, C. (2009). *Handbook of Leadership and Professional Learning Communities*. Basingstoke, UK: Palgrave Macmillan.
- National Association for Professional Development Schools (NAPDS). (2008). *What It Means to be a Professional Development School*. Retrieved from: http://www.napds.org/nine_essen.html.
- National Council for Accreditation of Teacher Education (NCATE). (2001). *Standards for Professional Development Schools*. Retrieved from: <http://www.ncate.org/Standards/tabid/107/Default.aspx>.
- National Council for the Accreditation of Teacher Education. (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. A report of the Blue Ribbon Panel on Clinical Preparation and Partnership for Improved Student Learning. Washington, DC: NCATE.
- Neapolitan, J. E., & Berkeley, T. R. (2006). *Where do we go from here?: issues in the sustainability of professional development school partnerships*. New York, NY: Peter Lang.
- Neapolitan, J. E. (2011). *Taking Stock of Professional Development Schools: What's Needed Now*. New York, NY: Teachers College Press.
- Pine, G. J. (2008). *Teacher action research: Building knowledge democracies*. Thousand Oaks, CA: Sage Publications.
- Reynolds, A., Steven, M. R., and Rakow, J.H. (2002). Teacher retention, teaching effectiveness, and professional preparation: A comparison of professional development school and non-professional development school graduates. *Teaching and Teacher Education*, 18(3), 289-303.
- Shiveley, J. & Taylor, H. (1998). Just what are professional development schools and how do they work? In H. Taylor (Ed.), *What's Going On?--Trends and Issues Confronting Today's Classroom Teacher*. New York, NY: Simon and Schuster.
- Shroyer, G., Yahnke, S., Bennett, A. & Dunn, C. (2007). Simultaneous renewal through professional development school partnerships. *Journal of Educational Research*, 100(4), 211–225. doi:10.3200/JOER.100.4.211-225.
- Teitel, L. (2003). *The professional development schools handbook: Starting, sustaining, and assessing partnerships that improve student learning*. Thousand Oaks, CA: Corwin Press.
- Wong, P. L., & Glass, R. D. (Eds.). (2009). *Prioritizing urban children, teachers, and schools through professional development schools*. Albany, NY: SUNY Press.

Zenkov, K., Corrigan, D., Beebe, R. S., and Sell, C.R. (2013). *Professional Development Schools and Social Justice: Schools and Universities Partnering to Make a Difference*. Lanham, MD: Lexington Books.

Kristien Zenkov is a Professor of Education at George Mason University, serving as a hybrid educator, working across school, university, and community contexts as a teacher, teacher educator, and activist. Ellen Clark is a doctoral student at George Mason University studying literacy and international education. James Shiveley is the Condit Endowed Professor in Teacher Education at Miami University. His research interests are in the areas of citizenship education, comparative education, and school-university partnerships.

Evidence-Sensitive Synthesis of Professional Development School Outcomes

David R. Snow

Denver Public Schools, Denver, Colorado

Siobhan Flynn

Billings Public Schools, Billings, Montana

Katie Whisenand

Bozeman Public Schools, Bozeman, Montana

Erin Mohr

Cherry Creek Public Schools, Englewood, Colorado

Abstract: This synthesis report describes a thorough analysis of primary professional development school (PDS) research in an effort to reveal reasonable PDS outcome claims as well as the strength of evidence that is in place to support these claims. The authors found reasonable evidence that support five claims: 1) PDS experiences encourage greater professional confidence in teaching candidates, 2) PDS experiences improve preservice teachers' perceptions of themselves as eventual professionals, 3) PDS experiences result in teaching candidates with more demonstrable teaching skills, 4) PDS experiences encourage improved quality and/or frequency of formative assessment for teaching candidates, and 5) PDS experiences improve host teachers' teaching practice. The authors also identify a list of emerging outcomes, a discussion of the nature of PDS interventions and research, and recommendations for improving the evidentiary quality of future PDS research.

KEYWORDS: PDS claims, PDS research, PDS research synthesis

NAPDS NINE ESSENTIALS ADDRESSED:

1. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants

Introduction

The organization of a professional development school (PDS) partnership need not be complex. It may be as simple as striking an agreement between a school and a university. However, the potential advantages of such an arrangement, as evidenced by the work of hundreds of program advocates and researchers, are many and varied. Those who do work in PDS programs are surely encouraged by these potential advantages for all stakeholders (here to be referred to as PDS *outcomes*), but the effort of understanding their true nature has proven to be an elusive task.

The PDS concept, when compared to the waves of short-term education reforms that have

influenced schools and universities throughout the standards-based era, has a rich history and long-standing political support. These characteristics of the PDS movement have resulted in the wealth of literature that has been produced on the topic. Intervention descriptions, program evaluations, guides for implementation, calls for reform to include PDS designs, and historical accounts fill long lists of returns on PDS searches.

We find it interesting that the reality of each of these studied PDS programs is that each one has at its inception a decision. Decisions to formally involve K-12 schools in the effort of teacher preparation are made by legislatures, boards of education, administrators, teachers, and/or faculty. Although these decisions are influenced by historical momentum, programmatic familiarity, and political pressure, it is clear that there is a need for stakeholders to have direct access to empirical evidence of PDS outcomes. This need is particularly keen, not only because of the wealth of descriptive and anecdotal information that can serve to distort the truth that can be found in the available evidence, but also because the decision to embrace or reject a PDS design can carry the potential for great consequences in terms of both human and financial resources.

This pragmatic perspective led us to the synthesis that underlies this report. In a question: What empirical evidence exists that can inform stakeholders about professional development school outcomes, and what does this evidence reveal? In the pages to follow we describe a logistically simple yet arduous undertaking that led us to answers to this question.

Literature Review

Despite a wealth of professional development school (PDS) reviews in various forms, there are only two large-scale analytical syntheses that address PDS outcomes (Abdal-Haqq, 1998; Breault & Breault, 2012). Both of these works enlighten the nuances of PDS partnerships and their effects, both have informed our work significantly, and their combined efforts provide a foundation for our specific and unique approach to answering questions about PDS outcomes.

The first of these syntheses of PDS research is reported in Abdal-Haqq's *Professional Development Schools: Weighing the Evidence* (1998). Although the bulk of the text is devoted to describing the complex national landscape of PDS interventions, the author does provide a series of conclusions regarding program outcomes:

PDS programs are more likely to involve more field time and structure, employ school-based faculty, serve post-baccalaureate students, provide thorough support and feedback, evaluate pre-service teachers using a wide variety of assessment strategies, expose pre-service teachers to authentic classroom experiences, and are more likely to empower and encourage reflective practices (pp. 13-14).

Graduates of PDS programs are more likely to use a wider range of strategies, be more reflective, have a better sense of school logistics, be more confident in their roles and in teaching diverse learners, and have lower attrition rates (p. 15).

Classroom teachers in PDS roles are more likely to take instructional risks, be more intellectually stimulated, experience professional growth, feel less isolated and powerless, make improvements to their own practice, and more likely to experience a sense of professionalism (p. 24).

It is important to note that Abdal-Haqq did not systematically analyze the evidence used as

the basis for these conclusions, and that most of the specific conclusions are based on few primary studies.

The idea that empirical quality should be considered in determining the overall weight of evidence was of far greater emphasis in Breault and Breault's *Professional Development Schools: Researching Lessons from the Field* (2012). After an initial screening to determine which of the 300 studies the authors uncovered met their criteria for "research," they coded each in terms of methodological strength ("strong," "acceptable," or "weak") and validity of conclusions ("valid" or "invalid"). However, as the authors note, the scope of their work did not extend to an analysis of primary research quality beyond a "basic level" (p. 51).

The authors distilled their concerns about PDS research into four conclusions: 1) PDS endeavors cannot be largely justified by the available research, 2) claims put forth in many primary PDS studies are unsupported, 3) student achievement outcomes are particularly under-examined, and 4) the perspectives of many important stakeholders have been underrepresented. In short, these authors brought to light the poor quality of the majority of existing PDS research, and they determined that none of the list of positive outcomes identified by Abdal-Haqq can be supported by this body of work.

The synthesis to follow differs from these previous efforts in two important respects. First, we concerned ourselves with the specific nature of each of the primary research reports that we believed could provide PDS outcome claim support. Before drawing conclusions we started by carefully dissecting each of the primary studies to gain a sense of empirical strength. We then based our claims on the evidence that resulted for our process while, at the same time, disregarding large amounts of poor-quality evidence that characterizes the PDS research landscape. The wealth of descriptive and anecdotal PDS documents, in our opinion, is indicative of the longevity and popularity of the PDS movement, but is not pertinent to a discussion about the claims that can be supported by the stronger evidence that is found among this mass.

Second, in this report we will not go so far as to make decisions for stakeholders. Because these decisions need to be weighed against varying degrees of resistance, we sought an approach to reporting claims that would be most useful for our readers. Specifically, outcomes that are supported by multiple sources of evidence are presented along with the supporting evidence citations, short descriptions of these studies, and an evidentiary quality indicator. Each reader is left to determine whether the evidence before them satisfies their particular need for empirical strength.

Methodology

There were three overlapping phases within this synthesis project. Our Phase I was characterized by the retrieving of evidence from primary research sources, a process which extended 19 months into our work (October 1, 2013 to April 30, 2015). As primary research sources began to be revealed, we set into our Phase II which was characterized by the inclusion and coding processes. As noted in the previous section, this phase makes the current synthesis unique in that the specific quality of available evidence was used as eventual basis for claims. A year into the process, in October 2014, we began our Phase III which was to synthesize the results. The results of this last phase produce the claims and recommendations that comprise the closing section of this report.

Phase I: The Search for Evidence

A broad internet search characterizes our initial attempts to identify relevant research reports. The search platforms of the Education Resources Information Center (ERIC), Google Scholar, and Power Search were employed using these phrases: "Professional Development Schools," "Professional Development School Partnerships," "Impact of Professional Development Schools," "Measuring the Achievement of Professional Development Schools," "Analysis of Professional Development Schools," "PDS," "PDS Partnerships," "Do Professional Development Schools (PDSs) Make a Difference?," "The Impact of a Professional Development Schools," "Effectiveness of Professional Development Schools," "Professional Development School Comparisons," and "Professional Development Schools PDS and Student Achievement." The titles and abstracts of the first 100 or more results from each search were used to determine whether or not each report was to be included in Phase II.

Phase I continued well into the timeframe of Phase II. As reports were coded, the reference lists of these studies were cross-referenced for possible study inclusion in our synthesis. We also presented our synthesis process and preliminary results, respectively, at two national Professional Development Schools Conferences (Las Vegas in March 2014 and Atlanta in March 2015) where requests for relevant citations were solicited. Identified report citations were then subjected to the same Phase I and cross-referencing processes.

More than 5,000 studies were considered for inclusion as a result of our Phase I process.

Phase II: Inclusion and Coding

It was determined that research reports would be subjected to our Phase II analysis if they met two criteria. First, the intervention studied in the reported research needed to be a PDS intervention. This identification was communicated through the research report either explicitly (the researchers identified the intervention as a "PDS" or "professional development school" intervention) or implicitly (the described intervention included at least five of the nine essential PDS characteristics identified by the National Association for Professional Development Schools (NAPDS)). A list and description of these essential characteristics can be found on the NAPDS website (napds.org).

The second inclusion criteria required some evidence of intervention outcome. A study of the growth dynamics of a particular PDS program, for example, would not necessarily include outcome measures. Note that such a study could be of great interest to stakeholders, and it could report a wealth of empirical evidence, but it would not help us to answer our research question.

Once it was determined that a given research report met our inclusion criteria, then it was selected for inclusion, the full text of that report was obtained, and the report was subjected to coding. Using a coding instrument adapted from the work of Barley et al. (2002), 102 studies were coded for this synthesis. As the coding process began, it was determined that 20 of the included studies did not, as it turned out, meet the inclusion criteria, so coding on these studies was aborted. Each of the 82 studies that remained was subjected to the complete coding process.

The coding process began with a thorough descriptive section in which 40 contextual, intervention, and study characteristics were identified. Among these characteristics were school/university descriptors, subject group demographics, content foci, pedagogical strategies leveraged, PDS intervention descriptors, study duration, study group assignment protocol, levels

of subject attrition, and outcome information (including effect sizes, when available). The complete coding instrument is available through the NAPDS website (napds.org).

Following this descriptive coding, each study was subjected to an evidence coding process to determine a quantitative and/or qualitative Empirical Evidence Strength Rating (EESR). The quantitative EESR is a numeric score based on the cumulative score across eight design and reporting metrics. Using adapted quality descriptors and the same cutoffs employed by Barley et al. (2002), studies were rated as "High," "Medium," or "Low" in evidentiary quality. Generally, studies earning High EESR scores included a strong combination of these design characteristics: the intervention and outcomes were properly defined, steps to insure fidelity were described and employed, the PDS intervention was largely protected from bias and contamination, the study employed appropriate sampling of groups and subgroups, and the statistical analyses were appropriate and carefully reported. This coding rubric is available through the NAPDS website (napds.org) as a part of the coding instrument described above.

Similarly, the qualitative EESR is a numeric score based on the cumulative score across ten design and reporting metrics. Again, using quality descriptors and cutoffs employed by Barley et al. (2002), studies were rated as "High," "Medium," or "Low." Studies that emerged with High qualitative EESR ratings were those that described and leveraged mechanisms to both confirm results and search for disconfirming evidence, studies that carefully avoided researcher effects, studies in which construct validity was established and described, and studies in which claims of generalizability and convergence of results were carefully established. This rubric is also available through the NAPDS website (napds.org) as a part of the coding instrument described above.

Having described what the EESR is, it is important for the reader to also understand what it is not. The EESR is not an indication of report quality. In fact, given the nature of educational programming of any kind, it is reasonable to expect researchers to give emphasis to descriptive and evaluative efforts while attending less to the potential for supporting generalized claims. The EESR is merely an indication of the generalizability of the evidence presented in a report while the report itself may not have been written with these ends in mind.

Phase III: The Synthesis Process

The quantitative aspect of our synthesis phase would have been to conduct a meta-analysis of primary study outcomes. As we report in the next section, however, the available research does not support such an approach, so a description of this process is not warranted here.

The qualitative aspect of this phase (and what turned out to be our sole synthesis mechanism) was to allow the High EESR studies to define a set of outcome claims, and then to also consider the degree to which any Medium EESR studies supported these claims. This interpretative approach (also similar to the approach used by Barley et al., 2002) yielded a rich set of results that are presented as a list of potential PDS claims in the section to follow.

Results

As noted in the previous section, 82 professional development school (PDS) studies were fully coded for this synthesis. A cursory set of descriptors of each of these studies is presented in Table 1. The reader should note that, despite its large size, this table is only portion of a much larger searchable and sortable spreadsheet (82 by 74) of study descriptors that is available for download through the NAPDS website (napds.org).

Table 1: Studies of Professional Development School (PDS) Intervention Outcomes

author(s)	year	quant EESR ^a	qual EESR ^b	sample n	outcome description
Armstrong, Rudolph, & Austin	2011	L	M	22/3	The authors report that a PDS program encouraged ongoing growth in the partner teacher education program.
Bennett	2011		M	62	The author identifies the use of weekly morning seminars as an important mechanism through which PDS interventions can be enhanced.
Blocker & Mantle-Bromley	1997		H	42	The authors report that PDS preservice teachers were more satisfied with their preparation, and were more enthusiastic about their preparation, experiences, and resulting confidence.
Brindley et al.	2008		M	86	The authors identify the use of internship placements as an important mechanism through which PDS interventions can be enhanced.
Bullough et al.	2002		M	39	A PDS program is reported to produce positive benefits for preservice teachers, host teachers, and classroom students.
Bullough et al.	1997		M	7 schools	Teachers who became openly engaged in the PDS process are reported to be more reflective, and described increases in personal and professional growth.
Carpenter & Sherretz	2012		M	1 school	PDS partnerships are reported to allow host teachers to assume more leadership functions in regard to developing the school as a learning organization, and they are reported to allow more opportunities to participate in seminars, problem solving groups, reflection, inquiry and skill development activities.
Castle, Arends, & Rockwood	2008	M		2 schools	A PDS intervention is reported to move more classroom students to mastery when compared to the control schools.
Castle, Fox, & Fuhrman	2009	M	H	171	Quantitative analysis revealed significant improvement in PDS candidates' time management skills, depth and integration in their reflection on teaching, and their willingness to discuss integrated assessments.
Castle, Fox, & Souder	2005	L	H	91	PDS candidates are reported to perform better on aspects of instruction, management, and assessment. PDS candidates are also reported to be more focused on their students and student performance, and are reported to have a broader experience base.
Castle, Rockwood, & Tortora	2008	M		21	The authors report that a PDS program encourages the use of new pedagogical approaches and it better supports student learning.
Catelli	2012	L		18	PDS student teachers are reported to show an increase in the percentage of time devoted to substantive pupil and teacher behaviors.
Cobb	2000	L		35	Host teachers report that PDS graduates had a higher level of preparedness as compared to non-PDS graduates, and that the impact of the PDS program is favorable in a variety of other ways.
Cobb	2001	L		35	PDS graduates are reported to believe that their principals and colleagues view them as agents of reform.
Conaway & Mitchell	2004		H	58	PDS preservice teachers report more independence and responsibility for implementing instructional decisions as well as greater collaboration with school personnel. They also agreed that they were more confident of their abilities and that the PDS program provided a more realistic experience.

^a Quantitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

^b Qualitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

Table 1 (continued): Studies of PDS Intervention Outcomes

author(s)	year	quant EESR ^a	qual EESR ^b	sample n	outcome description
Cosenza	2013		M	22	Stakeholders emphasized the collaborative culture of the PDS environment as a critical component in producing teachers with leadership potential.
Cuddapah et al.	2008	L		17	The authors report that PDS student teachers had higher attendance rates, improved GPAs, and were better prepared to enter the high school environment as effective teachers.
Czaja et al.	1998	L		684	PDS teachers who had mentoring experience are reported to have a greater focus on continual improvement. Authors also report that mentoring opportunities are affiliated with positive views of collegiality, recognition, autonomy, and an improved outlook.
Damore, Kapustka, & McDevitt	2011	L	M	82	The authors report that an urban PDS model begins to satisfy national recommendations for high-quality preparation of future teachers through providing a more meaningful experience, better preparation, increased opportunities, improved mentoring, and connections between coursework and the classroom.
Dangel & Hooper	2010		M	6	The authors identify the use of constructivist approaches as an important mechanism through which PDS interventions can be enhanced.
Duffield	2005		H	17	PDS candidates are reported to experience formation of strong, positive relationships with students and teachers. Additionally, PDS classrooms are reported to allow candidates to move beyond focusing on procedural aspects and think more about methodology.
Duffield	2006		M	17	The author reports that quality in relationships between preservice teachers and host teachers was the most influential factor in PDS preservice teachers' perceptions of fieldwork experiences.
Duquette & Cook	1999		M	23	Preservice teachers reported they learned about curriculum, pupils, discipline and the teaching profession, but they did not attribute the areas of growth directly to the PDS intervention.
Edens, Shirley, & Toner	2001		M	75	The authors report that a variety of PDS school and university staff viewed enhanced professionalism and networking as primary advantages of the intervention.
Fisher, Frey, & Farnan	2004	M		485	The authors report that scores were significantly higher for students in classrooms with PDS student teachers compared to classrooms without.
Flynn	2001		M	6	PDS graduates consistently reported a high quality of mentoring, excellent models of teaching, involvement in the entire school, connections between coursework and the classroom, and the support of the cohort structure as elements contributing to better teacher preparation.
Foster & Loving	2000		M	3	The authors identify the presence of principal support as an important mechanism through which PDS interventions can be enhanced.
Frampton, Vaughn, & Didelot	2003	L		87	The teachers surveyed report that their PDS partnerships have improved the practice of preservice teachers.
Gajada & Cravedi	2012		M	130	The authors report that a PDS program effectively addresses the professional development needs of both veteran and novice teachers.
Galassi et al.	2001	L	M	110	The authors describe ways in which PDS involvement both positively and negatively impacts stakeholders' perceptions of collaborative research.

^a Quantitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)^b Qualitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

Table 1 (continued): Studies of PDS Intervention Outcomes

author(s)	year	quant EESR ^a	qual EESR ^b	sample n	outcome description
Gimbert & Nolan	2003		M	7	The authors report that effectiveness of the university supervisor has increased as a result of a PDS intervention.
Heafner & Spooner	2008	L	M	126	The authors report that a PDS tutoring program helped increase individual student success, self-regulation, and self-efficacy.
Higgins	2002		H	13	The author reports that, as a result of PDS programming, university partners have a greater understanding of the work teachers do, that teachers were involved in more meaningful reflection on all aspects of instruction, that preservice teachers observed more merging of methods and practice, and that students received more attention.
Hopkins, Hoffman, & Moss	1997	L		64	The presence of stress, as well as preservice teachers' ability to cope with the stressors, is reported to have increased for both PDS and non-PDS participants. No between-group differences were identified with respect to these metrics.
Jorissen	2002		M	7	Characteristics including enhanced mentoring support, eventual professional integration, and teacher retention are reported as benefits of a year-long, cohort program for preservice teachers.
Klingner et al.	2004	L	M	948/47	The authors report that improved academic outcomes, and social and affective benefits, can be attributed to a PDS intervention.
Knight, Wiseman, & Cooner	2000	L	H	1,034	The authors report that PDS activities resulted in higher student writing scores, as well as increased achievement in writing and mathematics problem solving.
Kroll et al.	1997		H	17	PDS host teachers are reported to have experienced greater professional growth. PDS preservice teachers are reported feeling as though they were treated more professionally and were an integral part of the host school staff.
Latham & Vogt	2007	M		1,065	The authors report that PDSs significantly and positively affected how long teachers remained in the profession.
Latham & Wedwick	2009		M	203	PDS preservice teachers are reported to be more career-oriented and to place a higher priority on preparedness than their non-PDS counterparts.
Levin & Rock	2003		M	5	Adding an action research component to a PDS experience is reported to increase the effectiveness of the experience.
Long & Morrow	1995	M	M	32	No significant differences were found between PDS candidates and the control group on the National Teachers Exam, examination of portfolios, and an extensive questionnaire. The authors do report, however, that PDS preservice teachers were found to be significantly more positive toward inclusion, better prepared for their first year of teaching, and to be in possession of greater self-confidence.
Marchant	2002	M		60 schools	The author reports no significant differences between PDS and non-PDS sites on any of the indicators of student achievement.
McKinney et al.	2007	L		59	The authors report no significant difference between pre- and post-test scores on urban teacher preparation across PDS and traditional programs.
Mebane & Galassi	2000	M	M	66	Overall satisfaction with aspects of PDS involvement is reported to outweigh levels of dissatisfaction.
Mebane & Galassi	2003	M		68	The authors identify inquiry and study groups as important mechanisms through which PDS interventions can be enhanced.

^a Quantitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

^b Qualitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

Table 1 (continued): Studies of PDS Intervention Outcomes

author(s)	year	quant EESR ^a	qual EESR ^b	sample n	outcome description
Mitchel & Hindin	2008	L	M	43	The authors report that a greater percentage of PDS preservice teachers embedded their lessons with meaningful context, they were more prone to activate prior knowledge, and they showed a greater degree of focus on students as learners. A greater level of support from cooperating teachers was also reported, but no significant difference was found with regard to preservice teachers' perceptions with regard to pursuing a teaching career, the types of feedback they received, and how well they thought a methods class prepared them for teaching.
Mule	2005		M	5	The author reports that engaging inquiry in PDS settings may better challenge preconceived notions about teaching and may encourage more depth of reflection.
Neapolitan et al.	2008		M	46	The authors report that teachers prepared in PDS programs were more likely to remain in the profession, were more likely to give focus to reflection and thoughtfulness in planning and assessment, and were more likely to be confident in their abilities. The authors also report that there was no difference between the PDS and non-PDS groups' beliefs about their teaching effectiveness.
Paese	2012	M		48	The author reports increased role preparedness and efficacy as a result of preservice teachers' PDS involvement.
Pohan et al.	2009	M		96	PDS preservice teachers are reported to be more culturally responsive as a result of participation in an urban school placement.
Polizzi	2009		M	14	Preservice teachers are reported to experience personal and professional growth as a result of a full-immersion PDS program.
Reinhartz & Stetson	1999		M	31	The authors report that teachers trained in PDS programs felt they had an advantage over their counterparts and rated themselves better in terms of classroom management, effectiveness of instruction, and leadership skills and abilities. It is also reported that principals felt PDS teachers were more confident and knowledgeable.
Reynolds, Ross, & Rakow	2002	M	M	80	PDS program participants are reported to be better prepared, but quantitative analyses reveal no significant differences on measures of school culture or teacher proficiency.
Reynolds & Wang	2005	M		511	Two of the four PDS partnerships studied showed a higher percentage of PDS graduates remaining in the teaching profession.
Rice et al.	2011		L	85	The authors report that PDS programming resulted in positive learning outcomes for graduate-level preservice teachers.
Ridley, Hackett et al.	2005	L		<98	Teachers prepared in a PDS program were reported to be more effective at getting and holding student attention, communicating lesson objectives, connecting a lesson to prior knowledge, and providing instruction in an engaging manner.
Ridley, Hurwitz et al.	2005	M		51	The authors report that, during the first year of teaching, PDS graduates were superior to campus-prepared graduates in lesson planning, teaching effectiveness, and reflection.
Rieckhoff & Larsen	2012	L	M	<268	The authors report that a PDS partnership has a positive impact on leadership development.

^a Quantitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

^b Qualitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

Table 1 (continued): Studies of PDS Intervention Outcomes

author(s)	year	quant EESR ^a	qual EESR ^b	sample n	outcome description
Sandholtz & Dadlez	2000	M	H	249	The authors report that PDS student teachers had a more supportive and authentic student teaching experience.
Sandholtz & Wasserman	2001	M	H	59	The authors report that collaborative work with university partners offered added opportunities for host teachers to enhance their teaching. PDS teaching candidates noted improved opportunities including availability of the supervisor, a large support system, and more constructive feedback.
Scheetz et al.	2005		L	25	The authors report that being a host teacher in a PDS program was a professionally rewarding experience.
Shroyer et al.	2010	L	M	3 districts	The authors identify the use of student-centered resource allocation as an important mechanism through which PDS interventions can be enhanced.
Snow-Gerono	2005		M	>3	The author reports that a PDS program encouraged learning communities in absence of formal professional learning communities.
Stairs	2011		H	55	An urban PDS is reported to help recruit and prepare future urban teachers, and to help shift stereotypes about teaching in urban schools.
Stallings	1991	M	H	69	PDS preservice teachers are reported to successfully teach multi-cultural at-risk children, and most of these preservice teachers are reported to welcome future opportunities in the same environment.
Stallings & Kowalski	2011	M		62	PDS student teachers are reported to develop and maintain more effective instructional strategies than teachers prepared in a traditional setting.
Stanulis	1995		M	5	The author identifies a host teacher's ability to develop and maintain collaborative relationships as an important component of successful PDS programming.
Stroble & Luka	1999		L	17	The authors identify a host of advantages inherent in PDS programs as reported by school and university administrators.
Teitel	1997		M	3 programs	The author reports on the simultaneous renewal of institutions involved in long-term PDS programs.
Theiss & Grigsby	2010	L	M	136	The authors report that preservice teachers in a PDS program were advancing on a variety of standard certification metrics.
Tilford	2010		L	3	The author identifies particular host principal characteristics that are conducive to successful PDS.
Vare & Young	2007	L		1,704	The authors report that the quality of host teacher supervision improves as a result of communities of inquiry such as that provided by a PDS program.
Voltz	2001		M	24	The author reports that PDS interventions enhanced special education teachers' professional growth.
vonEschenbach & Gile	2007	L		250	This report supports the notion that PDS programs encourage alignment between schools and universities with regard to dispositional expectations.
Wait & Warren	2001	L		16	The authors report that teachers trained in a PDS program displayed better classroom management skills.
Walling & Lewis	2012		M	26	The authors report that PDS experiences encourage more mature professional beliefs and attitudes in preservice teachers.
Walmsley et al.	2007	L	M	48	The authors report that PDS preservice teachers improved markedly in terms of both knowledge and pedagogy within the context of addressing the needs of students with disabilities.

^a Quantitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)^b Qualitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

Table 1 (continued): Studies of PDS Intervention Outcomes

author(s)	year	quant EESR ^a	qual EESR ^b	sample n	outcome description
Willhite, McIntyre & Willhite	2008	L		26	The authors report that student teachers in a PDS program acquired more teaching experience than their traditional program counterparts.
Yendole-Silva & Dana	2004		H	6	The authors report that, as host teachers progressed into the PDS partnership, they became more effective decision-makers and teacher educators.
Yerian & Grossman	1997	M	H	74	The middle school PDS model is reported to have a positive effect on attitudes toward the practice and growth of preservice teachers.
Yssel, Koch, & Merbler	2010	L		45	The authors report that PDS programming is not resolving reluctance on the part of special education faculty to embrace PDS models.

^a Quantitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

^b Qualitative Empirical Evidence Strength Rating (L = low, M = medium, and H = high)

Careful analysis of Table 1 will reveal that none of the studies were coded as having High quantitative EESRs, 19 were rated as having Medium quantitative EESRs, and 26 were rated as having Low quantitative EESRs. In terms of qualitative methodologies, 14 of the studies we coded were rated as having High EESRs, 39 as having Medium EESRs, and 4 as having Low EESRs. Analysis will also reveal that 20 of the studies employed both quantitative and qualitative methodologies and were, therefore, coded as such and given EESR ratings in both methodological categories.

Claims

Support for claims of positive outcomes for PDS interventions clearly exists. We have identified 64 studies with High and/or Medium EESRs that will be used here to support specific claims regarding PDS outcomes. As noted, we cannot determine whether the strength of these claims will satisfy the empirical needs of program advocates, so we expect that decisions will be made while weighing the available evidence against the scope of the programmatic effort at hand. While these decisions are left to others, we present here our best effort at a compilation of the empirically strong evidence needed to make these decisions valid.

Under the headings to follow, a series of five PDS outcome claims are presented. Effort has been made to present the claims in order based on strength of support with the most heavily supported claim being presented first. Within each claim, the High EESR studies are presented first followed by the Medium EESR studies. Since multiple studies were to be presented in each given group, it was determined that the studies should be presented in chronological order in an effort to preserve any indication of evolution in empirical understanding that may be present.

Claim #1: PDS experiences encourage greater professional confidence in teaching candidates.

Six High qualitative EESR studies support this claim. Although some of the reported effects are mitigated by programmatic design elements such as self-selection to PDS interventions, and confounded by the often subtle differences between PDS interventions and

traditional student teaching experiences, these studies enlighten important aspects of PDS interventions that are not only unique to such experiences, but also have clear potential to encourage the candidate confidence at the heart of the claim.

Of these six High EESR studies, the earliest is the report of an interview-based study authored by Blocker and Mantle-Bromley (1997). In this study of 42 subjects the authors report that those who had chosen the PDS program option described themselves as being more confident in their teaching preparation and skills. Similar levels of confidence, this time in terms of perceptions of thorough preparation, were evidenced by Yerian and Grossman (1997) in their longitudinal middle-school study which included 74 teaching candidate subjects. The third study, an ethnographic study by Higgins (2002), describes professional confidence in larger terms as the self-perceived professional growth of 13 teaching candidate subjects. Conaway and Mitchell (2004), in a longitudinal study involving 57 subjects, report that the PDS-prepared candidates were more confident in their teaching abilities and, in another longitudinal study, Duffield (2005) reported that 18 subjects felt more confident in terms of a stronger willingness to apply instructional methodologies. The sixth of these High EESR studies is a more recent work by Stairs (2011) in which the author analyzes a variety of evidence provided by 55 teaching candidates involved in an urban PDS program. The candidates reported not only feeling more prepared to teach in urban classrooms, but also more willing to consider teaching in an urban classroom as a career choice.

This claim of increased confidence is also supported by six Medium EESR studies. The earliest of these is a mixed-methods study by Long and Morrow (1995) in which the authors report the studied PDS preservice teachers to be significantly more positive toward inclusion and to be in possession of greater self-confidence. Also placed among these studies is the quantitative portion of the Yerian and Grossman (1997) study described above. The authors' analyses of preservice teacher questionnaire responses further support the current claim of increased confidence. In another Medium EESR study, a qualitative study by Reinhartz and Stetson (1999), the authors report that the 12 PDS-trained teachers surveyed rated themselves higher than did their counterparts in confidence in terms of self-reported instructional effectiveness, classroom management, and leadership skills. The notion that self-reported perceptions of teaching ability are indications of professional confidence also led us to consider a mixed-methods study by Reynolds, Ross, and Rakow (2002) in support of this claim. In this interview and survey study that was given a Medium EESR rating for both its quantitative and qualitative methodologies the authors report that 18 PDS-prepared teachers rated their teaching effectiveness higher than did their non-PDS counterparts. Two additional Medium EESR qualitative studies support this first claim. Gajda and Crevedi (2006) report that teaching candidates with access to practicing teachers as a part of a PDS methods course left them feeling more prepared to enter the profession. And lastly, also in a study of methods course students, Mitchel and Hindin (2008) report that 24 PDS program students left the course feeling better prepared to teach than did the 19 who were enrolled in a traditional methods course.

Claim #2: PDS experiences improve preservice teachers' perceptions of themselves as eventual professionals.

Five studies that scored High qualitative EESRs support this claim. The first of these is an early mixed-methods study (scored also as Medium quantitative EESR) by Stallings (1991) in

which the author reports on the outcomes experienced by 44 PDS student teachers. Over three years the author generated data through classroom observation, interviews, and ethnographic records. The results suggest that PDS preservice teachers are more likely to use academic and clarifying statements, and they are more likely to employ comments of praise and support in their teaching. The Blocker and Mantle-Bromley (1997) study, and the Yerian and Grossman (1997) study, both used to support Claim #1, can also be used here. Blocker and Mantle-Bromley report that PDS candidates see themselves as having increased responsibility and as having more extensive interactions with students. As a result of their PDS program, the preservice teachers in Yerian and Grossman's (1997) study felt better prepared for middle school instruction in terms of early adolescent knowledge and working with students who have disabilities. The fourth study employed interviews and surveys with more than a hundred PDS preservice teachers over a four year period. Here Sandholtz and Dadlez (2000) report that the subjects felt more prepared for the transition into full-time teaching as a result of their PDS experiences. The fifth and most recent High EESR study that supports this claim and also cited in support of Claim #1. In this study, the work of Conaway and Mitchell (2004), the authors report that PDS interns see themselves as having a greater degree of independence and responsibility for implementing decisions.

A set of four Medium EESR studies were also found to support this claim. The first of these is the study by Long and Morrow (1995) that was used in support of Claim #1. In addition to the claims of increased confidence reported above, the authors also indicate that PDS preservice teachers felt better prepared for their first year of teaching when compared to a control group. The Mitchel and Hindin (2008) study (again described above in support of Claim #1) can also be used to support the current claim. These authors report that the studied preservice teachers felt positive about pursuing a teaching career, and they note that the preservice teachers reported that the methods courses were instrumental in preparing them to teach. A qualitative study by Latham and Wedwick (2009) also reported similar results. In this study 51 PDS preservice teachers the subjects reported more interest in establishing their own professional preparedness. In another study by Polizzi (2009), this one a study of 14 PDS preservice teachers, the author reports that the subjects experienced "a significant transformational impact in their personal and professional grounding as future career educators" (p 98).

Claim #3: PDS experiences result in teaching candidates with more demonstrable teaching skills.

There are four High EESR studies that can be used to support this claim. The first is the large- scale longitudinal work of Stallings (1991) reported in support of Claim #2. In addition to the conclusions reported above, the author also provides qualitative evidence to support the notion that students trained in PDS were more successful in teaching multi-cultural and at-risk students. In the second study that supports this claim, the Blocker and Mantle-Bromley (1997) study cited in support of the first two claims, the authors reveal that PDS preservice teachers also reported greater involvement with the role of being a teacher. We also include in this group a mixed- methods study by Castle, Fox, and Souder (2006). In this study data was collected using student teaching evaluation forms, video recordings, and student teaching portfolios. The authors report that PDS preservice teachers performed better on aspects of instruction, management, and assessment. Finally, in another mixed-methods study, Castle, Fox, and Fuhrman (2009), the authors report that PDS preservice teachers had better time management skills and demonstrated

greater depth in reflection.

In discussing the Medium EESR studies that speak to this claim, it is important to note that disconfirming evidence exists. For example, the Long and Morrow (1995) study, a mixed-methods study cited in support both of the previous claims, reported no statistical difference between the PDS and non-PDS preservice teachers on a series of quantitative measures: National Teacher Exam marks, scored portfolios, and the results of a questionnaire. Also note that in the mixed-methods study by Reynolds, Ross, and Rakow (2002), used as support of Claim #1, the authors report that, although the PDS preservice teachers in the study claimed to be better prepared, their perception was not supported by the authors' quantitative analyses. The authors report no significant difference between the PDS and non-PDS subjects on measures of teaching proficiency.

Six other Medium EESR studies do, however, offer support of the current claim. A qualitative study by Bullough et al. (2002) reports that children assigned to PDS student teachers were better served than were their counterparts. Walmsley, Bufkin, Rule, and Lewis (2007), in a mixed-methods study of PDS preservice teachers who were working with disabled students, report that their student teaching subjects improved markedly in terms of both professional knowledge and pedagogy. The Mitchell and Hindin (2008) study used to support Claims #1 and #2 can also be used here because the authors report that a greater percentage of PDS preservice teachers embedded their lessons with meaningful context, they were more prone to activate prior knowledge, and they showed a greater degree of focus on students as learners. The results of a quantitative study by Pohan, Ward, Kouzekanani, and Boatright (2009) support a slightly more specific claim that PDS-trained preservice teachers from urban sites were determined to be more culturally responsive. In the fifth study of this group, a mixed-methods study of 73 subjects, Theiss and Grigsby (2010) report that PDS preservice teachers were advancing more quickly on a variety of standard certification metrics. Finally, Stallings and Kowalski (2011) provide quantitative data from a variety of sources to support their claim that the PDS preservice teachers are more likely to develop and maintain effective instructional strategies.

Claim #4: PDS experiences encourage improved quality and/or frequency of formative assessment for teaching candidates.

We hesitated to include this as a claim of a PDS "outcome." At face value, increasing the quality and frequency of preservice teacher assessments appear to be programmatic choices that could be made independent of the choice to employ a PDS design. Further, this particular outcome may be better described as a PDS programmatic characteristic (an input) that is in small or large part responsible for other observed outcomes. Despite these concerns, however, we have been encouraged by the authors of studies listed below to include this claim. It appears there is reason to believe that the quality and frequency of feedback is an inherent quality of PDS interventions that may be in and of itself an outcome desired by designers of future programs.

There are four High qualitative EESR studies that support this claim. The first of these is the mixed-methods study by Sandholtz and Dadlez (2000) cited in support of Claim #2. Relevant here is the authors' report of an increase in support and encouragement of preservice teachers as a result of the PDS program. In another mixed-methods study, Sandholtz and Wasserman (2001) describe program design characteristics that encourage preservice teacher support, and go on to identify increased access to supervisors as a PDS outcome embraced by study subjects. The

Conaway and Mitchell (2004) study, described in support of Claims #1 and #2, also supports this claim in that the preservice teachers in the study identified professional support as a welcomed advantage of their PDS experience. Similarly, the study by Castle et al. (2009) described in support of Claim #3 also provides evidence that the preservice teachers in the studied program received increased supervision and feedback within the PDS structure.

Two Medium EESR studies can also be cited in support of this claim. The authors of the Bullough et al. (2002) study cited in support of Claim #3 also report that PDS preservice teachers felt better supported with their programs. The second is a case study by Gimbert and Nolan (2003) which not only describes the changing dynamics of the preservice teacher's supervision throughout a year-long placement, but also the flexibility of support structures afforded by the PDS program.

Claim #5: PDS experiences improve host teachers' teaching practice.

There are two High EESR studies that support this claim. Higgins (2002), in a naturalistic inquiry study used to support Claim #1, describes the rich and positive effects that PDS can have on host teachers in terms of their own teaching practice. The second study is an ethnography by Yendol-Silva and Dana (2004). In this 18-month study of six PDS host teachers, the subjects reported that their struggle to support and prepare preservice teachers was impetus for their own professional growth.

Six Medium EESR studies were found to support this claim. In the earliest of these, Bullough, Kauchak, Crow, Hobbs, and Stokes (1997) report that the host teachers were encouraged to think more deeply about their practice as a result of PDS programming. In another qualitative study, this one by Edens, Shirley, and Toner (2001), the authors report that host teachers viewed enhanced professionalism as a primary advantage of their PDS experiences. After analyses of interview data from 24 special education teachers, Voltz (2001) reports that PDS interventions enhanced these teachers' professional growth. The Gajda and Crevedi (2012) study used in support of Claim #1 also serves to support the current claim. These authors report that the studied PDS program was professionally revitalizing and enhanced the practice of the host teachers. In another study, the qualitative work of Carpenter and Sherretz (2012), it was the leadership opportunities provided for host teachers in a PDS program that was the focus. The authors of this study conclude that these leadership opportunities were likely to enhance the quality of the host teacher's practice. Lastly, Cosenza (2013) employed qualitative methods to come to a similar conclusion. This author suggests that the studied PDS program encouraged leadership potential in host teachers because of the resulting collaborative culture.

Emerging Claims

There are three other claims that are supported by High and Medium EESR studies. Since, in each of these cases, the claims were defined by only a single High EESR, we were reluctant to treat them with the same level of formality extended to the claims above. Not wanting to exclude them altogether, we instead suggest that these are claims which appear to be emerging from the complex reality of PDS research. Note that for each claim the High EESR study is listed first, and the Medium EESR studies are listed thereafter in chronological order.

Claim: **Those with PDS program experience make better teachers.** This claim is supported by evidence found in Stallings (1991); Reinhartz and Stetson (1999); Flynn (2001); Ridley, Hurwitz, Hackett, and Miller (2005); and Neapolitan et al. (2008).

Claim: **K-12 students demonstrate higher achievement within PDS programming.** This claim is supported by evidence found in Knight, Wiseman, and Cooner (2000); Marchant (2002); Fisher, Frey, and Farnan (2004); Klingner, Leftwich, van Garderen, and Hernandez (2004); Castle, Arends, and Rockwood (2008); and Heafner and Spooner (2008).

Claim: **PDS experiences encourage improved quality of college/university courses.** This claim is supported by evidence found in Higgins (2002); Mitchel and Hindin (2008); Armstrong, Rudolph, and Austin (2011); and Damore, Kapustka, and McDevitt (2011).

Future Research

Two broad conclusions can be drawn with regard to the landscape of professional development school (PDS) research as a result of this synthesis effort. The first of these is that there is a large body of PDS research available to us all. The second and more important conclusion is that, despite this large body of research, making a new and significant contribution to the body of empirical PDS research would not be a difficult task. PDS programming is a complex undertaking. Each of the studies described herein provides another piece of clarity in any effort to understand this complexity, but also raises new questions. Although we are largely echoing the pleas of previous PDS researchers, here are some recommendations in the direction and nature of future PDS study.

Not unexpectedly, we join others in a call for further quantitative research of PDS programs. Such research can not only support objective claims, but can also be used as a basis for meta-analyses. The results of these studies would be limited in their ability to communicate the rich complexities of PDS programming, but they are a necessary component in the answer to any question about the need for the effort and expense that often accompany PDS designs.

Researchers may also wish to consider isolating PDS-specific design features. For example, a study of a PDS-intervention that is a part of a teaching methods course may be more revealing than a study of a PDS-intervention that is applied to student teaching fieldwork simply because the PDS methods course is a greater departure from traditional practice.

Because evidence is already building under the claims we have identified, we recommend that researchers consider adapting future efforts to include some attention to enlightening these outcomes. This recommendation need not usurp the illumination of new outcomes, and should be taken to include the set of three important emerging outcomes listed in the previous section.

Finally, we recommend that researchers consider ways in which their designs can be adapted to allow for greater external validity. As with many education interventions, PDS research is plagued with confounding issues that limit the reliability of its conclusions (this observation is evidenced in the lack of High quantitative EESR studies found to inform the claims made here). Self-selection to PDS cohorts, for example, may be an unavoidable programmatic characteristic. But this does not mean that those who opt out of these programs are the best choice in terms of subjects for outcome comparison. Choosing a more similar comparison group (e.g., the students at a neighboring institution who would opt for a PDS program if one were offered) would not

only increase the confidence of results at a local level, but would also better serve the field as a new source of evidence.

Living Synthesis

The disadvantage of producing a synthesis report like this one is that the body of research upon which it is based is in gradual flux. Although we do not know at what pace new evidence will emerge, we do expect that it will continue to emerge. It is for this reason that our original approach in attempting to answer our research question was to produce nothing more than a PDS research clearinghouse characterized by regular updates as studies became available.

In support of the need for an ongoing clearinghouse for PDS research, the National Association for Professional Development Schools (NAPDS) has agreed to provide updated versions of our claims and the spreadsheet of study characteristics. For the foreseeable future, these documents will be available on the association website (napds.org) with updates appearing each winter to include the previous year's publications and other sources of evidence.

In time, this document, like the syntheses before it, will be a part of the historical record of PDS research. For now, it is our hope that it will fill the need of those who are making decisions with regard to PDS programming, and that it will serve as both a guide for those conducting PDS research and a point of departure for future efforts to synthesize results.

The authors wish to thank Natalie Bohlmann and Eileen Wright for their assistance with essential research design and document retrieval. Correspondence concerning this synthesis should be directed to the primary author at davesnowmt@gmail.com.

References

- Abdal-Haqq, I. (1998). *Professional development schools: Weighing the evidence*. Thousand Oaks, CA: Corwin Press.
- Armstrong, N., Rudolph, A., & Austin, K. (2011). A programmatic review of a professional development relationship: 14 years later. In *Investigating University-School Partnerships* (pp. 63-74). Greenwich, CT: Information Age Publishing.
- Barley, Z., Lauer, P., Arens, S., Apthorp, H., Englert, K., Snow, D., & Akiba, M. (2002). *Helping at-risk students meet standards: A synthesis of evidence-based classroom practices*. Aurora, CO: Mid-continent Research for Education and Learning.
- Bennett, M. (2011). A high school PDS becomes a whole school experience. In *Investigating University-School Partnerships* (pp. 309-320). Greenwich, CT: Information Age Publishing.
- Blocker, L. S., & Mantle-Bromley, C. (1997). PDS verses campus preparation: Through the eyes of the students. *The Teacher Educator*, 33(2), 70-89.
- Breault, R., & Breault, D. A. (2012). *Professional development schools: Researching lessons from the field*. Lanham, MD: Rowman & Littlefield Publishers.
- Brindley, R., Daniel, P., Rosselli, H., Campbell, C., & Vizcain, D. (2008). Eleven years and counting: The lasting impact of PDS experience on teaching careers. In *University and School Connections* (pp. 393-409). Charlotte, NC: Information Age Publishing.

- Bullough Jr., R. V., Kauchak, D., Crow, N. A., Hobbs, S., & Stokes, D. (1997). Professional development schools: Catalysts for teacher and school change. *Teaching and Teacher Education, 13*(2), 153-169.
- Bullough Jr., R. V., Young, J., Erickson, L., Birrell, J. R., Clark, D. C., Egan, M. W., Berrie, C. F., Hales, V., & Smith, G. (2002). Rethinking field experience: Partnership teaching versus single- placement teaching. *Journal of Teacher Education, 53*(1), 68-80.
- Carpenter, B. D., & Sherretz, C. E. (2012). Professional development school partnerships: An instrument for teacher leadership. *School-University Partnerships, 5*(1), 89-101.
- Castle, S., Arends, R. I., & Rockwood, K. D. (2008). Student learning in a professional development school and a control school. *The Professional Educator, 32*(1), 1-15.
- Castle, S., Fox, R. K., & Fuhrman, C. (2009). Does professional development school preparation make a difference? A comparison of three teacher candidate studies. *School-University Partnerships, 3*(2), 58-68.
- Castle, S., Fox, R. K., & Souder, K. O. H. (2006). Do professional development schools (PDSs) make a difference? A comparative study of PDS and non-PDS teacher candidates. *Journal of teacher education, 57*(1), 65-80.
- Castle, S., Rockwood, K. D., & Tortora, M. (2008). Tracking professional development and student learning in a professional development school partnership. *School-University Partnerships: The Journal of the National Association for Professional Development Schools, 2*(1), 47-60.
- Catelli, L. A. (1995). Action research and collaborative inquiry in a school-university partnership. *Action in Teacher Education, 16*(4), 25-38.
- Cobb, J. (2000). The impact of a professional development school on preservice teacher preparation, inservice teachers' professionalism, and children's achievement: Perceptions of inservice teachers. *Action in Teacher Education, 22*(3), 64-76.
- Cobb, J. B. (2001). Graduates of professional development school programs: Perceptions of the teacher as change agent. *Teacher Education Quarterly, 89-107*.
- Conaway, B. J., & Mitchell, M. W. (2004). A comparison of the experiences of yearlong interns in a professional development school and one-semester student teachers in a non-PDS location. *Action in Teacher Education, 26*(3), 21-28.
- Cosenza, M. N. (2013). Teacher leadership development in PDSs: Perceptions of 22 veteran teachers. *School-University Partnerships, 6*(1), 47-58.
- Cuddapah, J. L., Masci, F. J., Smallwood, J. E., & Holland, J. (2008). A professional development school-sponsored summer program for at-risk secondary students. *NASSP Bulletin, 92*(4), 261-275.
- Czaja, M., Prouty, J. L., & Lowe, J. (1998). Mentoring and the context for teacher leadership: A study of twenty-four professional development schools. *International Journal: Continuous Improvement Monitor, 1*(3).
- Damore, S. J., Kapustka, K. M., & McDevitt, P. (2011). The urban professional development school network: Assessing the partnership's impact on initial teacher education. *The Teacher Educator, 46*(3), 182-207.
- Dangel, J. R., & Hooper, S. (2010). Researching pedagogy in a professional development school. *School-University Partnerships, 4*(1), 88-100.
- Duffield, S. (2005). Swimming in the water: Immersing teacher candidates in the environment of a school. *Current Issues in Education, 8*(11), 1-16.

- Duffield, S. (2006). Safety net or free fall: The impact of cooperating teachers. *Teacher Development, 10*(2), 167-178.
- Duquette, C., & Cook, S. A. (1999). Professional development schools: Preservice candidates' learning and sources of knowledge. *Alberta journal of educational research, 45*(2).
- Edens, K., Shirley, J., & Toner, T. (2001). Sustaining a professional development school partnership: Hearing the voices, heeding the voices. *Action in Teacher Education, 23*(3), 27-32.
- Fisher, D., Frey, N., & Farnan, N. (2004). Student teachers matter: The impact of student teachers on elementary-aged children in a professional development school. *Teacher Education Quarterly, 31*(2), 43-56.
- Flynn, R. (2001). So what type of teachers are they? – Graduates of a PDS teacher preparation program 3-6 years later. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Foster, E. S., Loving, C. C., & Shumate, A. (2000). Effective Principals, Effective Professional Development Schools. *Teaching and change, 8*(1), 76-97.
- Frampton, P., Vaughn, V. L., & Didelot, M. J. (2003). The professional development school partnership: Is practice improving? Teachers and principals respond. *Journal of Educational Administration, 41*(3), 292-309.
- Gajda, R., & Cravedi, L. (2006). Assimilating “real” teachers in teacher education: Benefits and limitations of a professional development school course delivery model. *Action in Teacher Education, 28*(3), 42-52.
- Galassi, J. P., White, K. P., Vesilind, E. M., & Bryan, M. E. (2001). Perceptions of research from a second-year, multisite professional development schools partnership. *The Journal of Educational Research, 95*(2), 75-83.
- Gimbert, B., & Nolan Jr., J. F. (2003). The influence of the professional development school context on supervisory practice: A university supervisor's and interns' Pperspectives. *Journal of Curriculum and Supervision, 18*(4), 353-79.
- Heafner, T. L., & Spooner, M., (2008). Promoting learning in a professional development school: Helping students “get over the mountain.” In Guadarrama, I. N., Ramsey, J. M., & Nath, J. L. (Eds.), *University & School Connections: Research studies in professional development schools* (pp. 117-150). Charlotte, NC: Information Age Publishing.
- Higgins, K. M. (2002). Learning from each other in a professional development school collaboration. In Guadarrama, I., Ramsey, J., & Nath, J. (Eds.), *Forging alliances in community and thought* (pp. 285-306). Greenwich, CT: Information Age Publishing.
- Hopkins, W. S., Hoffman, S. Q., & Moss, V. D. (1997). Professional development schools and preservice teacher stress. *Action in Teacher Education, 18*(4), 36-46.
- Jorissen, K. T. (2002). Retaining alternate route teachers: The power of professional integration in teacher preparation and induction. *The High School Journal, 86*(1), 45-56.
- Klingner, J. K., Leftwich, S., van Garderen, D., & Hernandez, C. (2004). Closing the gap: Enhancing student outcomes in an urban professional development school. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 27*(3), 292-306.
- Knight, S. L., Wiseman, D. L., & Cooner, D. (2000). Using collaborative teacher research to determine the impact of professional development school activities on elementary students' math and writing outcomes. *Journal of Teacher Education, 51*(1), 26-38.

- Kroll, L., Bowyer, J., Rutherford, M., & Hauben, M. (1997). The effect of a school-university partnership on the student teaching experience. *Teacher Education Quarterly*, 24(1), 37-52.
- Latham, N. I., & Vogt, W. P. (2007). Do professional development schools reduce teacher attrition? Evidence from a longitudinal study of 1,000 graduates. *Journal of Teacher Education*, 58(2), 153-167.
- Latham, N., & Wedwick, L. (2009). Teacher candidates' attitudes that influence preparation choice: Traditional versus professional development school options. *School-University Partnerships*, 3(1), 90-99.
- Levin, B. B., & Rock, T. C. (2003). The effects of collaborative action research on preservice and experienced teacher partners in professional development schools. *Journal of Teacher Education*, 54(2), 135-149.
- Long, J. C., & Morrow, J. (1995). Research analysis of professional development school graduates and traditional Phase I and Phase II graduates. Paper presented at the annual meeting of the Association of Teacher Educators, Detroit, MI.
- Marchant, G. J. (2002). Professional development schools and indicators of student achievement. *The Teacher Educator*, 38(2), 112-125.
- McKinney, S. E., Haberman, M., Stafford-Johnson, D., & Robinson, J. (2008). Developing teachers for high-poverty schools. *Urban Education*, 43(1), 68-82.
- Mebane, D. J., & Galassi, J. P. (2000). Responses of first-year participants in a middle school professional development schools partnership. *The Journal of Educational Research*, 93(5), 287-293.
- Mebane, D. J., & Galassi, J. P. (2003). Variables affecting collaborative research and learning in a professional development school partnership. *The Journal of Educational Research*, 96(5), 259-268.
- Mitchel, L. Z., & Hindin, A. (2008). Linking theory and practice: Teaching methods classes in professional development schools. In Guadarrama, I. N., Ramsey, J. M., & Nath, J. L. (Eds.), *University and school connections: Research studies in professional development schools*, 3-25. Greenwich, CT: Information Age Publishing.
- Mule, L. (2006). Preservice teachers' inquiry in a professional development school context: Implications for the practicum. *Teaching and teacher education*, 22(2), 205-218.
- Neapolitan, J., Hartzler-Miller, C., Kenreich, T., Wiltz, N., Schafer, K., Proffitt, T., Kirmani, M., & Bolton, J., (2008). Keeping good teachers: Connections to professional development school preparation. *School-University Partnerships*, 2(1), 61-72.
- Paese, P. C. (2003). Impact of professional development schools pre-service through induction. *Action in Teacher Education*, 25(1), 83-88.
- Pohan, C. A., Ward, M., Kouzekanani, K., & Boatright, C. (2009). The impact of fieldplacement sites on preservice teachers' beliefs about teaching diverse students. *School-University Partnerships*, 3(1), 43-52.
- Polizzi, J. A. (2009). Best practices for transformational teacher education: The full-immersion professional development schools alternative. *School-University Partnerships: The Journal of the National Association for Professional Development Schools*, 3(2), 98-111.
- Reinhartz, J., & Stetson, R. (1999). Teachers as leaders: A question or an expectation. In Byrd, D. M. & McIntyre, D. J. (Eds.), *Research on professional development schools: Teacher education yearbook VII*. (pp. 157-172). Thousand Oaks, CA: Corwin Press.

- Reynolds, A., Ross, S. M., & Rakow, J. H. (2002). Teacher retention, teaching effectiveness, and professional preparation: A comparison of professional development school and non-professional development school graduates. *Teaching and Teacher Education, 18*(3), 289-303.
- Reynolds, A., & Wang, L. (2005). Teacher retention: What role does professional development school preparation play? *The New Educator, 1*(3), 205-229.
- Rice, E., Ihrig, K., Merves, E., & Brown, M., (2011). Preservice special educators: Graduate census results support PDS preparation. In Nath, J., Guadarrama, I., & Ramsey, J. (Eds.), *Investigating University-School Partnerships, 75-94*. Greenwich, CT: Information Age Publishing.
- Ridley, D. S., Hackett, M. R., Landeira, K., & Tate, P., (2005). Are new teachers prepared in a PDS-based certification program really better? In Guadarrama, I. N., Ramsey, J. M., & Nath, J. L. (Eds.), *Professional Development Schools: Advances in Community Thought & Research* (pp. 47-63). Greenwich, CT: Information Age Publishing.
- Ridley, D. S., Hurwitz, S., Hackett, M. R. D., & Miller, K. K. (2005). Comparing PDS and campus-based preservice teacher preparation: Is PDS-based preparation really better? *Journal of teacher education, 56*(1), 46-56.
- Rieckhoff, B. S., & Larsen, C. (2012). The impact of a professional development network on leadership development and school improvement goals. *School-University Partnerships, 5*(1), 57-73.
- Sandholtz, J. H., & Dadlez, S. H. (2000). Professional development school trade-offs in teacher preparation and renewal. *Teacher Education Quarterly, 27*(1), 7-27.
- Sandholtz, J. H., & Wasserman, K. (2001). Student and cooperating teachers: Contrasting experiences in teacher preparation programs. *Action in Teacher Education, 23*(3), 54-65.
- Scheetz, J., Waters, F. H., Smeaton, P., & Lare, D. (2005). Mentoring in a PDS Program: What's in it for me? *Kappa Delta Pi Record, 42*(1), 33-37.
- Shroyer, G., Yahnke, S., Bennett, A., & Dunn, C. (2007). Simultaneous renewal through professional development school partnerships. *The Journal of Educational Research, 100*(4), 211-225.
- Snow-Gerono, J. L. (2005). Professional development in a culture of inquiry: PDS teachers identify the benefits of professional learning communities. *Teaching and teacher education, 21*(3), 241-256.
- Stairs, A.J. (2011). Preservice teacher learning in a professional development school: Recognizing and accepting the complexity of urban teaching. In Nath, J. L., Guadarrama, I. N., & Ramsy, J. (Eds.), *Investigating University-School Partnerships* (pp. 95-118). Greenwich, CT: Information Age Publishing.
- Stallings, J. A. (1991). Connecting preservice teacher education and inservice professional development: A professional development school. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Stallings, J. & Kowalski, T., (2011). Research of professional development schools. In Neapolitan, J. E. (Ed.), *Taking stock of professional development schools: What's needed now*, Vol. 110, Part 2. (pp. 251-263). New York: Teachers College Press.
- Stanulis, R. N. (1995). Classroom teachers as mentors: Possibilities for participation in a professional development school context. *Teaching and Teacher Education, 11*(4), 331-344.

- Stroble, B., & Luka, H. (1999). It's my life, now: The impact of professional development school partnerships on university and school administrators. *Peabody Journal of Education*, 74(3&4), 123-135.
- Teitel, L. (1997). Changing teacher education through professional development school partnerships: A five-year follow-up study. *The Teachers College Record*, 99(2), 311-334.
- Theiss, D., & Grigsby, C. (2010). Measuring the Achievement of Professional Development Schools. *School-University Partnerships*, 4(1), 29-46.
- Tilford, K. (2010). A phenomenological study of professional development schools: How principals make sense of their role. *School-University Partnerships*, 4(2), 60-73.
- Vare, J. W., & Young, E. A. (2007). Perceptions of the quality of mentor teachers' supervision in professional development school and nonprofessional development school settings. *School- University Partnerships*, 1(2), 9-18.
- Voltz, D. L. (2001). Preparing general education teachers for inclusive settings: The role of special education teachers in the professional development school context. *Learning Disability Quarterly*, 24(4), 288-296.
- vonEschenbach, J. F., & Gile, W. B. (2007). Dispositions for teacher education candidates as perceived by public school and university faculty in professional development school programs. *School-University Partnerships*, 1(1), 72-79.
- Wait, D. B., & Warren, L. L. (2001). Are professional development school trained teachers better classroom managers? ERIC research report: ED541156.
- Walling, B., & Lewis, M., (2012). Development of professional identity among professional development school pre-service teachers: Longitudinal and comparative analysis. *Action in Teacher Research*, 22(2A), 65-72.
- Walmsley, A. L. E., Bufkin, L. J., Rule, A. M., & Lewis, M. (2007). How preservice teachers learn to teach children first: An analysis of preservice teacher learning in an urban school- university professional development school partnership. *School-University Partnerships: The Journal of the National Association for Professional Development Schools*, 1(2), 19-29.
- Willhite, G., McIntyre, J., & Willhite, K.T., (2008). A comparison of experiences of year-long teaching interns and traditional student teachers in a professional development school setting. In Guadarrama, I. N., Ramsey, J. M., & Nath, J. L. (Eds.), *University & School Connections: Research studies in professional development schools* (pp. 319-330). Charlotte, NC: Information Age Publishing.
- Yendol-Silva, D., & Dana, N. F. (2004). Encountering new spaces: Teachers developing voice within a professional development school. *Journal of Teacher Education*, 55(2), 128-140.
- Yerian, S., & Grossman, P. L. (1997). Preservice teachers' perceptions of their middle level teacher education experience: A comparison of a traditional and a PDS model. *Teacher Education Quarterly*, 24(4), 85-102.
- Yssel, N., Koch, K., & Merbler, J. B. (2002). Professional development schools and special education: A promising partnership? *The Teacher Educator*, 38(2), 141-150.

Pathways to Partnership: A Developmental Framework for Building PDS Relationships

Audra K. Parker
George Mason University

Seth A. Parsons
George Mason University

Lois A. Groth
George Mason University

Elizabeth Levine Brown
George Mason University

Abstract: In the past five years, there has been unprecedented, but much needed, attention given to the role of clinical practice in teacher preparation. The calls for earlier and more robust fieldwork alongside increasingly intentional and mutually beneficial partnerships with P-12 sites are long overdue. Yet these trends are situated within challenging financial and political times for universities and their P-12 partners. Our purpose in this article is to share one approach to balancing the desire to “turn teacher preparation upside down” (NCATE, 2010, p. ii) while also being attentive to the needs of our school partners in our Professional Development Schools (PDS) network. We constructed the developmental framework presented in this article using the key tenets of a PDS while also acknowledging the need for differentiation and flexibility in our work. Through these pathways to partnership, we broaden our notions of what constitutes a PDS by recognizing that stakeholders’ participation is necessarily varied within the broader constructs of the Nine Essentials.

KEYWORDS: PDS Network, elementary teacher preparation

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
4. A shared commitment to innovative and reflective practice by all participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and

9. Dedicated and shared resources and formal rewards and recognition structure.

Introduction

The core experience in teacher preparation is clinical practice.

- Report of the Blue Ribbon Panel, NCATE, 2010, p. 5

The field of teacher education is currently focused on increasing and improving clinical aspects of teacher preparation (American Association of Colleges for Teacher Education, AACTE, 2010; Darling-Hammond, 2014; National Council for Accreditation of Teacher Education, NCATE, 2010; Zeichner, 2012). For example, the National Research Council (2010) presented clinical practice as one of three aspects of teacher education that have the highest potential to positively impact student outcomes. Similarly, *Teachers for a New Era*, a Carnegie Corporation of New York (2001) funded program focused on innovation in teacher preparation, listed clinical practice as one of its three essentials:

Education should be understood as an academically taught “clinical practice profession,” requiring close cooperation between colleges of education and actual practicing schools; master teachers as clinical faculty in the college of education; and residencies for beginning teachers during a two-year period of induction. (p. 12)

Zeichner (2010) explains that effective teacher preparation takes place in “hybrid spaces” where academic and practitioner knowledge is merged and equally valued (p. 89). In short, “we know from research that good clinical experience is associated with effective teaching” (AACTE, 2010, p. 4.).

But what is “good clinical experience”? Researchers have demonstrated benefits of extended clinical experiences that are (a) closely aligned with coursework, (b) under the auspices of an expert mentor teachers, and (c) carefully supervised by high quality university supervisors (AACTE, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2006a, 2006b). Unfortunately, teacher candidates’ clinical experiences, especially their early field experiences, have traditionally been unintentionally designed and poorly supervised (Darling-Hammond, 2009; Feiman-Nemser & Buchmann, 1985; Valencia, Martin, Place, & Grossman, 2009; Zeichner, 2010). Clinical experiences have (a) been detached from program objectives and coursework, (b) generally involved matches with any volunteer teacher, and (c) been supervised by educators who do not have expertise in teacher preparation (e.g., graduate students or retired teachers) (Clift & Brady, 2005; Darling-Hammond, 2009; Zeichner, 2010, 2012). In summary, “while new and experienced teachers repeatedly cite classroom-based experiences and student teaching as the most highly valued elements of their preparation, clinical practice remains the most ad hoc part of teacher preparation in many programs” (NCATE, 2010, p. 4).

As a result of these issues, education researchers and professional association standards are calling for earlier, more frequent, and more closely supervised clinical experiences in sites that represent strong school-university partnerships (Council for the Accreditation of Educator Preparation, CAEP, 2015; National Association of Professional Development Schools, NAPDS, 2008). For example, AACTE (2010) suggested that, “teacher candidates participate in school-embedded clinical work throughout their entire program” (p. 6). Similarly, CAEP emphasized the importance of clinical practice with Standard 2, Clinical Partnerships and Practice,

encompassing three strands: (1) Partnerships for Clinical Practice, (2) Clinical Educators, and (3) Clinical Experiences.

The Professional Development School (PDS) philosophy aligns closely to the recommendations presented above regarding high-quality clinical preparation. The PDS philosophy was first articulated by the Holmes Group (1990), a group of education school deans from across the United States devoted to enhancing the effectiveness of teacher preparation (Holmes Group, 1986). The PDS philosophy is committed to four purposes: enhancing (a) K-12 student learning, (b) teacher candidate learning, (c) practicing teacher professional learning, and (d) collaborative school-university inquiry (Holmes Group, 1990; Neapolitan, 2011). There are more than 1,000 PDSs in the United States (AACTE, 2010), and core to the PDS movement are clinical partnerships and practice. NAPDS, which was formed in 2005, is an organization committed to optimizing the four purposes of the PDS philosophy (www.napds.org). In 2008, the NAPDS presented the *Nine Essentials of a PDS* (see Table 1).

Table 1

The NAPDS “Nine Essentials”

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
9. Dedicated and shared resources and formal rewards and recognition structures.

This article shares our program’s approach to answering the question, “What is a PDS?” and to addressing the NAPDS Nine Essentials. Our efforts are guided by a need to balance necessary calls for earlier and more rigorous fieldwork in teacher preparation while also being attentive to the needs of our school partners—all in the context of challenging financial times. The developmental framework for building PDS relationships that we present in this article enhances the engagement of all stakeholders and recognizes the need for differentiation and flexibility in PDS partnerships. Through these pathways to partnership, we purposefully broaden notions of what constitutes a PDS by recognizing that stakeholders’ participation is necessarily varied within the vision of the Nine Essentials.

University Program and Contextual Challenges

George Mason University's Elementary Education program has been engaged in PDS work since 1991. Rooted in the research on effective teacher preparation and the tenets of PDSs (Darling-Hammond & Bransford, 2005; NAPDS, 2008; NCATE, 2001), our Elementary Education program collaborates with school partners to address four shared goals that are central to the PDS philosophy: PK-6 student learning, pre-service teacher education, the professional development of practicing teachers, and collaborative inquiry (Holmes Group, 1990). During its 24-year history, the program has undergone four major revisions, each driven by feedback from all stakeholders via our PDS Advisory group (see Parsons et al., in press for a comprehensive description of our program's development).

Nonetheless, several fundamental characteristics exist across program iterations: a rigorous admissions process conducted with teams of faculty and classroom teachers, coursework designed to facilitate theory to practice transfer, field experiences in our PDS sites, internships guided by trained clinical faculty, and university faculty serving in roles to facilitate the PDS relationship. Finally, teacher candidates progress through our program in a cohort model through one of two program options. Each option includes a structured course sequence with field hours requirements. Option 1 culminates in a yearlong internship, and Option 2 culminates in a semester-long internship experience. The yearlong internship experience follows the K-6 school calendar in our partner districts and is split into two placements: one primary and one intermediate. Yearlong teacher candidates receive a small monthly stipend in exchange for their availability to substitute at their school site for a limited number of days across the school year. The semester-long internship is one 16-week placement in a single grade level in the spring semester.

In this elementary PDS program's latest review cycle, the confluence of several contextual challenges drove program revisions—many of which will likely resonate with teacher preparation programs around the country. First, program faculty expressed concern that on paper our 17 elementary school partners' engagement with our PDS work appeared to be comparable across sites. However, in reality there were vast differences in their level of and interest in collaborative engagement in the shared PDS mission. In some cases, our PDS partners had changes in administration and staff turnover that negatively impacted their capacity to fully engage in PDS work. Others partners had great interest in working with interns, but limited interest in participating in shared action research.

We also faced financial constraints at the university level, particularly with regard to changes in payment for internship supervision and decreasing resources to support university faculty for their work in PDS sites. These limited resources, coupled with essentially no university-based financial support for running and managing the PDS network, resulted in the need to be more systematic in terms of the minimum number of interns assigned to a PDS site and to university facilitators. Finally, and in response to CAEP Standard 2, we needed to improve the quality of early field experiences. Needed improvements included ensuring diverse and rigorous experiences, and subsequently increasing the level of support from the university and the classroom teachers working with early field candidates.

As we engaged with stakeholders regarding each of these issues, a few “non-negotiables” emerged. First and foremost, principals wanted their school sites to be seen as “PDS” sites. They did not all necessarily have the resources, interest, or willingness to engage with all of the Nine Essentials (NAPDS, 2008), but they wanted to be engaged in “PDS” work and to be called a “PDS site.” Second, our PDS partners overwhelmingly preferred interns who were in the ‘yearlong’ internship model, in comparison with those in the more traditional semester-long model, and asked that we focus our efforts on growing the number of students in that particular program track.

Third, the existing structure mingled final interns, those teacher candidates in their final yearlong or semester-long internship, with field hours students, those teacher candidates in their early field work prior to internship, at the same school site. Our partners shared that this approach confused teachers, administrators, and university facilitators—and stretched schools’ capacities for hosting our students with high-quality placements. As a result, most field hours students felt like second-class citizens and were often not placed with the most effective teachers. At the university, faculty questioned how to balance limited resources with our commitment to rich, sustained partnerships and the Nine Essentials (NAPDS, 2008). In other words, we were faced with the question: How could we use our resources wisely to push school sites that were ready and willing to engage fully with the Nine Essentials while still honoring the varying needs, capacities, and interests of all partners? Further, to move forward we needed to find a way to balance both the contextual challenges and the non-negotiables raised by school partners.

The review cycle coincided with our planned “open application” process for the George Mason University Elementary Education PDS network. Typically, every four to five years, schools engaged in PDS work are asked to review and renew their commitment to the George Mason Elementary PDS program. In addition, schools interested in collaboration are afforded an opportunity to apply for inclusion in the PDS network. During the most recent open application iteration, we intentionally sought to expand the network by adding schools with more diverse populations to our partnership work. The application process included evidence of faculty buy-in from each elementary site, as well as responses to questions related to teacher preparation, research goals, professional development needs, and demographic information (see Appendix).

A Differentiated Approach to PDS

In the sections that follow, we explain our approach to addressing the macro- and micro-level contextual issues previously described. At the core of our work was an expansion of our definition of what constitutes a PDS. With this lens, we purposefully crafted multiple pathways to varying levels of engagement between PK-6 schools and the Mason Elementary PDS program. We begin with a description of these differentiated routes to PDS participation. We then highlight strengths, challenges, and implications of multiple pathways to partnership for PDS-embedded teacher education.

In order to bring us closer to enacting each of the Nine Essentials with a large number of PK-6 school partners—purposefully grown from 17-30 in this open application period—but with very limited faculty resources, we differentiated opportunities for partnership involvement. At the heart of our PDS network is a common commitment to PK-6 student learning, teacher professional development, and preservice teacher preparation, but with varying degrees of

participation—especially in the fourth dimension of the PDS philosophy: collaborative inquiry. Therefore, within our PDS network, we created different “Pathways to Partnership,” allowing stakeholders to select the pathway that is the best fit for their individual school context at a particular point in time:

- 1) Partner sites
- 2) Clinical Practice sites
- 3) Collaborative Inquiry sites

The three pathways allow for flexibility and movement within the PDS network, thus differentiating for unanticipated changes at PK-6 sites that may necessitate a shift in the degree of engagement without having to drop from the partnership work altogether.

Before discussing the distinctions among the three Pathways to Partnership in the George Mason University Elementary Education PDS network, it is important to note the commonalities that exist across the structures. First, all schools in the PDS network have a designated school-based point of contact who serves as the liaison between the school and the university. These *site facilitators* are instrumental in organizing placements, hosting orientations to the school site, problem-solving the inevitable “speed bumps” that emerge in partnership work, and attending informational meetings with university facilitators and university faculty across the academic year. All schools in the PDS network also have access to the *clinical faculty course*. This three-credit graduate level course prepares teachers for working with pre-service teachers and for collaborating with the George Mason University Elementary Education program. We strongly encourage all teachers hosting interns to complete the clinical faculty course. Finally, to varying extents, each site has some relationship with a *university facilitator*. These university-based liaisons are points of contact based at the university, but are explicitly connected to one school site, where they spend one day a week for partnership work.

The hallmark of the differentiated Pathways to Partnership can be seen in the distinctions among them. *Partner sites* host George Mason University Elementary Education teacher candidates in their early fieldwork. Each course in the program requires a minimum of 15 hours of field work. Given our program structure, in most cases this equates to 30 hours of early field work each semester prior to internship. Typically, early field work is completed in 3-4 hour chunks across 10 weeks of a given semester. Our teacher candidates enter their early field hours with tremendous variation in their prior classroom experiences. As a result, the course requirements associated with each semester’s field hours are scaffolded such that teacher candidates begin with observations and one-on-one tutoring, and progress to small group work and whole group lesson instruction.

Having a dedicated site facilitator at partner sites creates the infrastructure necessary to support significantly more purposeful and rigorous field hours experiences for teacher candidates in sites that were relatively new to our work. The field hours students are the primary focus of the school site, and as such, they are afforded more opportunities, engaged more fully with the school staff, and are expected, when ready, to do more than observations. In addition, with one university facilitator overseeing the partner sites and serving as the communication point of contact for site facilitators at all of the partner sites, we create clear channels for communication and feedback. Each of these facets of partner sites lays the foundation for the program enhancements highlighted above.

Our intention with this Pathway to Partnership is to provide new school sites an opportunity to test out the “PDS waters.” Teachers in partner sites have access to university faculty for staff development needs and to the clinical faculty training course. This provides sites with an opportunity to build capacity via the clinical faculty course and determine if collaboration in teacher education is a good fit (i.e., something they can commit to more fully). The partner site route also provides an engagement option for schools that have experienced changes in administration, teacher turnover, capacity to support interns, and/or need a break from the rigors of more intensive partnership.

A second Pathway to Partnership in our PDS network is as a *clinical practice school*. The key element for clinical practice schools is the agreement to host five or more elementary pre-service teachers during their final internship each year. Clinical practice sites rotate from year to year in hosting semester-long candidates and yearlong candidates. This rotation addresses administrators’ concerns by equitably spreading our yearlong teacher candidates and the associated resources across our internship sites. This means that clinical practice sites must have a cadre of teachers across a variety of grade levels, all of whom have completed the clinical faculty training course. A site facilitator serves as a key point of contact for clinical practice schools and supports the teacher candidates and clinical faculty throughout the internship experience.

Clinical practice sites work collaboratively with a site-based university facilitator—typically an adjunct faculty member engaged in internship supervision and support for partnership communication. These university facilitators spend one full day at the school site every other week. In between visits, teacher candidates provide the university facilitator with a short video clip of their teaching. Using Edthena (www.edthena.com), a video coding program adopted to support teacher candidates’ professional development, the teacher candidate and university facilitator are able to dialogue about the teaching sample during the week between site visits. This process provides continuity of feedback and encourages forward progress for the teacher candidate. In addition, this model allows us to reduce the site visit responsibilities of the university facilitator—a necessity given a mandated reduction in pay for internship supervision for our program so as to align it more with average rates for traditional supervision across the college.

The third Pathway to Partnership is the *collaborative inquiry site* pathway. Collaborative inquiry schools host five or more elementary pre-service teachers during their yearlong internship experiences. Both clinical practice and collaborative inquiry sites host interns, and as such, have a critical mass of teachers trained as clinical faculty. The key distinction between the two is (a) the presence of a full-time faculty member as the university facilitator at collaborative inquiry sites and (b) collaborative inquiry sites host yearlong interns exclusively.

Collaborative inquiry sites also work collaboratively with one university faculty member who serves in the university facilitator role for internship supervision and who is engaged in service work to support organic, inquiry-based research and grant projects emerging from the collaborative work. University facilitators spend one full day each week at their collaborative inquiry site. This ongoing presence across the school year is vital in creating the relationships necessary to engage in shared professional development and research opportunities. University facilitators at collaborative inquiry sites often attend faculty meetings and leadership team

meetings, engage regularly with school administration, lead professional development at the school site, and become a fixture of the school community.

Because participation requires a commitment to ongoing, shared research, and because of the weekly presence of a faculty member, collaborative inquiry sites are often incubators and trial spots for new program ideas and innovations. For example, the university facilitator and principal at one site decided to explore a true ‘yearlong’ internship model where teacher candidates were placed in one classroom for the length of the entire school year. This shared research experience provided an opportunity to explore some of the strengths and weaknesses of the model on a small scale, and implications from the work continue to inform programmatic practices. Similarly, another university facilitator at a collaborative inquiry site wanted to embed his literacy methods course more directly within an authentic teaching environment. His PDS site hosted the course in the school’s library. Throughout the semester, the preservice teachers in the course observed the literacy instruction in each of the grades K-6 in groups of seven or eight. The observed teachers, two each week, then came to the class, which took place immediately following the school day, to collaboratively reflect on their instruction and answer preservice teachers’ questions. The very nature of a collaborative inquiry site creates small spaces in the PDS network for faculty and P-12 educators to pursue innovative practice.

Lessons Learned

After a one-year cycle of using a differentiated, developmental approach to building and supporting a PDS network, a number of strengths and weaknesses emerged. Many of our initial concerns with the structure did not come to fruition. For example, we worried about how to manage a situation in which all schools wanted to be collaborative inquiry schools—something we would not be able to support because of our limited faculty resources. When we introduced the three pathways to our school partners, designed in collaboration with them, administrators were asked to rank order their preferred Pathway to Partnership. Almost all schools were able to engage in their first choice pathway. We also worried that we would need to have some tough conversations at the end of year one because we would need to shift some schools from pathways based on a decline in the number of candidates and loss of a university facilitator. In reality, though, our school partners also needed to shift roles due to changes in administration, fatigue, or loss of clinical faculty. Conversely, some schools embraced the PDS work with such gusto that they wanted to move quickly from hosting field hours students to interns. These transitions were possible because of the flexibility of the Pathways to Partnership options.

Similarly, we worried that all schools would want to host interns, and more specifically yearlong interns. Fortunately, we structured the network design in such a way that clinical practice schools would rotate between hosting semester-long and yearlong interns. Looking back, this additional layer of flexibility, built into the pathways from the outset, gave us the space to change the internship type at a PDS site as our numbers shifted. Furthermore, by having a plan in place for shifting school roles and internship types, we removed what some perceived to be a hierarchical, unfair distribution of yearlong and semester-long interns.

Choosing to focus our faculty research and service on collaborative inquiry sites allowed us to move closer to enacting each of the Nine Essentials in four sites rather than spreading ourselves thinly across 30 sites. Additionally, through several specific examples, we realized that

our schools needed and appreciated this flexibility. For example, although two of our school sites were new to PDS work and to our program, with strong leadership and exceptional faculty in place, they were able to quickly transition from working with field hours students to hosting interns, to engaging with faculty in collaborative inquiry sites. Another site that was stretched to host five interns had significant turnover during the school year and asked to move from hosting interns as a clinical practice site to hosting field hours students as a partner school site. As the administrator noted, they needed to regroup and reset. A third site, struggling with state accreditation standards, expressed relief at being able to be a part of the network in a different capacity, even though a district takeover would cause sweeping changes in the leadership and instructional methods.

With these structural elements in place, we are eager to further capitalize on our Pathways to Partnership model. We look forward to designing and implementing more structured tools that enable schools to examine the participation route that best fits their needs. Because we spent the first year building relationships in our collaborative inquiry sites, we now meet as a small team (the four principals and four university facilitators) to discuss how we can develop and refine shared research agendas. We began these conversations with a reading of the article “Generating PDS Possibility and Practicality Thinking Using a Case and Protocol Tool to Enhance PDS Development” (Yendol-Hoppey & Hoppey, 2013). Additionally, in this meeting, each collaborative inquiry school readily committed to collaborate in a U.S. Department of Education, Institute of Education Sciences grant proposal. These activities, while small steps, are integral to the growth of our ongoing collaboration as well as the fulfillment of our commitment to the Nine Essentials. As we continuously reflect on these structures, we realize that engagement in PDS work does not need to be narrowly defined. Rather, our school partners help us define engagement differently, and developmentally, at their sites. When we created a flexible system to acknowledge the ever-changing K-12 context, we also created space for schools to understand the similarly unpredictable world at the university level. Candid, ongoing conversations among all stakeholders regarding capacity, needs, and expectations at multiple intervals through various communications structures served as a conduit for these shared understandings.

Implications

Clinical practice for teacher candidates is, and should be, a hot topic in the field of teacher preparation given the powerful role and great potential it has in supporting teacher candidates’ development (AACTE, 2010; Darling-Hammond, 2014; NCATE, 2010; National Research Council, 2010; Zeichner, 2012). However, critics have found traditional models of clinical practice to be poorly designed, which ultimately limits the full potential of teacher education. In this article, we present an example of an intentional approach to designing clinical experiences—one that moves away from a traditional approach where clinical experiences are “ad hoc” and towards clinically centered teacher preparation with PDS ideals at its core.

Our framework is built upon the belief that relationships must be differentiated for the school partners in our PDS network. This is not to say, however, that we did not adhere to national standards regarding school-university partnerships. Rather, standards play a key role in guiding our work and can be especially facilitative for others moving teacher preparation more

fully into clinical settings. School-university partnerships can use CAEP Standard 2 and the NAPDS Nine Essentials as principles that guide the structure of their clinical experiences and the nature of their school-university partnerships. Accordingly, the clinical practice structure that a school-university partnership designs can still be responsive to their respective contexts under the umbrella of these broad standards. We contend that schools and universities need to be flexible and work toward joint and mutually beneficial goals within their unique contexts in order to build sustainable partnerships.

While standards are a useful ideal for school-university partnerships, we must move away from the mindset that a PDS only exists if it adheres to them fully. Freeing ourselves from the notion that school-university partnerships have to look a certain way (e.g., fully exemplifying all Nine Essentials) is a necessary step in embracing a differentiated approach to PDS partnerships. High quality clinical practice cannot be mandated in a one-size-fits-all manner and does not need to look the same in every context. In fact, it is this mindset that often hinders innovation, halts progress toward real reform, and creates a dichotomous view of PDS—you either are or are not a PDS. Rather, we believe that schools committing to notions of mutually beneficial partnerships, with a desire to move towards fully enacting the Nine Essentials, must exist as a continuum of PDSs.

The model of pathways to partnership presented here is the approach that worked best for the George Mason University Elementary Education PDS Network. We encourage other school-university partnerships to thoughtfully and intentionally consider the clinical experiences they provide their teacher candidates to determine whether the approach is simultaneously driven by principles and responsive to their local context. In doing so, sites are answering the question “What is a PDS?” using their unique circumstances, and the responses are inherently and necessarily varied.

References

- American Association of Colleges for Teacher Education (AACTE). (2010). *The clinical preparation of teachers: A policy brief*. Washington, D.C.: Author.
- Carnegie Corporation of New York. (2001). *Teachers for a new era: A national initiative to improve the quality of teaching*. New York, NY: Author.
- Council for the Accreditation of Educator Preparation (CAEP). (2015). *Standard 2: Clinical partnerships and practice*. Retrieved from <http://caepnet.org/standards/standard-2>
- Clift, R., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith, & K. Zeichner (Eds.), *Studying teacher education: The Report of the American Educational Research Association panel on research and teacher education* (pp. 309-424). New York, NY: Routledge.
- Darling-Hammond, L. (2006a). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2006b). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57, 300-314. doi:10.1177/0022487105285962
- Darling-Hammond, L. (2009, February). *Teacher education and the American future*. Charles W. Hunt Lecture presented at the annual meeting of the American Association of Colleges for Teacher Education, Chicago, IL.

- Darling-Hammond, L. (2014). Strengthening clinical preparation: The holy grail of teacher education. *Peabody Journal of Education*, 89, 547-561. doi:10.1080/0161956X.2014.939009
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., Banks, J., Zumwalt, K., Gomez, L., Sherin, M. G., Griesdorn, J., & Finn, L. E. (2005). Educational goals and purposes: Developing a curricular vision for teaching. In L. Darling-Hammond, & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (169-200). San Francisco, CA: Jossey-Bass.
- Feiman-Nemser, S., & Buchmann, M. (1985). Pitfalls of experience in teacher education. *Teachers College Record*, 87, 49-65.
- Holmes Group. (1986). *Tomorrow's teachers: A report of the Holmes Group*. East Lansing, MI: Author.
- Holmes Group. (1990). *Tomorrow's schools: Principles for the design of professional development schools*. East Lansing, MI: Author.
- National Association of Professional Development Schools (NAPDS). (2008). *What it means to be a professional development school*. Retrieved from <http://napds.org/wp-content/uploads/2014/10/Nine-Essentials.pdf>
- National Council for Accreditation of Teacher Education (NCATE). (2001). *Standards for professional development schools*. Washington D.C.: Author.
- National Council for Accreditation of Teacher Education (NCATE). (2010). *Transforming teacher education through clinical practice: A National strategy to prepare effective teachers. Report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning*. Washington, DC: Author.
- The National Research Council. (2010). *Preparing teachers: Building evidence for sound policy*. Washington, D.C.: Author.
- Neapolitan, J. E. (Ed.). (2011). *Taking stock of professional development schools: What's needed now* (Vol. 110, Part 2). New York, NY: Teachers College Press.
- Parsons, S. A., Groth, L. A., Parker, A. K., Brown, E. L., Sell, C., & Sprague, D. (in press). Elementary teacher preparation at George Mason University: Evolution of our program. In R. Flessner, & D. Lecklider (Eds.), *Case studies of clinical preparation in teacher education*. Lanham, MD: Rowman & Littlefield.
- Valencia, S., Martin, S., Place, N., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, 60, 304-322. doi:10.1177/0022487109336543
- Yendol-Hoppey, D., & Hoppey, D. (2013). Generating PDS possibility and practicality thinking using a case and protocol tool to enhance PDS development. *School-University Partnerships*, 6, 59-75.
- Zeichner, K. (2010). Rethinking the connections between campus course and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61, 89-99. doi:10.1177/0022487109347671
- Zeichner, K. (2012). The turn once again toward practice-based teacher education. *Journal of Teacher Education*, 63, 376-382. doi:10.1177/0022487112445789

Audra Parker, Ph.D. is an Associate Professor and Program Coordinator in the College of Education and Human Development at George Mason University. Her research addresses topics related to elementary teacher preparation. Seth A. Parsons, PhD is an associate professor in the College of Education and Human Development at George Mason University. His research focuses on teachers' instructional adaptations, teacher education and development, and student motivation and engagement. Lois A. Groth, PhD is an associate professor in the College of Education and Human Development at George Mason University. Her teaching and research focuses on elementary literacy practices and teacher action research. Elizabeth Levine Brown, Ph.D. is an Assistant Professor at George Mason University in the College of Education and Human Development. Her research addresses the developmental and psychosocial influences on marginalized students' learning.

Appendix A
Application for Mason Elementary PDS Network

**GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION**

School _____

Address _____

Phone Number _____

Principal's Name _____

Principal's Email Address _____

- Preference (rank order): _____ Partner School
 _____ Clinical Practice School
 _____ Collaborative Inquiry School

1. Complete the School Profile and Student Population documents. Briefly describe the special attributes of your school that you believe will add to the strength of the GMU Elementary Professional Development School (PDS) Network.

2. Describe how faculty commitment to the GMU Elementary PDS Network was obtained (i.e., through survey, staff vote, signatures, etc...). Include documentation.

3. Describe technology available for instruction purposes and faculty commitment to use of technology.

4. Please indicate whether you have building space to hold on-site courses or seminars during and/or after the school day.

5. In the chart below use an X to indicate previous areas of collaboration with GMU and/or other universities. Additionally, use an X to indicate areas of potential interest for collaboration with GMU.

	Previous Areas of Collaboration	Potential Interest in Future Collaboration
Working with interns		
On-site courses		
Working with field hours pre-service teachers		
Grant activity		
Professional development projects		
Collaborative research		
Conference presentations		
Co-teaching university classes		
Co-teaching in elementary classrooms		
Other		

6. What professional development needs do you believe are most pressing in your particular school setting? How do these connect with your school plan or PLC plan?

7. Describe any school wide research activities and/or identify at least one potential research project you would be interested in exploring in your particular school setting.

Principal:

(name)

(signature)

*Applicants will be notified as soon as possible regarding the review of their application.
Further information may be requested, including an on-site visit.*

Is it Possible to Sustain Innovation, Community, and Responsiveness in Teacher Education when a Unique Pilot PDS Becomes a Program-Wide Model?

Linda K. Reece
University of North Georgia

Alli Roberts
University of North Georgia

Keri Smith
Hall County Schools

Abstract: This article chronicles the timeline of a PDS collaboration that originated as a pilot program between a College of Education and a public charter language immersion school and has grown to become the model for Early Childhood Teacher Education at our institution. The trepidation and successes of years one, two, and three are explored along with benefits and challenges of moving from a pilot to an institution-wide program. Observations from faculty, current students, and former students are examined within the context of the PDS Essentials: the challenges in preserving a “shared commitment to innovative and reflective practice by all participants” and the advancement of equity within schools and communities are highlighted.

KEYWORDS: Professional Development Schools, early childhood education, culturally relevant teaching

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school-university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration; and
8. Work by college/university faculty and P-12 faculty informal roles across institutional settings.

Introduction

“The more radical the person is, the more fully he or she enters into reality so that, knowing it better, he or she can transform it. This individual is not afraid to confront, to listen, to see the world unveiled. This person is not afraid to meet the people or to enter in a dialogue with them. This person does not consider himself or herself the proprietor of history or of all people, or the liberator of the oppressed; but he or she does commit himself or herself, within history, to fight at their side”

--Paulo Freire, Pedagogy of the Oppressed.

Rationale for our PDS Pilot: Addressing issues of Equity and Engagement with Preservice Teachers in a Diverse Field Placement

Freire’s statement captures the requisite passion and commitment of K-12 and higher education partners who seek to create and sustain robust Professional Development School relationships where partners connect intimately with the ‘lived experiences’ of each other as well as the students—both K-12 and university level—in order to effectively transform the educational setting to empower all stakeholders. If Freire’s words are the heart and soul—the philosophical foundation—for a robust PDS, then how do stakeholders bridge the philosophical with the operational in sustaining a dynamic and meaningful partnership that enriches the lives and learning of all participants? Our university has been part of a Professional Development School model since 2008; this article reviews the first three years of our institution’s PDS model. Our pilot year (2008-2009) consisted of a collaborative relationship with a unique K-5 public charter school; we added a second school the next year and added two more schools the third year. In this paper, we explore the initiatives, opportunities, and challenges of the first three—developmental--years with an overview of years four through seven when our College of Education partnered with four geographically and culturally diverse school systems (including over 25 partner K-5 schools) to create a program-wide Professional Development School model for Teacher Education.

Responsive Evaluation and Changing Methodology

This paper provides a narrative overview—a tapestry of sorts--exploring the experiences of our College of Education faculty and interns as we moved from PDS collaboration with one school to a program-wide PDS model serving over 225 students across 24 different K-5 schools located in four counties. There was no one research focus the developmental years and data collection and analysis was guided by stakeholder needs such as:

Will immersion in a dual language (Spanish) charter school increase the critical consciousness of white preservice teachers and enhance their ability to plan for and to teach children from diverse backgrounds?

*Data collection from 2008-2010 of mentor teachers’ and interns’ journals, survey results, and transcribed interviews was used to study the development of preservice teachers’ cultural identities following immersion in a culturally diverse field setting (Reece, 2010). This study reinforced the beliefs we had going into the pilot year that preservice teachers having little prior experience with children

and families from diverse cultures could, indeed, show significant growth in their understandings of the needs of children from diverse backgrounds (Reece, 2010).

Are methods courses co-taught by university faculty and select K-5 mentor teachers more effective for intern preparation?

*Survey data collected from interns (2009-2011) participating in a PDS cohort where methods courses were co-taught by university faculty and K-5 teachers (Baldwin & Covert, 2012; Reece & Roberts, 2012) indicated more favorable responses in methods classes co-taught by university and K-5 teachers than course taught by university faculty alone.

Are there measurable differences in intern self-efficacy between a cohort of students participating in a field intensive PDS model versus a cohort of students from the same university participating in a traditional model of field and course work?

*Data from interns and mentor teachers compared self-efficacy among interns participating in an intensive field placement, PDS setting with interns participating in a traditional teacher education program at the same institution. Findings indicated students completing fieldwork in the intensive, collaborative PDS field experience indicated greater levels of self-efficacy with regard to teaching (Nodine, Reece, & Roberts, 2016).

Survey and interview data collected during years four through seven from all PDS stakeholders has been collected and results will be forthcoming. The consolidation of our university with another institution (during the academic years 2011-2012, 2012-2013, and 2013-2014) added a plethora of new responsibilities for faculty across all departments at the same time program-wide implementation of a PDS model in the College of Education occurred. For the purpose of this special publication, we will focus more on the growth of our PDS from a pilot effort to a program-wide model, citing aspects related to the research questions mentioned above. Challenges we faced with program-wide implementation of the PDS model included: maintaining collaborative communication with and high standards in the selection of mentor teachers; sustaining innovation and a sense of community among faculty during and following institution-level consolidation; and, pushing back against the pressures of standardization with intern led research projects and teaching opportunities with summer academic programs serving students in grades 6-12.

Key Objectives and Outcomes of the Pilot Year and Year Two of our PDS

In fall 2008, the North Georgia College and State University (NGCSU) student body was comprised of 7,460 students with the following demographic: 87.8% white; 6% Latino; 3.2%; 2% Asian; and 1% unidentified (UNG.org). The demographics of students enrolled in the College of Education mirrored the university demographic. In contrast, the demographics of the surrounding counties and school systems where many of our graduates would seek employment were much more diverse. The demographics of Hall County Schools, where many NGCSU interns would complete their senior field experiences, was comprised of: 52.7% white 38.9% Latino; 4.7% Black; 1.4% Asian; and 2% multiracial (Department of Education, 2009). Many of the children and families identifying as Latino were new to the United States and spoke very little English (Hall County Schools, 2009; U.S. Census, 2010).

A desire to provide NGCSU interns with more meaningful experiences with children and families from diverse resulted in a PDS pilot partnership between a public charter dual language (Spanish) immersion school (World Language Academy) and a cohort of seniors in the College of Education at NGCSU in fall 2008. The focus of the first two years of the partnership was to provide white, monolingual preservice teachers with student teaching experiences working with children and families from diverse cultural, linguistic, and academic backgrounds. Methods courses were held on the WLA campus and the lead author of this paper collaborated on course content with the WLA literacy coach (who is the second author of this paper and now a faculty member in the College of Education) to train interns in content reading strategies and then provide classrooms for them to practice the strategies.

NGCSU faculty and administration provided funding and professional learning opportunities for WLA teachers who were native Spanish speakers from Latin and South American countries in order to assist the teachers with credentialing and teaching strategies related to Georgia standards and K-5 curricula (L. Reece, observation, August 29, 2008; Reece & Roberts, 2012; WLA Charter, 2008). The practices and collaboration during the pilot year reflects NAPDS essentials of advancing principles of equity, providing all stakeholders with professional development opportunities, and creating a shared vision of improving education (NAPDS, 2008).

Lyman Hall Elementary, a Hall County Title One school with 96% of students qualifying for Free and Reduced lunch and 86% classified as English learners with a first language other than English, joined our PDS in 2009 (Department of Education, 2009). That year, nine junior and senior interns were placed at WLA and 10 junior and senior interns placed at Lyman Hall; these interns (along with 13 other students who completed traditional field placements in non-PDS schools) attended classes at Lyman Hall. Students completing field experiences in one of the two PDS sites discussed strategies of collaboration and professional learning, sharing information with peers in the traditional cohort (Nodine, Reece & Roberts, 2016). The PDS interns' professional learning experiences included: administering DRA-II reading assessments to students while supervised by mentor teachers; participating in vertical planning meetings and RTI (Response to Intervention) sessions with K-5 faculty, and designing plans for student-led conferencing. Such activities reflected the NAPDS Essential of "ongoing and reciprocal professional development" for all stakeholders "(NAPDS, 2008).

Lyman Hall Elementary provided a one-way immersion program for kindergarten students having little English vocabulary. This model provided for the majority of daily instruction to be delivered in the child's first language (Spanish) at the start of the year; the classroom teachers then gradually shifted to more instructional time in English and less in the first language. Two NGCSU interns, minoring in Spanish, were assigned to one -way immersion classrooms for their field experiences. One of the PDS requirements for field placements was for interns starting in fall was to meet and talk with prospective mentor teachers in spring; the immersion teachers (one of whom was a native Spanish speaker and one of was a native English speaker with a little Spanish) sat down with the interns and developed a plan for the field experience whereby both interns would teach children in both Spanish and English. During the first meeting, the interns expressed their hesitancy at teaching in Spanish; the teachers were encouraging and supportive, so the interns agreed to try teaching in both classes. Three weeks into the fall semester, these interns taught a hands -on science lesson completely in Spanish, to the delight of the children and the mentor teacher (L. Reece observation, September 24, 2009). NAPDS Essential 7—a field experience setting that allows for "ongoing governance, reflection,

and collaboration” among all stakeholders is evidenced by the level of engagement of both mentor teachers and interns" (NAPDS, 2008).

These interns, along with a NGCSU faculty member and mentor teacher, put together a professional learning session for their cohort peers on best practices for teaching ESOL (English for Speakers of Other Languages); NGCSU students then presented their work at the TESOL conference in Atlanta, Georgia (TESOL, 2010). These interns’ desire to promote equity and best practice in teaching children from diverse backgrounds was nurtured through open and ongoing collaboration and support from the K-5 mentor teachers in the PDS model. The NAPDS Essentials of: advancing equity, preparing future educators for active engagement, and opportunities for ongoing reflection and collaboration were evidenced in this project (NAPDS, 2008). After observing the success of their peers, three other Spanish-speaking interns volunteered to administer a pilot version of the PALS (Performance Assessment for Language Students) under the supervision of the lead author to Lyman Hall students in order to better assess their reading abilities and plan more effectively for reading instruction.

Culturally Relevant Teacher Education and PDS Field Placements

During the first and second years of the PDS, NGCSU interns volunteered for senior field placements within the PDS; these volunteers agreed to begin their field placement during teacher pre-planning (three weeks earlier than NGCSU peers in the traditional senior field experience model) and remained in their field placements any time during school hours when the interns were not in university methods courses. The total time that NGCSU PDS interns at World Language Academy and Lyman Hall spent in classrooms totaled 29 hours a week; NGCSU interns following the traditional model of field placement were in classrooms 14 hours a week. Our research showed that students participating in the PDS model requiring increased time in classrooms reported greater feelings of self-efficacy and willingness to take initiative in new settings (Castle & Reilly, 2011; Nodine, Roberts & Reece, 2016). Given the culturally diverse settings of WLA and Lyman Hall, we integrated Culturally Relevant Teaching (CRT) practices into methods coursework and seminar discussions. CRT curricula focused on the premise that teachers who relate academic content to their students’ lived experiences have more success in engaging students in the learning environment, developing critical thinking skills, and promoting self-confidence in learning (Ladson-Billings, 1995).

According to Ladson-Billings (1995), culturally relevant pedagogy/teaching is tailored to “collective, not merely individual empowerment” (p.160). This outcome was achieved through formal school sponsored activities such as family dinners (families bring dishes from their countries of origin to school for a potluck); spring festival where students showcase dances and celebrations unique to their county or culture. Most importantly, critical consciousness was developed through daily interactions among mentor teachers, interns, and students. The mission of advancing principles of equity (NAPDS Essential One) has been a cornerstone in our PDS program; community efforts such as those listed above reflect the commitment of both partners in outreach and engagement with the community (NAPDS, 2008).

Pilot Year and Year Two: Mentor Teacher Roles and Relationships

Traditionally, mentor teachers have been considered purveyors of practical knowledge while university supervisors evaluate students’ pedagogical development and provide theoretical

knowledge (Rodgers & Keil, 2007). The ongoing collaboration between mentor teachers and interns, meetings with NGCSU faculty and mentors, and monthly meetings with all PDS stakeholders blurred the roles of mentor teacher and university supervisor. Both mentors and supervisors shared and reinforced important pedagogical ideas—thereby providing the interns with consistent and relevant information. The features associated with changes in the roles of mentor teachers and university faculty included mentor teachers' beliefs that they could more powerfully engage students in the process of supervision which added a layer of complexity for evaluation and assessment of the interns as well as potentially new tensions between university faculty and mentor teachers; movement toward a more concerted collaborative effort between the university and the site school; and an increased focus upon preparing mentor teachers to assume their roles with interns (Rodgers & Keil, 2007). During the first two years of the PDS, mentor teachers met with university faculty and supervisors to discuss pedagogy and theory and to review the expectations of both partners; the Dean paid for substitute teachers to cover mentor teachers classrooms so the mentors could meet and collaborate directly with higher education partners. During the first two years, NGCSU also encouraged faculty and K-5 teachers to prepare NAPDS presentations and paid K-5 partners' travel expenses.

During the first year, NGCSU interns confronted feelings of being awestruck, excited, and intimidated in an environment where many teachers spoke mainly in Spanish. During the second year with Lyman Hall, the cultural chasm wasn't as broad as teachers (even those who were native Spanish speakers) used English most of the time, except in the one-way immersion kindergarten classes.

Following lunch with third grade teachers at WLA during the first week of field placement (three of whom were native Spanish speakers while two were native English speakers), one intern shared her feelings of uneasiness when team members turned to one another and spoke in Spanish. Interns shared similar feelings during our first seminar meeting with questions like, "Are we supposed to ask Spanish speaking teachers to translate for us? Should we act like we understand what they're saying? Are they talking about us?" (L. Reece, observation, August 25, 2008). For the next seminar, two native Spanish-speaking teachers joined us along with the dual language program coordinator to address intern concerns and to talk about the school's goals. Our robust conversation ended with one intern capturing the moment, "Wow! I guess we're feeling what kids who don't speak English well feel every day in schools where everything is in English" (L. Reece, observation, August 25, 2008). One of the Spanish-speaking teachers hugged the student and replied, "Yes, yes, it is so" (L. Reece, observation, August 25, 2008). K-5 and university partner exchanges such as this one opened the door for these young interns and their professor to build the knowledge, skills, and compassion to work alongside school and community members to promote principles of equity in ways that deliberately address teacher identity development regard to principles of equity (Banks, 2003; Gee, 2001; NAPDS Essentials, 2008).

The principals at WLA and Lyman Hall provided NGCSU interns the opportunity to attend professional development activities with school faculty. During the school year, interns attended workshops on effective RTI (Response to Intervention) reporting and monitoring, student-led conferencing, and meetings with parents from culturally and linguistically diverse backgrounds. The university role in collaborating with K-5 partners in the pilot PDS included faculty and intern participation as leaders for such extra-curricular activities such as Science Olympiad and Odyssey of the Mind teams; assisting with Chinese New Year activities; and

tutoring in math and English in after school programs. Extra-curricular activities such as these afforded interns the opportunity to work with parents and other community members.

The tremendous success of collaborative efforts such as literacy faculty co-teaching methods courses with K-5 partners and science education faculty collaborating with K-5 teachers for hands on science labs (Baldwin & Covert, 2012) led to more formal collaboration, with the literacy coach co-teaching methods courses with university faculty (Reece & Roberts, 2011; Reece & Roberts, 2012). By the third year of the partnership, mentor teachers and interns met together for vertical planning as well as development of assignments for methods courses. While the interns benefitted from the rich relationships with mentors as well as professional training opportunities, school administrators also saw the benefit of close collaboration between K-5 teachers and university partners.

Monthly meetings were held with mentor teachers, university faculty, and administrators to discuss what was working really well and what aspects of the extended field pilot needed to be addressed. A number of ideas stemming from these meetings are currently standard practice among all Five Professional Development School sites. These include: debriefing week, mandatory start to the field placement with preplanning, and community-service based projects targeting issues related to elementary schools' SIP (School Improvement Plan). Debriefing week (Reece and Nodine, 2014) is the week between the ending of one six -week field placement and the beginning of another. During this time, interns research schools, personnel, and programs they are interested in and shadow school professionals during the week. An intern may choose a school counselor, teacher of gifted students, ESOL teacher, or administrator to work with or shadow during the debriefing week. Prior to shadowing the selected person or persons, the interns develop questions (like a mini action research prospectus) and then attempt to answer those questions as they shadow the school person. One student opted to spend half the week shadowing a school resource officer and half the week shadowing a school counselor. The questions she and her peers developed included: how do you work effectively with parents and students when you may not speak the same language? Do you find that more students who live in poverty tend to drop out of school? How do you help teachers understand the needs of children who may not speak English? The experiences during debriefing week led this intern to complete a research project studying the impact of teacher mentoring on at-risk students (L. Reece, observation, November 16, 2008).

The strong support for the PDS shown by the administrators during the first two years paved the way for other schools to join the PDS model in years to come; in addition, such support also laid the groundwork for future collaborative projects between K-5 and university faculty (Reece and Roberts, 2012; Reece and Nodine, 2014). One example of the "shared commitment to innovative and reflective practice" (NAPDS, 2008) occurred during the brainstorming, planning, and execution of the "social studies blitz" teaching experience. During this activity, fifth grade teachers and volunteer interns developed inquiry-based lessons to introduce fifth grade English language learners (ELLs) to sixth grade social studies vocabulary through inquiry-based group projects. In addition to vocabulary development, interns engaged students in critical inquiry discussions related to immigration, rights of Americans, and economics. This discussion grew out of a student's concerns over immigration legislation; the intern unpacked the facts for the students then invited community members in to address the issue on a local level which reflects a commitment to the NAPDS Essentials One and Two (NAPDS, 2008; Reece & Nodine, 2014).

Year Three: Excitement and Growing Pains

Two public charter schools (also in Hall County) were added to the PDS relationship in year three—Martin Technology Academy and Chestnut Mountain Creative School of Inquiry. Martin Technology Academy (MTA) was participating in a school-wide training initiative with Dell Computers; PDS interns placed at MTA received technology training and also sponsored Science Olympiad teams. Chestnut Mountain Creative School of Inquiry (CMCSI) provided PDS interns with training in the Renzulli Model of teaching with high expectations for all students. PDS interns at CMCSI participated in professional learning activities based on differentiation strategies for K-5 teachers with content, process, and product (Renzulli & Reis, 2003).

A PDS is considered to be fully implemented when ongoing collaboration between partners, directed at the development of learning outcomes that address the specific needs of PDS children, exists. Learning outcomes and practices are fully endorsed by the PDS and all involved institutions. Further, the partnership extends beyond the school campus to effect sustainable changes in school practices and policies influencing educational policy at the district, state, and possibly even national levels (Breault & Lack, 2009). During year three of the PDS model, administrators, mentor teachers, university faculty, and interns met together twice each semester to review programmatic goals, share ideas and practices, and brainstorm new avenues for collaboration. One strength of the PDS model at this point was in the diverse demographics of the participating K-5 schools. While all from the same county and geographically near one another, the academic and social goals and strengths of each school were different. Lyman Hall Elementary teachers planned weekly with ESOL support personnel to design lesson plans and activities tailored to the needs of English learners. The dual language (Spanish and English) immersion model of World Language Academy exposed interns to weekly planning sessions with grade level teachers who were native Spanish and native English speakers. The math/technology focus of Martin Technology Academy afforded interns the opportunity to participate with mentor teachers for in-depth professional learning on technology use, sponsored by a grant from Dell Computers (Hall County Schools, 2011); and interns at Chestnut Mountain Creative School of Inquiry assisted teachers in developing inquiry units of instruction aligned with Georgia curricula standards.

A prerequisite for analyzing the roles of university faculty and mentor teachers is careful examination of the construct of teacher identity itself. The decisions interns make in the field setting relate directly to the influence (both formal and informal) of mentor teachers and university personnel. The four schools of our PDS in year three differed with regard to curricular focus, family and teacher demographics, and administrative style. With the addition of these two schools, all interns attending site-based methods classes in one cohort also had the intensive field experiences being part of the PDS model. Robust discussions occurred over intern initiative; in the first two PDS schools, interns were encouraged to initiate ideas, propose and implement projects, and lead programs. The two schools added during the third year were different with regard to the leadership style of the administrators. More formal in structure and administration, these schools maintained a more traditional view of the intern-mentor relationship. During year three the cohort added discussions of school culture and the influence of administrators in teacher behaviors---another wrinkle to the fabric of teacher identity formation. Interns shared candidly the positive and challenging aspects of the school culture in their field placements. During debriefing weeks, interns were encouraged to visit a school with a

different school culture and to talk with teachers at that school. Following the debriefing week, one intern commented: “I really like my experiences at World Language Academy; but Martin Technology Academy felt more like a school where I would fit. I liked the structure and the way the principal maps things out for the teachers”. Another intern stated, “I liked the willingness of teachers at Lyman Hall to use their Spanish in order to communicate with children and families; I became more confident in my Spanish speaking and will be able to communicate better with English learners in my own classroom” (L.Reece, communication, April 13, 2011). The varied experiences of these four PDS schools provided interns with experiences that broadened their understanding of student demographics as well as varied approaches toward teaching and learning found in different schools.

Going Program-Wide with PDS partners During Institutional Consolidation

With the addition of two more schools—for a total of four K-5 schools serving over fifty juniors and seniors from NGCSU, monthly meetings with all stakeholders became more difficult to coordinate; also, more university faculty were needed to supervise interns in the field and work collaboratively with K-5 teachers and administrators. At the same time, North Georgia College and State University (with two campuses and a total enrollment of approximately 7,000 students) was undergoing a consolidation with Gainesville State College (with two campuses and approximately 9,500 students) to become the University of North Georgia (UNG). The goals and missions of the two institutions differed in that GSC was a two-year college while NGCSU was a four-year university with a growing graduate program. At the time of consolidation, Gainesville State College had just begun an evening education program designed to meet the needs of nontraditional students who worked full time. Bringing together faculty from a nontraditional/evening education program at one institution with faculty from another institution having both traditional and PDS teacher education programs led to concerns and apprehension with regard to ‘merging’ into one College of Education. Such tensions were readily evident during consolidation that coincided with the first year of a program-wide implementation of the PDS model. In addition to navigating among different styles of leadership and significantly different Teacher Education programs, College of Education faculty from both institutions were tasked with consolidation policy revisions on topics from from faculty governance policies to class size issues, pay equity, and teaching on multiple campuses requiring their attention.

Years Four to Seven: Sustaining Flexibility, Community, and Innovation among Four School Systems in Geographically Different Regions

The essence of the discussions of a pilot PDS collaboration between one group of university interns and a new public, dual language K-5 school revolved around providing monolingual white interns with meaningful experiences teaching and working with children and families from diverse backgrounds; the ultimate goal was to increase interns’ understandings so they would be more effective teachers while also providing professional learning support for the K-5 teachers in the partner school. Flexibility, community, and innovation existed everywhere during the first year—interns, mentor teachers, and university faculty volunteered to embark on an adventurous new collaboration with one of the first dual language schools in the state. Stakeholders on both sides were excited and ready to begin. The innovative, unpredictable nature of the first few years of the PDS development appealed to the nature of risk-taking

faculty; when the expansion of this ‘adventure’ became a required path for faculty and students at our university, some faculty expressed concern over the speed and magnitude of changes accompanying the move from pilot to program-wide implementation of a PDS model. Faculty feared losing collaboration with colleagues due to the geographical distances between schools; they also questioned how to assess whether interns have all the requisite field experiences, given the diverse school cultures and the close collaboration required with PDS partners. Some faculty feared the PDS model would result in too much focus on the practical matters of teaching while theoretical connections would be limited.

Due to the enormity of responsibilities associated with consolidation, program-wide implementation planning of the PDS model was initiated late spring (2011); in less than six months, all early childhood faculty and students were participating in the PDS model. Methods courses and professional learning took place on site at a number of K-5 partner schools. Faculty stepped up bravely to the task; however, many felt overwhelmed and detached from colleagues and university resources.

Years Four through Seven: Mentor Teacher Selection and Challenges

Mentor teachers are vital to the success of a PDS partnership. The selection of mentor teachers is one that requires a philosophical ‘goodness of fit’ as well as content expertise. We worked closely with the school administrators during the early years to form a strong definition of desired qualities for teachers who would mentor our student interns. For starters, it was imperative that the mentor teachers see themselves as life-long learners as we wanted interns to understand that learning continues to happen in all stages of teaching. This experiential relationship between mentor and intern was a definite learning situation for both parties. We also wanted teachers that were willing to give constructive feedback to interns and university partners. The mentor teachers were modeling skills and strategies day in and day out and we wanted them to “coach” our student interns as they released classroom responsibilities of planning, teaching, and learning to interns. We looked for teachers that were collaborative by nature; this was accomplished through individual and group “chats” between. In order to maintain a fluid partnership between the university, the interns, and the elementary schools, collaboration was key. We also felt that mentor teacher buy-in was essential. We wanted the teachers to feel confident about being a part of this replication process and their role within it. During years one through three, it was easy to identify strong mentor teachers. Unfortunately as the PDS grew (years four through seven), it was proving difficult to find teachers that met all of these qualifications as well as being a much greater time consuming task for university faculty. This forced us to widen the pool of mentor teachers and from a university standpoint, provide training for ALL mentor teachers to somewhat help level the playing field.

Due to the fact there was/is little to no money to offer stipends to teachers, along with the fact that the state of Georgia no longer requires teachers to earn Professional Learning Units (PLU’s), it was a major challenge to entice teachers to attend the professional learning mentoring sessions we offered throughout the summer. One of the things the university sought out to do was to search for grant money that could be used for mentor teachers. We were not able to procure funding for all mentor teachers to receive stipends as we had done in the developmental years. We try to work as individually as possible with our mentor teachers in each school to articulate their role and our expectations as they help us replicate teachers, and faculty attempt

monthly meetings where representatives from the four different school partners meet to talk about issues and progress with field experiences.

Other challenges that the PDC faces as we have grown are: offering unique experiences across each PDC and battling outside pressures of standardization in Teacher Education. While growth is a positive thing for the university, it remains a challenge for the PDC. When we began this journey we were able to allow the students a substantial amount of flexibility within their course work and within their schools to craft an experience that met their needs, the schools goals, and was also responsive to their passions. As schools were added and student numbers increased, student responsiveness on the university side could not be maintained at the same level. There was a growing concern among faculty members that the students were not getting an equitable experience. This forced each PDS to become more standardized in their actions, which took away some of the initial “draw” to the PDS experience. While we strive to give each PDS its own identity and character, this remains difficult to do.

We are also battling with outside pressures such as edTPA, teacher certification changes, and GACE requirements. It is difficult not to “teach to the test” when as educators we know that this goes against our philosophies. We also understand the importance of these requirements and have been forced to make adjustments within each PDS (regarding coursework, expectations, and requirements) to conform to the expectations of these pressures. We feel confident that in the near future we will strike balance with each of these challenges, but for now we work hard to do our best to meet the needs of our student interns and replicate the best teachers possible. Despite all of the challenges, hurdles, and changes over the past few years, the program-wide PDS functions surprisingly well. We are by no means perfect and we strive daily to improve our practice, enhance our school partnerships, and remain positive across the university faculty.

Interviews with faculty teaching in the PDS model reflected new challenges to maintaining the original mission of the PDS model: to bring interns into meaningful contact with children, teachers, and families from diverse backgrounds. With over 225 juniors and seniors participating in the PDS model, faculty workload has increased at the expense of gathering together with K-5 partners to collaborate and plan activities specific to the richness of the particular school system where interns are in field placements. Planning has returned to more of a university-based endeavor with minimal collaboration at the coursework level. University faculty did indicate a positive impact of being based in a PDS “cluster” (geographical proximity of participating schools) in that interns get to know and work with two different teams of professors, thereby learning how to navigate different styles of teaching and learning and better understand their own learning preferences and how those preferences carry over into their teaching (A.Roberts, observation, April 6, 2015). With the pressures of EdTPA as well as administering a teacher education program that is housed off campus, faculty now see the challenges of preserving the integrity of a robust Professional Development School model with regard to collaboration, shared equity, and outreach into the broader community. The direction for our program to take moving forward may be guided from the compassion, initiative, and relationship formed between a public charter dual language immersion school and a small cadre of university faculty and students. We must also believe that we can continue our fidelity to the PDS Essentials (2008) even on a program-wide scale.

Conclusion and Future Directions

As the dust settles on the frenzied process of institution-level consolidation, university faculty find themselves better able to devote the time and energy needed to sustain the innovative practices upon which our program-wide PDS was built. With regard to recruiting and training mentor teachers, designated faculty are writing grants to provide stipends for the mentor teachers. Other faculty are collaborating with select mentor teachers to develop rubrics that may guide the duties and responsibilities of new mentor teachers. The University of North Georgia has started a terminal degree program in Educational Leadership tailored to innovative administrators and teachers currently working in the Professional Development School setting. Providing training and support for collaborative efforts of university and K-5 faculty at the administrative level will strengthen the relationship in a “top down” manner among stakeholders as we move forward.

Given the pressures facing faculty and interns with the current “standardization” movement in Teacher Education, juniors and seniors have little room for research and collaborative projects with faculty or mentor teachers. The lead author of this paper has developed and implemented a research-based summer teaching experience for UNG students to participate in *prior to* formal admission into the teacher education program. These students, who are completing Educational Foundations coursework in summer have the opportunity to serve as paid teaching assistants for two grant funded academic programs serving “at-promise” youth: *Steps to College* and *Summer Scholars Institute*. *Steps to College* is a three year academic enrichment program that serves promising 9th-11th grade students from counties surrounding the UNG Gainesville campus. Students who will be first generation college attendees and who are economically disadvantaged are recommended by high school counselors for this program. *Summer Scholars* is a three year program for rising 8th to 10th graders; curricula is designed by faculty interested in STEM and humanities teaching. Activities are inquiry-based for *Summer Scholars* and the requirements for student attendance is similar to *Steps to College*. Currently, one of the paid interns is also collaborating with the lead author of this paper to conduct an ethnographic study on the impact of Culturally Relevant Teaching on the self-efficacy of students attending *Summer Scholars*.

For our colleagues currently involved in pilot PDS programs, we strongly recommend careful planning with the inclusion of all faculty if you decide to move toward a program-wide PDS. Transparency and ongoing communication are key—even during the pilot year(s). In our case, the intensity of collaborating with K-5 colleagues to develop curricula and field experiences led to a closeness among university faculty working on the pilot PDS. At the same time, faculty who remained on campus and continued teaching and supervising interns in the traditional model experienced feelings of uneasiness regarding changes the pilot PDS would bring to all programs. We realized this during the year of program-wide implementation. Had we anticipated “us/them” tensions earlier, we would have worked more deliberately to be inclusive of all faculty during the pilot year by inviting K-5 partners to meet and talk with all Teacher Education faculty. Sensitivity toward faculty concerns, creating an inclusive environment where faculty feel comfortable discussing difficult issues, and engaging pre-education students and faculty with opportunities to learn principles of culturally responsive teaching will help all faculty buy into the PDS model—such buy in and support is essential in building and sustaining a dynamic professional development school model.

Appendix 1**PDS Timeline:****2008-2009 (Year One):**

Pilot implementation of a PDS between NGCSU and World Language Academy (public charter dual language—Spanish and English—immersion school). A cohort of 25 Early Childhood/Special Education students completed coursework on the campus of WLA; 8 of the students volunteered for and completed an extended, year-long field experience at WLA. Collaborative activities included: K-5 teacher-led professional learning in culture and language challenges; university faculty-led reading assessment administration; shared planning with science and social studies curricula (university faculty and students with K-5 faculty). Monthly meetings occurred between NGCSU leadership and faculty and WLA leadership and faculty to assess/modify initiatives.

Three other ECE/SPED cohorts remained campus-based and followed a traditional model of teacher education.

2009-2010 (Year Two):

A Title One—high poverty, majority population of ELLs—school, Lyman Hall, was added as a PDS partner/field setting. A cohort of 25 ECE/SPED students (with 16 of the students volunteering for an extended year long field placement at Lyman Hall and WLA) met for classes at Lyman Hall. In addition to continuing the Professional Learning activities of the first year, the following collaborative activities occurred: University faculty-led intensive social studies teaching to fifth graders; hands on science for students and faculty in grades 3-5; K-5 teacher-led literacy workshops on gradual release and reading instruction for English Learners. PALS (Spanish reading assessment) tests administered by NGCSU interns to Lyman Hall students to assess reading comprehension in the native tongue. Monthly meetings with WLA and Lyman Hall faculty and administration and NGCSU faculty and administration continued as part of ongoing program development.

Three other ECE/SPED cohorts remained campus-based and followed a traditional model of teacher education.

2010-2011 (Year Three):

Two non-Title One, public charter schools--Martin Technology Academy and Chestnut Mountain Creative School of Inquiry-- were added to the PDS model. A cohort of 30 students completed extended field experiences in one of the four PDS schools and all NGCSU courses were held at CMCSI; Debriefing week activities included opportunities for students from the more traditional schools in the PDS—MTA and CMCSI—to visit and shadow teachers at the more culturally and linguistically diverse—Lyman Hall and WLA—schools. Seminars led by K-5 partners included training in working with ELLs, differentiation strategies with social studies and science content and activities as well as the continuation of the collaborative activities listed above. Interns assigned to CMCSI collaborated with faculty on final revisions for the school's charter. Meetings among all stakeholders were held twice a semester to assess and plan for collaborative experiences across the four schools.

Three other ECE/SPED cohorts remained campus-based and followed a traditional model of teacher education.

2011-2012 (Year Four):

Program-wide implementation of the PDS model; four cohorts of ECE/SPED students completed extended field placements in one of four geographically and culturally different settings:

Hall County: ELL-rich, dual language immersion, charter schools for technology and creativity.

Forsyth County: Technology-based (BYOT—Bring Your Own Technology) curricula where teachers and students use “flipped classroom” technology.

Dawson County: Strong literacy initiatives and professional learning opportunities for K-5 faculty and NGCSU (now UNG) students.

Lumpkin County: Rural population with ties to the university.

Tensions among faculty as all were required to teach on-site at local elementary schools. This was also year one of the consolidation of Gainesville State College and North Georgia College and State University.

Meetings among all stakeholders occurred once per semester.

2012-2015 (Years Five, Six, and Seven):

Each PDS cluster has a convener and they meet on a monthly basis to maintain consistency across the PDSs.

Hall County PDS was separated into two groups due to the large number of Junior admits and the need for diverse field placements.

Due to many mentor teachers reaching retirement age, UNG faculty and staff provide training regarding the vision and mission of the partnership and to (in some cases) realign collaborative goals within the partnership.

Meetings with administration are becoming more consistent and have allowed for UNG to better meet the needs of school partners and students based on feedback from meetings.

References

- Baldwin, P., & Covert, J., (2012). A comparison between science methods implementation models in two separate professional development school settings. Paper presented at the 2012 Professional Development Schools National Conference.
- Banks, J.A. (2003). Multicultural education characteristics and goals. In J.A. Banks & C.A. Banks (Eds.) *Multicultural education: Issues and perspectives* (pp.3-30). New York: Wiley.
- Breault, R. A. & Lack, B. (2009). Equity and empowerment in PDS work: A review of literature (1999-2006). *Equity and Excellence in Education*, 42(2), 152-168.
- Castle, S., & Reilly, K., (2011). Impact of professional development school preparation on teacher candidates. *National Society for the Study of Education*, 110(2), 337-371.
- Freire, P. (1968). *Pedagogy of the oppressed*. NY: Penguin.
- Gee, J.P. (2001). Identity as an analytic lens for research in education. In W.G. Secada (Ed.) *Review of research in education*, 25, 2000-2001. Washington, DC: American Educational Research Association.
- Georgia Free and Reduced Lunch Statistics (2009): https://app3.doe.k12.ga.us/ows-bin/owa/fte_pack_frl001_public.entry_form (retrieved January 10, 2016).
- Hall County Schools (2009; 2011; 2015). Retrieved from hallco.org on December 15, 2015.

- National Association for Professional Development Schools (NAPDS) 9 Essentials for Professional Development Schools April 12, 2008). Retrieved from : <http://napds.org/nine-essentials/> (January 10, 2016).
- Nodine, P., Reece, L., & Roberts, A. (forthcoming). Learning outcomes and initiative development in teacher candidates from professional development school-based and traditional cohorts. *GATEways, Journal of Georgia Association of Teacher Education*.
- Reece, L. & Roberts, A. (2011, March). *Preparing teachers to serve students from diverse backgrounds through a professional school model in a dual language immersion setting and PDS: Meeting the needs of all*. Presented at the National Association of Professional Development Schools Conference (NAPDS). New Orleans, LA.
- Reece, L. & Roberts, A. (2012). Teacher belief development through field experience in a dual language immersion PDS partnership. *PDS Partners, 2012*.
- Reece, L. & Nodine, P. (2014). When immigrant is synonymous with terrorist: Culturally responsive teaching with English learners. *The Social Studies, 105*(5), 259-265.
- Renzulli Model of Gifted Education: <http://gifted.uconn.edu/schoolwide-enrichment-model/sem3rd/> (retrieved January 10, 2016).
- Reis, S. M. & Renzulli, J. S. (2003). Research related to the Schoolwide Enrichment Triad Model. *Gifted Education International, 18* (1). 15-40.
- Rodgers, A. & Keil, V.L. (2007). Restructuring a traditional student teacher supervision model: Fostering enhanced professional development and mentoring within a professional development school context. *Teaching and Teacher Education, 23*, 63-80.
- University of North Georgia Teacher Education Statistics: <http://ung.edu/teacher-education/> (Retrieved January 1, 2016).
- Zeichner, K. (2009). *Teacher education and the struggle for social justice*. NY: Routledge.

Linda Reece is an associate professor in the Educational Foundations department at the University of North Georgia. Her research interests include Culturally Responsive Teaching with ELLs, social studies teaching, and graduate courses in global issues. Alli Roberts is an assistant professor in the Early Childhood/Special Education department at the University of North Georgia. Her research interests include literacy and language learning in K-5 students and educational research. Keri Smith is a literacy coach at Lyman Hall and adjunct faculty member at UNG. Her work focuses on literacy development and language acquisition in ELs in grades K-5. She is also a doctoral student in Educational Leadership.

What is a PDS? Reframing the Conversation

Janna Dresden
University of Georgia

With

Selena S. Blankenship
Jackson County School System

Robert M. Capuozzo
University of Georgia

Allison U. Nealy
University of Georgia

Mark D. Tavernier
Clarke County School District

Abstract: In the quest to answer questions about the definition of a PDS, this paper begins with an examination of the past and current status of PDSs, including the origins and history of the PDS concept, the purposes of PDS work, and the processes that facilitate PDS partnerships. The second section of the paper reframes the original question, using both a deeper engagement with theory and a more direct focus on specific practices. These sections are followed by a dialogue about these issues between the first author and PDS colleagues from the university and the school district. The paper concludes with some thoughts and questions to guide future PDS inquiry and practice.

KEYWORDS: professional development schools; school-university partnerships

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;

Introduction

In 1994 Robinson and Darling-Hammond wrote, PDSs are much more than a fashionable new idea. They are an imperative of professional responsibility in education. They are the means for joining practitioners in public schools and universities in preparing and admitting future members to their profession....They are both the exemplars and the birthing places of tomorrow's schools. (pp. 217-218)

With these words the authors were entering into what was by then a frequent discussion about the meaning and purpose of a Professional Development School (PDS). It is a conversation that continues unabated today.

During the past 20 years, the conversation about PDSs has become more sophisticated and has expanded to include two interwoven questions: (1) What is a PDS? and (2) Are PDSs effective? Because we cannot know if something is effective if we do not know what it is, the perceived success of a PDS will be based entirely upon the definition that is used (Yendol-Hoppey & Smith, 2011). Thus, we need to know what a PDS is in order to know if the work of PDSs has lived up to the promise of the picture painted by Robinson and Darling-Hammond (1994). A third inter-related question has emerged as important in this ongoing conversation: Are PDSs sustainable? As with the question of effectiveness, we cannot answer the question about sustainability until we know what we are trying to sustain.

This article is an entry into the ongoing conversation about PDSs and instead of answering the question directly, it begins with an examination of the past and current status of PDSs, followed by a reframing of the questions using a greater emphasis on theory, and a dialogue among a group of PDS partners. The paper concludes with a set of thoughts and questions to guide future PDS inquiry and practice.

Professional Development Schools Examined

This part of the paper examines PDSs from a number of different perspectives. It begins with some preliminary answers to the questions of effectiveness and sustainability and then proceeds to problematize the initial question. Subsequent sections will examine the origins and early definitions of PDSs, provide a brief historical review of PDS work, an overview of the purposes of PDSs and a discussion about the processes that facilitate this work. Finally, the complexity of teaching and especially of PDS work will be considered as it relates to the attempt to define PDSs.

Can PDSs be Sustained? Are They Effective?

Though some PDS partnerships have been maintained for long periods of time, there are numerous stories of the demise of these partnerships and mounting evidence that there is an ebb and flow to engaged partnership work (e.g., Johnston-Parsons, 2012; Mitchell, Nath & Cohen, 2012; Pellegrino, Zenkov, Sell, & Calamito, 2014). Preliminary answers to the question of effectiveness were provided by reviews in the *Yearbook of the National Society for the Study of Education on Professional Development Schools* (Neapolitan, 2011). These reviews confirmed the prevailing wisdom that the research providing direct links between 'being a PDS' and any

measurable outcomes, especially improvements in P-12 student learning, was scant at best. Wong and Glass (2011) found that, “the oft-repeated critiques about the lack of rigorous research on the outcomes of PDSs are nowhere more prevalent than in the area of the impacts on student learning and achievement” (p. 411). Similarly, a review of the literature from this same volume noted that there were no PDS partnerships that had systematically created and consistently used robust systems of accountability (Yendol-Hoppey & Smith, 2011).

These critiques and disappointments have echoed throughout PDS publications and conferences for many years. Given that the people who plan and participate in PDSs are unlikely to be less intelligent or less knowledgeable and certainly no less caring than others, we must ask ourselves, “Why do they have trouble maintaining their position as a PDS and why have they been unable to show, to a large extent, that the work they do is effective?” As educators we have determined that when a child cannot accomplish a task, it is not because the child has failed, but because we, as educators and/or as a society, have failed to provide the child what she needs to be successful. Sometimes the problem is vast and sometimes the problem is as simple as a poorly-constructed task, but the problem does not reside within the child. This rather heavy-handed analogy is presented to suggest that the field of PDS has not failed. Perhaps the task of proving the effectiveness of PDS work, based on a clearly defined and agreed-upon definition, is simply a poorly constructed task. In this paper, I argue that the field would benefit from simultaneously broadening and narrowing our focus, and by asking different questions.

Origins and Definitions

PDSs are often considered to be the education equivalent of a teaching hospital and serve as the place where theory and practice come together to better prepare future teachers, support practicing teachers in their work, and create optimal learning environments for students. Although the ideas that give form to the organizational structure we now call a PDS have been in the educational atmosphere since at least the time of John Dewey (1938), the current wave of interest in the PDS model was energized as a response to critiques of American education (Rutter, 2001). The 1983 publication of *A Nation at Risk* served to consolidate and intensify existing general concern with the American system of education and as a result, “a plethora of reform agendas and reports were commissioned...that laid the groundwork for the professional development schools (PDS) movement” (Rutter, 2011, p. 291). These reports and initiatives included the Ford Foundation’s Academy for Education Development, the Task Force on Teaching as a Profession, the National Network for Education Renewal (NNER), and the Holmes Group (Rutter, 2011).

The Holmes Group, along with John Goodlad and his colleagues at NNER, is generally accorded the honor of giving rise to the modern PDS movement and a retrospective view shows that their proposals had two significant goals: (1) to professionalize the teaching profession and provide a vehicle for the empowerment of educators and (2) to increase the opportunities for teacher candidates to engage in substantive and supported clinical experiences as part of their preparation (Murray, 1986). The Holmes Group, made up of the deans of prestigious colleges of education from around the country, was an early advocate for providing teacher candidates with more and better-designed clinical experiences, though their sentiments were reiterated by many throughout the coming years (Darling-Hammond, 1994b; Murray, 1986; NCATE, 2010). As

Rutter (2011) explained, “In connecting university teacher education programs with schools as mutual partners, Holmes further expanded the idea of partner schools, thereby creating PDSs, an idea that far exceeded prior relationships of university teacher education field-based experiences” (p.297).

A Brief History

In the early days the PDS movement was centered on creating these new spaces: “In their first decade—the late 1980s and early 1990s—much of the focus of professional development schools’ energies was on starting up the partnerships and making them work” (Teitel, 2004, p. 407). This emergent work was accomplished primarily through individual connections and relationships and was centered on people rather than on models or systems (Basile & Gutierrez, 2011; Teitel, 2004). Consistent with the idiosyncratic and dynamic way that most PDSs originated, they often existed on the periphery of traditional institutions and programs and may have even benefitted from this lack of oversight. Teitel (2004) explained that: “Early PDSs...functioned with high levels of autonomy, often outside of the scrutiny, and sometimes not even on the radar screen of school districts or larger university teacher education programs” (p. 403). Also in line with the emergent nature of the early examples of PDSs, the literature from this period did not focus on criteria or definitions (Breault & Breault, 2012), and was primarily descriptive (using case studies, surveys, and comparative analyses) or narrative—and telling stories became the dominant mode of scholarship for PDSs during this early phase (Basile & Gutierrez, 2011; Grossman, 2005; Miller & Silvernail, 2005; Neapolitan & Levine, 2011; Teitel, 2004).

However, the next decade of PDS activity began to be marked by a greater emphasis on defining criteria and the development of structures to explain and frame PDS work. For example, by the late 1990s the National Council for the Accreditation of Teacher Education (NCATE) had begun to work on developing a set of criteria or standards for PDSs (Teitel, 2004). Two developments may have necessitated this increased attention to clarifying statements, labels, and definitions. The first is that scholars and practitioners had begun to notice that “the ideals of professional development schools have been unevenly implemented, and many sites that have adopted the label have not created the strong relationships or adopted the set of practices anticipated for such schools” (Darling-Hammond, 1994, p. xi). The second factor was that PDSs had begun to attract more attention and to move from the periphery of institutions to a more central role (Teitel, 2004). PDS programs were more visible, some were expanded, and the demand for meaningful partnership work began to increase. A more clearly articulated definition was needed to support this shift in the status of PDSs and to control the use of the term as it became both more recognizable and more popular. Thus, the early 1990s were marked by frequent debates and discussions about the exact meaning of a PDS, but by the end of that decade a consensus had begun to emerge around the goals of improving student learning, improving the preparation of educators, improving the professional development of educators, and research and inquiry into the improvement of practice (Teitel, 2004).

Although a more clearly defined structure enabled PDSs to take on a greater role in schools and in teacher education programs, as well as receive more financial support, there were notable challenges that resulted from these changes. Clear guidelines were sometimes viewed as

constraints and it was feared that PDSs would become less vital and less generative. Teitel (2004) articulated this viewpoint:

The trip in from the margins—the development of PDSs as more central to schools, school systems and universities—comes with its own set of problems and challenges. One challenge is retaining the spontaneity and creativeness that early developers of PDSs...saw as an important hallmark of what this new kind of collaboration would bring. (p. 403)

In addition, support sometimes turned into expectations of specific activities and outcomes and even demands that PDSs help achieve the priorities of upper level administration in schools and universities (Teitel, 2004).

Both of these strands of thinking about PDSs continue to be evident today. Although historically the grass-roots and emergent vision of PDSs preceded a more structured and defined perspective of PDS work, each approach can be seen in one or more organizations that are currently involved with the PDS movement in some way. For example, the NNER and the National Association for Professional Development Schools (NAPDS) have goals that focus on guiding, supporting, and stimulating PDS work, consistent with a vision of PDSs as emergent and dynamic. In contrast, NCATE has taken an approach more focused on definitions and structures and has directed their attention to “the professionalization of teaching through standard setting and accountability” (Neapolitan & Levine, 2011, p. 310).

What is the Purpose of a PDS?

The purpose of a PDS is to facilitate exemplary teacher education by serving as a space in which theory and practice not only meet, but where each way of knowing and understanding the world enriches the other. “Linking theory and practice in ways that theorize practice and make formal learning practical” (Darling-Hammond, 2006, p. 307) is thought to improve teacher preparation, provide support to practicing teachers, facilitate research into problems of practice, and ultimately improve the learning experiences of students in the P-12 system (Teitel, 2004).

This blending of theory and practice is critical in order to prepare teacher candidates who are ready to teach in today’s classrooms. Teacher candidates need both academic knowledge and extensive authentic experience in classrooms (Anderson & Freebody, 2012), but more importantly they need to learn how to apply and use this knowledge (Feiman-Nemser, 2012; Levine, 2010) and how to reflect on their experiences to learn from them (Feiman-Nemser, 2012). A meaningful connection between theory and practice must be the essence of teacher preparation and it is the responsibility of teacher educators to develop “pedagogies, models and structures that innovatively close the gap between practice and theory, making praxis possible” (Anderson & Freebody, 2012, p. 362).

PDSs were originally envisioned as exemplars of such productive educational environments because they made it possible to blend theory and practice into powerful clinical experiences for teacher candidates. It was assumed that these types of experiences would produce more effective teachers. Recent research into the problem of teacher attrition has indeed shown that substantive clinical experiences, such as practice teaching, not only contribute to the development of expertise by providing opportunities to observe the teaching of others and to receive substantive feedback on one’s teaching, they also contribute to teacher retention

(Ingersoll et al., 2014). Teachers who have participated in these types of experiences are more likely to stay in teaching and continue their careers as teachers for longer than do teachers who did not have these clinical experiences in their preparation programs (Ingersoll et al., 2014).

What are the Processes that Facilitate the Work of a PDS?

Theory and practice are abstract concepts. In reality, PDS work is done by people who come from two different institutions, a university and a school, and the institutions are identified with these abstract concepts—the university with theory and schools with practice. However, as Anderson and Freebody (2012) wrote, “The theory-practice divide is made and therefore can be un-made if there is the institutional will to do so” (p. 360). To create a PDS and ‘un-make’ the theory-practice divide requires the desire to do so and positive relationships among the people who work in these two institutional settings. The processes that facilitate the work of a PDS are the result of positive relationships that develop from trust and respect; trust and respect are in turn the product of communication and familiarity (Robinson & Darling-Hammond, 1994).

To develop familiarity takes a lot of time, a lot of communication (Robinson & Darling-Hammond, 1994), and a willingness to be flexible. Ultimately, people must sit down together and talk to one another. Meetings, though frequently disparaged, are in fact the place where much of the work of creating a PDS occurs. In these spaces, dialogue can happen and it is through dialogue that shared understanding is developed (Johnston-Parsons, 2012). In addition, “opportunities to communicate and share in direction-setting both solidify the mutual trust and respect that are essential for collaborations and contribute to the team learning and shared vision that motivate continued work together” (Robinson & Darling-Hammond, 1994, p. 212). The process of working together is enacted through relationships that are strengthened by openness and flexibility (James et al., 2015), and built upon a foundation of the reciprocal processes of dialogue and trust. Trust is necessary to engage in meaningful dialogue (Johnston-Parsons, 2012) because without trust people are unlikely to say what they believe and thus not achieve an authentic shared understanding. The reciprocal is also true: Honest dialogue is the means through which trust is developed because when people have shared their beliefs, viewpoints, hopes, and fears, they begin to trust one another.

PDS Work is Complex

Many scholars have commented on the extraordinary complexity of teaching practice (Ball & Forzani, 2009; Cochran-Smith, 2014; Grossman et al., 2009; Hollins, 2011). If teaching is complex, how much more complex is PDS work that situates teaching practice within a nexus of different multi-faceted institutions, each of which is embedded in multiple contexts (Grossman, 2005)? An additional layer of complexity is added because for a PDS, the learning of P-12 students is viewed as just one of several significant goals. Wiseman (2011) worried about the complexity of PDS work and the difficulty this created for evaluating the effectiveness of PDSs, explaining that,

The diversity of partnership processes, funding mechanisms, local needs and goals, and data collection procedures are only some of the unique features of partnership that inhibit common reporting or standardization. The very nature of PDS formation, which often

emerges from unique local needs or individual relationships, interferes with standardized response and accountability. The varieties of PDS goals, processes, and accountability methods make it difficult to cross-analyze or go beyond what many consider an anecdotal approach to discussing outcomes. (p. 569)

Though the complexity of PDS work may make research and evaluation in this area seem daunting, it might be possible to view this characteristic not as a liability but as an asset. Our perspective on complexity might be changed by recognizing that growth and development are more likely to occur when a variety of viewpoints are considered. Systems and structures must be re-imagined to allow for productive change (Basile & Gutierrez, 2011). Thus, complexity might even be considered necessary: “To produce innovation, more complexity is essential; more relationships, more sources of information more angles on the problem” (Rosabeth Moss Kanter, *The Change Masters*, p. 148, cited in Robinson & Darling-Hammond, 1994).

Reframing and Revisiting the Questions

The preceding brief review of the history and purpose of PDS work and the processes that make it possible have highlighted the complexity of this work and brought us no closer to a definition of a PDS. In this part of the paper the presenting question(s) will be considered from both a theoretical and practical perspective. In the first section, three theories currently being used in the field of teacher education will be explored and in the second section the impact of these theories on the presenting questions will be addressed. A third section will present a review of research into the impact of specific pedagogical practices in the context of PDSs. The final section of this part of the paper will re-visit the original question: What is a PDS?

At this juncture, I propose to simultaneously broaden our perspective by making better use of theory, and narrow our perspective by becoming more firmly grounded in the world of practice. Integrating theory and practice means that we do not have to choose between them. However, we should not abandon both and become mired in rules without meaning and action without purpose. Rather, the integration of theory and practice means using each to clarify and provide direction for the other. Thus, it is possible to be at once more theoretical and more clearly focused on specific practices.

It is important to become more intentional and explicit in our use of theory because theories provide ways to explain what happens and reflect on the strengths and weaknesses of our practice (Johnston-Parsons, 2012). Though the strong focus on practice has been and continues to be a foundation of PDS work, this does not require that we abdicate a focus on theory, as Tobin (1995) explains: “The practicality of our teaching and scholarship is a virtue which only becomes a deficit when it lacks an active engagement with theory” (p. 223). Also, as Forester (1989) reminds us, “Theories do not solve problems in the world, people do. Nevertheless, good theory...can help alert us to problems, remind us of what we care about, or prompt our practical insights into the cases we confront” (p. 12). Finally, a meaningful use of theory can encourage us to examine new and perhaps better questions and guide us to a more profound understanding of the work we have done and of the work that remains to be done. The next section will examine several theories that have been recently explored in the teacher education literature that might guide the search for more productive questions.

Theories in Teacher Education

This section briefly discusses cultural historical activity theory (CHAT), the theoretical work of Deleuze and Guattari (1987), and investigates the use of complexity theory in teacher education as proposed by Cochran-Smith et al. (2014). The purpose of presenting these theories is not to imply that any one of them *should* be used in future research and writing about PDSs, but rather to show how they have been employed, and to provide examples of how a deeper engagement with theory might clarify our understanding of PDSs. All three of these theoretical frameworks are useful for our engagement with PDSs because they highlight the indeterminate and multi-faceted nature of all human endeavor.

CHAT, for example, emphasizes the collective nature of learning and is based on the premise that learning results from action situated within specific contexts (Ellis, Edwards, & Smagorinsky, 2010). Because context and activity are so completely intertwined, the process of learning to teach is made more challenging by differences between the school and university settings in which teacher candidates participate (Jahreie & Ottesen, 2010). However, the perspective provided by CHAT makes evident that these challenges are not necessarily negative. Specifically, CHAT can provide a useful lens for teacher education because contradictions and tensions are seen not as problematic, but as productive: “By centering the activity of teacher learning in the contradictory, conflictual spaces among the university, school, and community’s knowledge and practice, the possibility for collaborative efforts around these contradictions can lead to remediation of novice teachers’ learning” (Zeichner, Payne & Brayko, 2015, p. 125). The usefulness of CHAT as a theoretical framework is that it encourages teacher educators to consider the discontinuities between schools and universities not as problems, but as spaces within which powerful learning can occur for all participants. Thus the inevitable differences that arise should be used as opportunities for growth rather than as a justification to diminish or discontinue the work (Zeichner et al, 2015).

The theoretical framework proposed by Deleuze and Guattari (1987) also eschews constraining definitions and tidy cause-effect analyses. They use the metaphor of the ‘rhizome’ and consider organizations, action in the world, and even theories to be ‘rhizomatic,’ that is, non-linear, non-hierarchical and non-symmetrical. From this vantage point any description that focuses on clear-cut analysis will necessarily miss much of the messy and unpredictable and important ‘stuff’ that happens below-ground.

‘Assemblage’ is another significant concept in their framework. They suggest that we should not attempt to study things in isolation, but instead focus on the connections among things. An assemblage is created by how we look at a situation, so we might choose to view as an assemblage a specific teacher candidate-mentor teacher-student group-school building-university professor-school principal. Thus, within any given school or classroom there are a whole host of different possible combinations or sets of connections and Deleuze and Guattari (1987) use the term assemblage to describe each of these sets of connections. They also emphasize emergence and contingency as ways of describing the lack of predictability of assemblages—until a situation plays out you cannot be sure what will happen. Small events can have big effects. ‘Becomings’ has to do with appreciating that things are in flux and it is only in interaction with other elements in an assemblage that identities and meanings form, and even then only temporarily.

Strom (2015) used Delueze and Guattari's (1987) theory in her study of a first year teacher because it enabled her to attend to varied contexts within which the work was situated, and to recognize the vast number of factors that influence even the smallest pieces of teaching practice:

A rhizomatic framework offers a way to conceptualize teaching as non-linear, multiply constituted, and inherently complex processes....Viewing teaching as assemblage means...the teacher is no longer seen as an autonomous being...instead she is considered one element working within a constellation of multiple elements, all of which work together to jointly construct or shape her teaching practice....teaching is a collectively negotiated activity. (p. 322)

A review of PDS history, purpose, and the processes that support them confronts us with the extraordinary complexity inherent in even a single PDS. This complexity has confounded attempts at definition and frustrated the search for answers to questions about effectiveness and sustainability. Recent scholarship in teacher education has explored complexity theory, as used in sociology, to propose a new approach, "an opening and broadening perspective that invites new questions, methods, and combinations of research tools" (Cochran-Smith, et al., 2014, p. 16). A broader perspective may be exactly what is needed to help us grapple with the struggles we are currently encountering in the PDS community. A perspective that highlights the power of relationships, acknowledges the enormous variety and unpredictability of our community, recognizes the emergent nature of most PDS partnerships, accounts for the lack of linear mechanisms of change, and yet still enables us to consider how we might learn from and support one another would be profoundly beneficial to the ongoing study of PDSs. In a recent article, Cochran-Smith and her colleagues (2014) have offered a perspective that fulfills all these needs as well as, perhaps most importantly, showing how complexity theory can guide the field towards more powerful and productive questions.

First, these authors explain that studies using complexity theory "need to account for and foreground relationships, interactions, and processes across levels" (p. 28). Second, acknowledging variety

and unpredictability...requires...more complex and contingent notions of agency and responsibility that depend on deep understanding of the local (e.g., initial conditions, sequences, and transformative events) linked to larger understanding of processes and outcomes at various systems levels that are widely variable but not inexplicable. (p. 21)

Third, complex systems are recognized as emergent in this theoretical framework: "Their change and growth occurs as a bottom-up emergent process, rather than as a top-down directed process" (p. 25). In addition, complexity theory rejects linear notions of cause and effect, but does not reject "the idea that things have causes...Understanding cause as complex, multiple, and contingent is quite consistent with focusing on the particulars of local contexts" (p. 20). And despite the variety, fluidity, and contextualized and emergent nature of educational settings, complexity theory proposes that it is possible to "contribute insights about the particular that are also useful beyond the local context and beyond a single moment in time" (p. 19). Finally, using complexity theory to engage in a reconceptualization of teacher education

is a rich source of questions for investigation: *How do teacher education program systems interact with schools as systems?...What learning opportunities for teacher candidates emerge from different types of interactions and relationships? To what extent*

are teacher candidates' abilities to enact teaching that enables learning for all students influenced by different school system/teacher education system interactions and relationships? How do these influence students' learning opportunities and outcomes?. (p. 26)

The Impact of Theory: A Need for New Questions

Using what we have learned from a quick review of CHAT, Delueze and Guattari (1987), and complexity theory it has become apparent that we may have been asking the wrong questions. I suggest that we need to move from such deceptively simple questions as, “What is a PDS?” to more generative questions. If classroom teaching is complex, which it undoubtedly is, how much more complex is PDS work that exists at the intersection of multiple sets of institutions and teaching traditions? If our vision of teaching recognizes complexity, then so must we recognize the complexity of “being a PDS.” And in fact, as a field we have generally acknowledged that “The inherent nature of PDS work [is] locally constructed in collaborative processes...in customized formats closely linked to the particular conditions within each partnership” (Wong & Glass, 2011, p. 411). Thus asking the question, “What is a PDS?” is a potentially reductionist approach that assumes a linear logic and might lead to the construction of a binary (PDS/not PDS) that limits both accessibility and potential. As some have noted “the feasibility of maintaining a ‘perfect’ PDS becomes more and more difficult” (Mitchell et al., 2014, p. 126). In addition, by focusing on the definition of a PDS we limit our ability to study the impact of our practices. It is not possible to study of the impact of a PDS because a PDS is not a coherent entity—it is a contextualized combination of many variables. Each PDS is a unique assemblage of specific people, places, buildings, policies, geographies, furniture, attitudes, and climate.

Because every PDS is a unique assemblage, the search for clarity may obscure the complex and contextualized nature of all PDS work and divert our attention from having conversations, making choices, and taking action. Rather than asking for definitions of a PDS, our community would be better served by asking such generative questions as: “What practices are enabled and facilitated by PDS partnerships?” and “What practices are most effective for what ends in which contexts?” Therefore, just as a deeper engagement with theory leads us to ask different questions, so these questions will lead us back to a stronger investigation of practice. By asking a different set of questions, it will be more feasible to find answers to queries about effectiveness and sustainability. We will be able to consider what practices are enabled by PDSs and to examine those practices within their local context as we take into account the myriad of variables that make up each specific example of PDS-enabled activity. Our focus should now be on identifying and creating contexts that facilitate a range of useful, productive, and meaningful pedagogies, as well as on examining those specific pedagogies themselves. It will be important to “identify the specific kinds of uniquely configured, research-based pedagogy that supports” learning of teacher candidates in PDS settings (Yendol-Hoppey & Franco, 2014, p. 19) and to investigate the impact of specific, PDS-enabled pedagogies on the learning of P-12 students.

A Focus on Specific Practices

The attempt to clearly define a PDS in order to synthesize the impact of such structures will both limit and constrain our field of practice and the research that we conduct. I would argue that it is not possible nor would it be advantageous to have such a unified, but narrow, approach. Our field needs a more nuanced, and ultimately richer, view of the work we do and the impact it has. Thus, the focus of inquiry should change from ‘What is a PDS?’ and ‘Are PDSs effective?’ to, “What practices are enabled and facilitated by PDS partnerships?” and “What practices are most effective for what ends in which contexts?” It turns out, of course, that much of this scholarship already exists, because we as a community have been hard at work for many years. There is a long-standing body of research that has explored the pedagogies of teacher education that have been made possible by PDS partnerships. For example, Yendol-Hoppey and Franco (2014) found that,

teacher educators developed integrated coursework and fieldwork using focused observation, elements of the inquiry process, and coaching/mentoring. In combination, these pedagogical approaches collaboratively offered by university and school-based teacher educators created links between theory and practice, building knowledge for, in and of practice. (p. 30)

These authors also noted that classrooms where PDS mentors and teacher candidates work together are spaces where “pedagogies of engagement and formation” are more likely to be employed (Yendol-Hoppey & Franco, 2014, p. 25). A number of other examples of the clinically-rich practices enabled by PDSs have been reviewed (e.g., Dresden, Kittleson, & Wenner, 2014) and thoroughly described (e.g., Kittleson, Dresden, & Wenner, 2013) in various publications.

Teitel (2004) pointed out that over the years there has been an increasing commitment to examining the impact of the pedagogical practices embedded in PDSs. Though this research has primarily described and investigated the impact of specific practices on teacher candidates, there is a more recent trend to study the impact of specific practices on students and teachers in the K-12 system, as well. For example, research has shown that a middle-school project that succeeded in getting students to think more deeply about citizenship was the direct result of PDS structures (Pellegrino et al., 2014), and that teams, developed within the context of a PDS partnership, were able to engage in child-centered practices “that would not otherwise be possible” (James, et al., 2015, p. 60).

Along with studying the practices that are embedded within PDSs and the impact of these specific practices, scholars have cautioned that it will be important to consider carefully what counts as impact (Teitel, 2004). As James and her colleagues (2015) asked, “How do we measure the degree to which children are benefitting from PDS work? Beyond test scores and retention rates, what are the markers by which PDS work is deemed worthwhile for the lives of students?” (p. 53).

Despite this warning, we have a substantial body of literature, merely hinted at in this paper, which indicates the vibrant activity going on in PDS settings. And this is exactly the type of research that needs to occur in order for PDSs to fulfill their potential. Studies of specific practices in specific contexts should be the foundation of our collective research agenda. “The community of praxis approach...albeit modest and context-specific, demonstrates the potential

of effective partnerships” (Anderson & Freebody, 2012, p. 374). Small, thoughtful investigations will enable us to understand our own endeavors and communicate them effectively to others, because as Linda Darling-Hammond (1994b) has said, “the work of restructuring—and the ideas that finally count—are entirely local” (p. 19).

Questions of effectiveness are more successfully addressed when the complexity of any given PDS is acknowledged and when the research focus is local, specific, and contextualized. Similarly, questions about the sustainability of PDSs are dependent on recognizing and responding to their inherent complexity, “the roles, structures, and governance models must become more complex...This shift is essential to long-term sustainability” (Basile, & Gutierrez 2011, p. 512). And just as questions of effectiveness require a broader, more theoretical lens at the same time that they require a greater focus on local and specific practices, PDSs are more likely to be sustained when the vision that undergirds them is broader (Zeichner et al., 2015) and when the structures that support and surround them are adaptable (involving equal parts of chaos and order) (Johnston-Parsons, 2012).

What is a PDS? Revisiting the Question

Though we have moved beyond this potentially reductionistic question, we can still consider the meaning of the term, PDS. I would suggest that a PDS is not a thing; rather, it is a set of relationships. A PDS is not a product; instead, it is a process. Like Dewey’s description of democracy, a PDS “involves individuals in communication with others in constructing the community, a process that is ongoing” (Johnston-Parsons, 2012, p. 74). And it is the role of leaders of this community to “coordinate things in ways that [allow] for more collaborative practices to evolve” (Johnston-Parsons, 2012, p. 86). Viewed in this way, a PDS is a context, a community, constructed (and continually re-constructed) through conversation and dialogue. Further, the community of a PDS has a responsibility to enable practices that integrate theory and practice to benefit learners. If there were a defined model of a PDS, it could be implemented or imposed. However, if PDSs are ‘places of becoming,’ constantly being co-constructed and re-envisioned, then their development will take time and there will be no point of arrival. Thus, as scholars and practitioners, we must focus on the processes of dialogue and the actions that follow because, quite simply, there is nothing else.

Dialogue

To showcase the conversation that I believe is the essence of PDS work, I sent an early draft of this paper to several partners (for a description of our PDS partnership see Dresden, Gilbertson, & Tavernier, 2016). Their thoughts are italicized below and my responses follow.

I'm wondering about the role of leadership as it relates to both PDS sustainability and PDS practices. Many reforms are often leader-dependent in that when the leader leaves the reform quickly follows. In our case, we've been fortunate in that most, if not all of our school-based leaders have been in place since the inception of our PDS partnership. That's not the case on the university-end. A couple of key players have moved on and the initial professor in residence has retired. I'm wondering if the same had been true on the

District end (loss of the superintendent, retirement of several PDS principals), how this would have impacted the partnership, if at all?

I'm also wondering about the merging of theory and practice that you've developed in the article. How do we begin or continue to carve out time for discussions of both—and build that into the sustainability of the partnership? How can we continue and expand the use of those on the university end who are immersed in those practices?

—Associate Superintendent for Instructional Services

I wonder about the issue of change in leadership, too. I suppose we can't know for sure. My hope is that if our partnership is strong in many ways, includes lots of people, and most (if not all) people feel that there are benefits from the work we do together, the partnership will continue. I think we have also talked about how important good communication at multiple levels within and across institutional boundaries is to the success of our partnership. But I suppose the bottom line is that we need to be in it because it works for now and because we think it is important work that helps learners of all ages...and we can't worry about the rest. Your second question about merging theory and practice—maybe we should put that on an agenda for a meeting and talk about what that looks like to us...and how we would like it to look for our partnership.

I am drawn to the section on sustainability. Perhaps it is because of my unique position, but I see structure, parameters, measurable outcomes, clear goals, and well-defined roles as all critical components to the sustainability of our relationship. In my role, their absence may be detrimental to my effectiveness as a PIR.

—District-wide Professor-in-Residence

Yes, as much as I argue for openness and flexibility, if there is not agreement on what each of us, as actors in our group of PDSs, is supposed to do, that will definitely threaten our ability, not just to sustain our work, but to do it at all. There is always a tension between the need for structure and the need to be open to possibility. And sometimes I think people get caught, not in the middle, but in the most difficult spaces of both: within some structures that may not provide enough guidance and other structures that limit the chance to be responsive to needs and try out new things. We'll need to find some ways to address these issues.

*Is it helpful to view PDS partnerships through a "communities of practice" lens?
PDS as a community of practice that informs, and is informed by theory?*

—Middle School Principal

Yes! I think it's incredibly helpful. I did some reading on this but don't think much of it made it into the draft of the paper that you read. Hopefully, this paper is an example of a community of practice, of a group of people working together, engaged in a variety of practices and reflecting on those practices together. Maybe we should try to write an article about this!

You wrote, "Positive relationships develop from trust and respect and these attitudes are in turn the result of communication and familiarity." I couldn't agree more with you on this point...two years into my current role as professor-in-residence at a PDS continues

to illustrate this point; what troubles me continually is the time needed to form these relationships is generally available on my end but typically not the classroom teachers' end, usually they'd have to add more time to their day. In the past semester or two we've been occasionally "pulling" mentors during school hours from their classrooms which gives us some time and allows teacher candidates some time solo with the students. Seems like a win-win to me, and the Principal.

—Professor-in-Residence from an elementary school

I think it's wonderful that you have worked out, if not a solution, at least a 'work-around' for that perennial problem of finding time to meet. And it is also a terrific example of a local solution. While the problem may be nearly universal, the solutions need to be created within a very specific set of circumstances (time, place, personalities, policies, etc.).

Reflecting on the Dialogue

These snippets of conversation highlight the links between theoretical issues (e.g., establishing trust) and individual, context-specific practices (e.g., finding ways for mentor teachers to have time to meet with a professor-in-residence). They also illustrate the messy and vague meanderings that characterize our PDS partnership and the ways in which it is co-constructed not through elaborate plans, but through small ideas, the expression of concern, and tentative wonderings.

This brief dialogue also provides a window into the meaning of collaboration in our partnership. We have re-conceptualized how, when and even why we work together. For us, collaboration does not mean speaking with one voice—rather it means providing space for conversation and honoring the individual voices of each and every member of our community. Thus, the structure of this article intentionally reflects the views of the author along with some independent yet connected perspectives offered by colleagues. Our goal is not agreement, nor even a collective vision, but a focus on inquiry and a commitment to moving forward together, one step at a time.

Conclusion

Reviewing the history and theoretical basis of the PDS movement has shown that attempts to develop clear and immutable definitions of a PDS will narrow our vision and impede our progress. The power of PDS work comes from grass-roots energy, the excitement of variety, and the strength of complexity. By recognizing and harnessing these characteristics we will be able to move forward as individuals, as groups of many shapes and sizes, and as an entire community of teachers, students, writers, researchers, scholars, and always, learners.

In this paper I have traced a path from questions of definition to questions about practice, rooted in theory. I began with the question of "What is a PDS?" and moved to what I believe will be more powerful and productive questions: "What practices are enabled and facilitated by PDS partnerships?" and "What practices are most effective for what ends in which contexts?"

These questions, when grounded in powerful theories, open the door for inquiry, for exploration, and for moving forward. Guided by the needs, abilities, interests, and capacity of our PDS

communities, we can investigate possibilities and strive to improve the learning environments that surround us. And now the path continues to what may be the most generative questions of all:

- What do we wonder?
- What is the next step for our PDS?
- What shall we do tomorrow?

References

- Anderson, J. J., & Freebody, K. (2012). Developing communities of praxis: Bridging the theory practice divide in teacher education. *McGill Journal of Education*, 47(3), 359-377.
- Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497-511.
- Basile, C. G., & Gutierrez, C. (2011). Universities, schools, and communities: A new generation of professional development school roles, structures, and governance. *Teachers College Record*, 113(14), 511-530.
- Breault, R., & Breault, D. A. (2012). *Professional development schools: Researching lessons from the field*. Lanham, MD: Rowman & Littlefield.
- Cochran-Smith, M., Ell, F., Ludlow, L., Grudnoff, L., & Aitken, G. (2014). The challenge and promise of complexity theory for teacher education research. *Teachers College Record*, 116(5), 1-38.
- Darling-Hammond, L. (1994). Introduction. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. vii-xii). New York, NY: Teachers College Press.
- Darling-Hammond, L. (1994). Developing professional development schools: Early lessons, challenge, and promise. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 1-27). New York: Teachers College Press.
- Darling-Hammond, L. (2006). How teacher education matters. *Journal of Teacher Education*, 57(3), 300-314.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus* (B. Massumi, Trans.). Minneapolis, MN: University of Minnesota Press.
- Dewey, J. (1938). *Experience and education*. New York, NY: Simon and Schuster.
- Dresden, J., Gilbertson, E., & Tavernier, M. (2016). University of Georgia and Clarke County School District: Creating a dynamic and sustainable district-wide partnership. *School-University Partnerships*, 9(1), 3-6.
- Dresden, J., Kittleson, J., & Wenner, J. (2014). Clinically rich practices in teacher education: Review and recommendations. In J. Ferrara, J.L. Nath, & I. N. Guadarrama (Eds.), *Creating visions for university-school partnerships* (pp. 43-60). Charlotte, NC: Information Age Publishing.
- Ellis, V., Edwards, A., & Smagorinsky, P. (2010). Introduction. In V. Ellis, A. Edwards, & P. Smagorinsky (Eds.), *Cultural-historical perspectives on teacher education and development: Learning teaching* (pp. 1-10). New York, NY: Routledge.
- Feiman-Nemser, S. (2012). *Teachers as learners*. Cambridge, MA: Harvard Education Press.

- Forester, J. (1989). *Planning in the face of power*. Berkeley, CA: University of California Press.
- Grossman, P. (2005). In pursuit of a dual agenda: Creating a middle level professional development school. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 50-73). New York, NY: Teachers College Press.
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P.W. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, 111(9), 2055-2100.
- Hollins, E. (2011). Teacher preparation for quality teaching. *Journal of Teacher Education*, 62(4), 395-407.
- Ingersoll, R. I., Merrill, L., & May, H. (2014). *What are the effects of teacher education and preparation on beginning teacher attrition?* Research Report (#RR-82). Philadelphia, PA: Consortium for Policy Research in Education, University of Pennsylvania.
- Jahreie, C. F., & Ottesen, E. (2010). Learning to become a teacher: Participation across spheres for learning. In V. Ellis, A. Edwards, & P. Smagorinsky (Eds.), *Cultural-historical perspectives on teacher education and development: Learning teaching* (pp. 131-145). New York, NY: Routledge.
- James, J. H., Kobe, J., Shealey, G., Foretich, R., & Sabatini, E. (2015). Authentic collaborative inquiry: Initiating and sustaining partner research in the PDS setting. *School-University Partnerships*, 8(2), 53-61.
- Johnston-Parsons, M., & PDS Colleagues. (2012). *Dialogue and difference in a teacher education program: A 16-year sociocultural study of a professional development school*. Charlotte, NC: Information Age Publishing.
- Kittleston, J., Dresden, J., & Wenner, J. (2013). Describing the “supported collaborative teaching model”: A designed setting to enhance teacher education. *School-University Partnerships*, 6(2), 20-31.
- Levine, M. (2010). *Developing principles for clinically based teacher education*. Washington, DC: National Council for the Accreditation of Teacher Education.
- Miller, L., & Silvernail, D. L. (2005). Wells Junior High School: Evolution of a professional development school. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 28-49). New York, NY: Teachers College Press.
- Mitchell, L. A., Nath, J. L., & Cohen, M. D. (2014). When a professional development school program becomes unsustainable: Trying to keep the best of both worlds. In J. Ferrara, J. L. Nath, & I. N. Guadarrama (Eds.), *Creating visions for university-school partnerships* (pp. 105-128). Charlotte, NC: Information Age Publishing.
- Murray, F. B. (1986). Goals for the reform of teacher education: An executive summary of the Holmes Group. *Phi Delta Kappan*, 68(1), 28-32.
- National Council for Accreditation of Teacher Education. (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning. Washington, DC: Author.
- Neapolitan, J. E., & Levine, M. (2011). Purpose and vision of professional development schools. *Teachers College Record*, 113(14), 306-324.

-
- Pellegrino, A., Zenkov, K., Sell, C., Calamito, N. (2014). Lifting as we climb: A citizen project in a professional development school setting. *School-University Partnerships*, 7(1), 64-84.
- Robinson, S. P., & Darling-Hammond, L. (1994). Change for collaboration and collaboration for change: Transforming teaching through school-university partnerships. In L. Darling-Hammond (Ed.), *Professional development schools: Schools for developing a profession* (pp. 203-219). New York, NY: Teachers College Press.
- Rutter, A. (2011). Purpose and vision of professional development schools. *Teachers College Record*, 113(14), 289-305.
- Strom, K. J. (2015). Teaching as assemblage: Negotiating learning and practice in the first year of teaching. *Journal of Teacher Education*, 66(4), 321-333.
- Teitel, L. (2004). Two decades of professional development school development in the United States: What have we learned? Where do we go from here? *Journal of In-service Education*, 30(4), 401-416.
- Teitel, L. (2011). Afterword. *Teachers College Record*, 113(14), 577-590.
- Tobin, J. (1995). Post-Structural research in early childhood education. In J.A. Hatch (Ed.), *Qualitative research in early childhood settings* (pp. 223-244) New York, NY: Greenwood Press.
- Wiseman, D. L. (2011). Response to section IV: What's needed now: Issues of professional development school accountability and sustainability in today's complex educational environment. *Teachers College Record*, 113(14), 567-576.
- Wong, P. L., & Glass, R. D. (2011). Professional development schools and student learning and achievement. *Teachers College Record*, 113(14), 403-431.
- Yendol-Hoppey, D., & Franco, Y. (2014). In search of signature pedagogy for PDS teacher education. *School-University Partnerships*, 7(1), 17-34.
- Yendol-Hoppey, D., & Smith, J. J. (2011). What do we know about accountability and resources in professional development schools? *Teachers College Record*, 113(14), 531-566.
- Zeichner, K., Payne, K. A., & Brayko, K. (2015). Democratizing teacher education. *Journal of Teacher Education*, 66(2), 122-135.

Janna Dresden is a clinical associate professor and coordinates the PDS partnership in her role as Director of the Office of School Engagement at the University of Georgia. Selena Blankenship is the former principal at Hilsman Middle School, a PDS. She currently serves as Director of Human Resources for Jackson County School System. Bob Capuozzo is a clinical assistant professor and the early childhood program coordinator at the University of Georgia. He is also a Professor-in-Residence (PIR) at an elementary PDS. Allison Nealy is a clinical associate professor at the University of Georgia and a former special education teacher. She serves as a District-Wide Professor-in-Residence in the area of special education. Mark Tavernier is Associate Superintendent for Instructional Services and School Performance for Clarke County School District. He has held a variety of positions during his 34 years in public education.

**Making Muffins:
Identifying Core Ingredients of School-University Partnerships**

Rebecca West Burns
University of South Florida

Jennifer Jacobs
University of South Florida

Wendy Baker
Hillsborough County Public Schools

Denise Donahue
Hillsborough County Public Schools

Abstract: National calls for transforming teacher education are harmonious – schools and universities must collaborate to transform teacher preparation (American Association of Colleges for Teacher Education (AACTE), 2010; National Council for the Accreditation of Teacher Education (NCATE), 2010). Rather than reinventing the wheel, the field of teacher education needs to capitalize on the knowledge, research, and experiences the PDS literature has generated over the past 30 years. In addition, PDSs will need to attend to the discourse surrounding clinical practice. Using three national documents: (1) the National Association for Professional Development Schools (NAPDS) Nine Essentials (2008), (2) the NCATE Blue Ribbon Panel Report (2010), and (3) the National Education Association’s (2014) report entitled *Teacher Residencies: Redefining Preparation through Partnerships*, we identify seven core ingredients of school-university partnerships. These core ingredients can serve as a framework that connects PDS to clinical practice, develops robust school-university partnerships, and keeps PDSs as the national leaders in the movement towards increased collaboration between schools and universities.

KEYWORDS: clinically rich teacher education, clinically-based teacher education, school-university partnerships, professional development schools, clinical experiences, field experiences

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;

7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
9. Dedicated and shared resources and formal rewards and recognition structure

Introduction

In 1997, Marilyn Johnston and colleagues wrote the book *Contradictions in Collaboration: New Thinking on School/University Partnerships*. In this book, they offered insight into the challenges and benefits of creating and sustaining professional development schools (PDSs). This book is somewhat therapeutic for any individual who works across the boundaries of schools and universities because the issues and tensions described feel as relevant today as when the book was published nearly 20 years ago. But beyond therapy, Johnston and colleagues raise thought provoking questions for our field. For instance, Johnston asks,

Do we have professional agreement that collaboration between schools and universities is the best way to reform teacher education and promote professional development, inquiry, and change? If my own college is a reasonable sample, I would have to say no. Many of my colleagues think that collaboration is not worth the time and money it requires and that it detracts from the scholarly agenda of the university. (pp. 92-93)

Twenty years later, her worries are being acknowledged. National calls for increased school-university partnerships indicate professional agreement that school-university partnerships are imperative to the successful implementation of clinical practice (AACTE, 2010; NCATE, 2010). And yet, like Johnston (1997), many of us who work in PDSs continue to face the same controversies from almost two decades ago. Perhaps this is because building and renewing partnerships is hard work; or perhaps it is because PDSs, as robust school-university partnerships, are complex and difficult for outsiders to dissect. Either way, communicating the essence of PDSs is imperative for the future of the PDS community and is, no doubt, a worthy endeavor.

Organizations like NAPDS began this charge almost a decade ago with their creation of the Nine Essentials (NAPDS, 2008). If such a charge was already answered, why do we need to revisit the question of *What is a PDS?* Like so many innovations, when PDSs moved from conceptualization to application, the concept of PDS was widely interpreted (Abdel-Haqq, 1998; Goodlad & Sirotnik, 1988; Field, 2009). Likewise, the notion of school-university partnerships is equally problematic. Some use the term school-university partnership and PDS interchangeably. Look at Johnston's text as an illustration. She uses school-university partnerships in her title but the entire book is about her work in a PDS (Johnston, 1997). We would not disagree that school-university partnerships and PDSs are closely connected. In fact, we would contend that all PDSs are school-university partnerships, but not all school-university partnerships are PDSs, particularly if they do not adhere to the NAPDS Nine Essentials (2008).

In addition to the complications from interchangeable terminology, the increase of school-university partnerships over the past 15 or more years has created additional language to describe school-university partnerships (Jacobs, Burns, & Yendol-Hoppey, 2014) resulting in a need for a common lexicon (Zenkov, Parker, Dennis, & Degregory, 2015). This special edition of *School-University Partnerships* is occurring at an opportune time. Dialogue around what

constitutes a school-university partnership is imperative if PDSs are to remain viable and be national leaders in teacher education. Now, more than ever, the PDS community needs to have a strong, unified voice for understanding and articulating the essence of PDSs. So how do we address the question of *What is a PDS?* We propose that rather than address the question of what is a PDS, a more timely question should be: *What core ingredients are essential for the kinds of school-university partnerships needed to transform teacher education?* To address that question, we need to draw upon what we know about PDSs.

Johnston and colleagues (1997) offer an analogy that provides imagery for what constitutes a PDS and what constitutes a school-university partnership. She claims that PDSs are like muffins. Muffins come in different sizes and flavors. Walk into any grocery store and you can purchase mini muffins, blueberry muffins, chocolate chip muffins, corn muffins, and even seasonal pumpkin-spice muffins to name a few. And yet, despite this diversity, Johnston argues that muffins have core ingredients that make them muffins. While they have other ingredients that add taste to the standard muffin, they all have core ingredients that make the muffin a muffin. We propose that like muffins, school-university partnerships should have “core ingredients” that make them a school-university partnership. While school-university partnerships may have other ingredients that make them special and unique, essentially adding “taste” to the partnership, they all should have “core ingredients” that make the particular school-university partnership a school-university partnership.

Process for Determining “Core Ingredients”

It is an exciting but potentially scary time for PDSs. At the national level, the focus on how best to prepare teachers has included greater emphasis on clinical preparation. National organizations like the AACTE and the Council for Accreditation of Educator Preparation (CAEP) (formerly known as NCATE) have been calling for increased school-university partnerships as the keystone for high quality teacher education (AACTE, 2010; NCATE, 2010). PDSs, as intentional school-university partnerships, are poised to lead this charge given the fact that PDSs have been in existence for over 25 years (Rutter, 2011). However, PDSs face competing concepts. PDSs are not the only innovations committed to school-university partnerships. Teacher residencies are another construct with parallels to PDSs. Organizations like the National Center for Teacher Residences are also creating a vision for teacher preparation (NCTR, n.d.). Multiple constructs with multiple visions have the potential to confuse, complicate, or even dilute clinical practice through robust school-university partnerships. To address this cacophony of constructs, we examined and compared the reports focused on school-university partnerships from three national organizations: (1) the NAPDS Nine Essentials (2008), (2) the Ten Design Principles from the NCATE Blue Ribbon Report (2010), and (3) the National Education Association’s (NEA) Report (2014) *Teacher Residencies: Redefining Preparation through Partnerships*. Through comparison, we identified core tenants or “ingredients” for what we believe will strengthen and articulate a vision of what constitutes a school-university partnership with the potential to transform teacher education.

Description of Organizations and Reports

In 2007, NAPDS, an organization dedicated to supporting school-university partnerships and professional development schools (NAPDS, n.d.) gathered scholars and practitioners from across the country to articulate a shared vision of PDSs. The result was the creation of the NAPDS Nine Essentials, which can be found on the organization's web site (www.napds.org/) and in the 2008 publication of *School-University Partnerships* (NAPDS, 2008).

Within a few years of the Nine Essentials, NCATE, another national organization focused on teacher education, also gathered scholars and practitioners from across the country to rethink teacher preparation. This group created a Blue Ribbon Panel Report called *Transforming Teacher Education through Clinical Practice: A National Strategy to Prepare Effective Teachers* (NCATE, 2010). In this report, the authors described 10 design principles for turning teacher preparation upside down to place clinical practice at the core of teacher preparation. The authors argued that schools and universities must collaborate and create school-university partnerships, such as those found in PDSs, to actualize the transformation of teacher education.

Most recently, the NEA, the largest national organization representing over three million educators, created a task force composed of K-12 educators, politicians, and the organization's staff to examine teacher residencies. The result was the publication of the report, *Teacher Residencies: Redefining Preparation through Partnerships* (NEA, 2014), which offered characteristics, components, and guiding principles for teacher residencies. In their report, they highlighted programs as exemplars of their guiding principles and two of the programs highlighted – West Virginia University and Montclair State University – were specifically identified as PDSs.

It is interesting to note that activity around school-university partnerships appeared to have momentum during the years of 2007 – 2014 and it may still be present as the field of teacher education moves toward transforming teacher preparation. Table 1 lists the NAPDS Nine Essentials, the NCATE Blue Ribbon Panel Report 10 Essentials, and the NEA's Guiding Principles.

Process of Comparison

First, we used the oldest document – the NAPDS Nine Essentials – as the anchoring document of comparison, and created categories from this document that were important to understand the construct (e.g. PDS, teacher residency) of each report. Those categories included: guiding principles, goals, purposes, missions, and recommendations. Next, we created a chart to compare the information from our search. We then looked across the information within the chart to identify commonalities that could exist as “core ingredients.” All commonalities were included in the “core ingredients.” However, when there were differences, the researchers discussed the relevance and importance of the difference to determine if it was essential in actualizing school-university partnerships that can actualize clinical practice and educational renewal. If the researchers felt it was essential in actualizing the reform narratives, it was included as a core ingredient.

Disclosure of Bias

We must disclose that all of the authors have experiences in school-university partnerships. Two have experiences in PDSs, one in a teacher residency, and one in both PDSs and teacher residencies. One of our authors has served on the Executive Board of Directors for NAPDS. We disclose this information because ultimately, it is our commitment to and care for collaboration between schools and universities that drives our passion for further investigation.

Table 1. Comparing the “Core Ingredients of School University Partnerships” with the Three Reports

<p>NAPDS Nine Essentials (2008)</p>	<p>NCATE Blue Ribbon Panel Report Ten Essentials (2010)</p>	<p>NEA Report on Teacher Residencies, Guiding Principles (2014)</p>	<p>School-University Partnerships for Transforming Teacher Education (2016)</p>
<p>1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;</p> <p>2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;</p> <p>3. Ongoing and reciprocal professional development for all participants guided by need;</p> <p>4. A shared commitment to innovative and reflective practice by all participants;</p> <p>5. Engagement in and public sharing of the results of</p>	<p>1. Student learning is the focus.</p> <p>2. Clinical preparation is integrated throughout every facet of teacher education in a dynamic way.</p> <p>3. A candidate’s progress and the elements of a preparation program are continuously judged on the basis of data.</p> <p>4. Programs prepare teachers who are expert in content and how to teach it and are also innovators, collaborators and problem solvers.</p> <p>5. Candidates learn in an interactive professional community.</p>	<p>1. Teacher residencies should be developed with the goal of not only preparing future teachers but also of serving as a mechanism to drive school renewal and improve student learning.</p> <p>2. Residency programs should be developed by local partnerships that bring together teacher preparation providers, school districts, and other stakeholders.</p> <p>3. Residency partners should decide together what learning experiences – how much time, the kinds of resources, and the quality of clinical experiences – their teacher candidates will need to become profession-ready.</p> <p>4. Residency partners should work together to ensure that the following signature components are in place –</p> <ul style="list-style-type: none"> - A selection, training, and feedback plan for clinical educators – those school-based and provider-based faculty that 	<p>1. A shared, comprehensive mission dedicated to equity for improved PreK-12 student learning and educational renewal</p> <p>2. Designated partnership sites with articulated agreements</p> <p>3. Shared governance with dedicated resources that foster sustainability and renewal for the partnership</p> <p>4. Clinical practice at the core of teaching and learning</p> <p>5. Active engagement in the school and local community</p> <p>6. Intentional and explicit</p>

deliberate investigations of practice by respective participants;

6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;

7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;

8. Work by college/university faculty and P-12 faculty in formal roles across institutional settings; and

9. Dedicated and shared resources and formal rewards and recognition structures.

6. Clinical educators and coaches are rigorously selected and prepared and drawn from both higher education and the P-12 sector.

7. Specific sites are designated and funded to support embedded clinical preparation.

8. Technology applications foster high-impact preparation.

9. A powerful R&D agenda and systematic gathering and use of data supports continuous improvement in teacher preparation

10. Strategic partnerships are imperative for powerful clinical preparation.

will be training teacher candidates

- A preparation curriculum that coherently integrates all field experiences with coursework
- Clinical experiences that provide ongoing opportunities for teacher candidates to plan and deliver lessons and then analyze and reflect on their own teaching practice with clinical educators and peers.
- Frequent assessment and feedback so candidates improve their skills.
- Coherent systems designed to support improved student learning.
- A requirement that residency candidates demonstrate their teaching knowledge and skill by successfully completing a classroom-based performance assessment before they are deemed profession-ready

9. Residency partnerships must develop data systems that support continuous improvement and accountability for both candidates and programs, and that also allow school districts and preparation faculty to exchange information.

commitment to the professional learning of all stakeholders

7. Shared commitment to research and innovation through deliberate investigation and dissemination

The Core Ingredients of School-University Partnerships

From our analysis, we identified seven core ingredients (see Table 1) that should compose every school-university partnership, and they include:

1. A shared, comprehensive mission dedicated to equity for improved PreK-12 student learning and educational renewal
2. Designated partnership sites with articulated agreements
3. Shared governance with dedicated resources that foster sustainability and renewal for the partnership
4. Clinical practice at the core of teaching and learning
5. Active engagement in the school and local community
6. Intentional and explicit commitment to the professional learning of all stakeholders
7. Shared commitment to research and innovation through deliberate investigation and dissemination

For teacher preparation to be transformed, it will be critical not only to create school-university partnerships but also to recognize that all school-university partnerships share these common seven ingredients.

Core Ingredient 1: Shared, Comprehensive Mission

The first core ingredient is a shared, comprehensive mission dedicated to equity for improved PreK-12 student learning and educational renewal. All three reports included information about a mission. While the NCATE Blue Ribbon Report (2010) focused solely on teacher preparation, the other two (NAPDS and NEA) included elements broader than teacher preparation. The NAPDS Nine Essentials (2008) indicated the mission should include equity and be greater than either institution, and the NEA Report (2014) on teacher residencies mentioned school renewal and improved student learning. Our proposed “core ingredient” unites all three missions to compose a more inclusive and robust mission for school-university partnerships.

When schools and universities decide to create a partnership, one of the most important conversations is the task of creating a mission. In the spirit of collaboration, this mission needs to be beyond either institution’s individual goals. When PDSs were first emerging, symbiotic relationships were encouraged. John Goodlad (1988) said, “Symbiosis is a provocative concept. Viewed positively, it refers to unlike organisms (or institutions) joined intimately in mutually beneficial relationships” (p. 14). Creating a mission where both institutions receive benefits is tempting, but if teacher education is truly to be transformed, then the benefit of individual institutions should not be the primary goal. Instead, the goal needs to be more selfless than selfish. In lieu of symbiosis, partnerships need to focus on the collective good without sacrificing the attainment of self-interest (Schlechty & Whitford, 1988). This means that the partnership needs to make a commitment to a mission for the common good. Working for the common good includes a commitment to equity for all stakeholders.

John Goodlad and his National Network for Educational Renewal was one of four visionaries in the history of PDS (Rutter, 2011). Goodlad’s (1988) vision of school-university partnerships not only included a mission beyond either institution, but he saw school-university partnerships as the vehicle for, what he termed, simultaneous renewal. Goodlad believed that if schools and universities could work together in pursuit of a common good, then together they

would push back and change bureaucratic structures in both institutions. We believe that if Goodlad's vision is to be actualized, then the best hope is through school-university partnerships that are able to actualize comprehensive missions dedicated to equity and educational renewal.

Core Ingredient 2: Designated Partnership Sites

The second core ingredient is the identification of designated partnership sites with articulated agreements. All three reports referenced partnerships between schools and universities in their vision, but we feel that identifying dedicated partnership sites is imperative in the creation of school-university partnerships.

In some ways, this ingredient seems like common sense; however, actualizing this practice may not be as common. The term school-university partnership seems to imply the identification of specific schools that are willing to intentionally become specific and consistent partnership sites. However, the term school-university partnership could be interpreted more broadly as the loosely connected practice of a university placing teacher candidates in schools. If schools and universities can work together to identify partnership sites and express that commitment through formal agreements, transforming teacher education becomes more possible. Developing robust school-university partnerships takes time, so designated partnership sites may be identified based on their commitment to developing a relationship over time. These partnerships must be open and committed to the other ingredients such as professional learning for all, creating an engaged learning community, and innovation. This could include a willingness to hold teacher candidate classes at the school site. Designated and consistent partnership sites allow for building the capacity of all learners over time. These sites can potentially become centers of excellence that transform the way teaching and learning are conceptualized and practiced.

Core Ingredient 3: Shared Governance and Resources

The third core ingredient is shared governance with dedicated resources that foster sustainability and renewal for the partnership. This core ingredient is not new to the PDS literature. In fact, shared governance and shared resources appear in the NAPDS Nine Essentials (2008), but the idea of shared governance was not universal across all reports. The NEA Report (2014) alluded to the notion of shared governance by using the term "shared decision-making." In our opinion, shared governance implies shared decision-making. Examples of shared decision-making could include schools and universities collaboratively deciding where teacher candidates are placed as well as the type of professional learning that meets the school's goals. In addition, schools and universities can work together to develop shared routines, rituals, and celebrations. In fact, we would contend that the absence of this ingredient could negate any potential for the development of school-university partnerships and ultimately the transformation of teacher education.

In addition to shared governance, resources are another important core ingredient referenced in all three reports. The NAPDS Nine Essentials (2008) identified shared and dedicated resources as imperative to the function of PDSs whereas the NCATE Blue Ribbon Panel Report (2010) referenced funding more broadly. NCATE (2010) argued that transforming teacher education through school-university partnerships required dedicated funding and also a

reallocation of resources at both universities and schools. Another identified type of resource allocation is restructured staffing. An example of both a shared resource and a restructuring of staffing would be the creation of boundary-spanning roles. The NAPDS Nine Essentials (2008) specifically identified boundary-spanning roles, but the notion of boundary-spanning was absent from the other documents. The NCATE Blue Ribbon Panel Report (2010) included clinical educators and clinical coaches from both schools and universities, but did not specifically include formalized boundary-spanning roles. We feel that if school-university partnerships are to actualize a comprehensive mission committed to equity and educational renewal, then creating structures that permit shared governance, the dedication of resources, and the creation of boundary-spanning roles are imperative.

Core Ingredient 4: Professional Learning for All

The fourth core ingredient is an intentional and explicit commitment to the professional learning of all stakeholders. While all three reports were committed to teacher preparation, only the NAPDS Nine Essentials (2008) referenced a commitment to ongoing and reciprocal professional development. The NEA Report (2014) on teacher residencies focused primarily on the qualifications of the clinical educator, also called the mentor teacher, suggesting that this individual required training. The NCATE Blue Ribbon Panel Report (2010) advocated for strengthening the selection processes of clinical educators. The NEA Report (2014) on teacher residencies asked how partners might be involved in professional learning.

If school-university partnerships are to actualize the comprehensive mission of a shared focus on student learning and educational renewal, then attention to the professional learning of all individuals needs to be a focus. In school-university partnerships, the focus can no longer be solely on teacher preparation. Instead, the focus needs to be on a broadened conceptualization of teacher education. Teacher education should be seen as a continuum of lifelong learning from teacher preparation through in-service teacher education (Feiman-Nemser, 2001). Some PDSs have been able to actualize this continuum (Burns, Yendol-Hoppey, & Jacobs, 2015). School-university partnerships should work collaboratively to consider ways to strengthen not only the learning of teacher candidates as the future workforce but to build capacity of teachers, mentor teachers, teacher leaders, administrators, and university faculty. School-university partnerships of the future need to enact what PDSs have made a commitment to already, the intentional and explicit commitment to resources and structures that facilitate the learning of all stakeholders.

Core Ingredient 5: Centering Clinical Practice

The fifth core ingredient is clinical practice at the core of teaching and learning. The direct mention of clinical practice was most prominent in the NCATE Blue Ribbon Panel Report (2010). However, all three reports alluded to the notion of clinical practice. The NEA Report (2014) on teacher residencies mentioned that clinical experiences needed to be developed and implemented in coordination with academic coursework. The NCATE Blue Ribbon Panel Report (2010) argued that clinical practice should occur in every aspect of the curriculum in the preparation of teachers. In fact, all but the NEA Report (2014) on teacher residencies specifically used the medical model of doctor preparation as an aspiring model for teacher preparation. It was

interesting to note that the NAPDS Nine Essentials (2008) were the least expressive about clinical practice.

So what constitutes clinical practice? The reports did not clearly articulate definitions of clinical practices but they did describe characteristics. One of the characteristics was the close coupling of practice, content, theory, and pedagogy. This was articulated in the NCATE Blue Ribbon Panel Report (2010) when they claimed that teacher preparation programs needed to be, “fully grounded in clinical practice and interwoven with academic content and professional courses” (p. ii). The NEA Report (2014) on teacher residencies advocated for an integrated curriculum of field experiences and coursework with mastery of subject knowledge and pedagogical content knowledge. An integrated curriculum that is grounded in clinical practice would require significant changes for schools and universities, specifically with regard to how university faculty are rewarded and how P-12 schools are staffed (NCATE, 2010). The inclusion of clinical practice as a core ingredient of school-university partnerships is essential for the successful transformation of teacher education.

Core Ingredient 6: Engagement in School and Local Community

The sixth core ingredient is active engagement in the school and local community. All three reports discussed school-university partnerships including the aspect of community. The NCATE Blue Ribbon Panel Report (2010) spoke specifically about the importance of teacher candidates learning within the context of a professional community. The NEA Report (2014) on teacher residencies referenced the importance of teaching and reflection within a community of clinical educators and peers. However, the NAPDS Nine Essentials (2008) expanded upon the idea of community. Essential #2 stated, “A school-university culture committed to the preparation of future educators that embraces their active engagement in the school community” (NAPDS, 2008, p. 2). This NAPDS Essential was more encompassing than the other descriptions as it communicated the notion of a collaborative school-university culture that is vested in the school community.

While we agree that a core ingredient of school-university partnerships is engagement within the school community, we also believe that community should be conceptualized more broadly beyond the school walls. In order to work for the common good and advance educational equity, school-university partnerships need to include engagement in the local community as well. Schools need to connect to the local community to build bridges between what occurs in schools and the home, incorporate cultural norms and patterns from the home and community, and understand the challenges as well as assets within the community (Noguera, 2003; Villegas & Lucas, 2002). By conceptualizing community as both the school and the greater local community, our core ingredient is a more inclusive notion of community.

Core Ingredient 7: Shared Commitment to Research and Innovation

The seventh core ingredient is a shared commitment to research and innovation through deliberate investigation and dissemination. Both the NAPDS Nine Essentials (2008) and the NCATE Blue Ribbon Panel Report (2010) indicated that research and innovation should be an integral component. While the word research was not specifically used in the Nine Essentials, two of the essentials referenced research and innovation. NAPDS (2008) Essential #4 stated, “A

shared commitment to the innovative and reflective practice by all participants,” and Essential #5 stated, “Engagement in and public sharing of results of deliberate investigations of practice by respective participants” (NAPDS, 2008, p. 3). Research is implied in these essentials but the term was not specifically used. On the other hand, the NCATE Blue Ribbon Panel Report (2010) specifically identified a powerful research and development agenda as one of the 10 design principles for clinically rich teacher education. Interestingly, the NEA Report (2014) on teacher residencies did not specifically include research and innovation as a component of teacher residencies.

Even though research and innovation were not present in all three reports, we feel that they should be included as a core ingredient of school-university partnerships. If school-university partnerships are to actualize educational renewal, then they must be committed to investigating innovations that actualize that agenda. Likewise, if they are committed to clinical practice and the professional learning of all, then research and innovation are imperative to foster learning. Research and innovation are not the sole responsibility of researchers in universities. Teacher inquiry is considered a signature pedagogy in the PDS literature related to research and innovation (Yendol-Hoppey & Franco, 2014). Teacher inquiry is the systematic study of a teacher’s own practice (Dana & Yendol-Hoppey, 2009) and is sometimes used simultaneously to mean practitioner research. In school-university partnerships, both research and practitioner research should be valued. By including research and innovation as a core ingredient, school-universities remain committed to their mission and they value the role of research for scholars and for practitioners.

Discussion and Implications

National calls for transforming teacher education are loud and clear - schools and universities must work collaboratively. As an example of this charge, the NCATE Blue Ribbon Panel Report (2010) stated:

All teacher preparation programs and districts have to start thinking about teacher preparation as a responsibility they share, working together. Only when preparation programs become deeply engaged with schools will their clinical preparation become truly robust and will they be able to support the development of candidates’ urgently needed skills and learn what schools really need. (p. 3)

Clearly, the future of teacher education is through school-university partnerships; however, loosely developed school-university partnerships will not be able to meet the calls for robust clinical preparation. For that reason, we drew upon recommendations from three national documents to blend the knowledge of PDSs, clinically rich teacher education, and yearlong teacher residencies to identify seven core ingredients of school-university partnerships. We hope that the articulation of these seven core ingredients will provide guidance and support for the development of robust school-university partnerships.

It is an opportune time for PDSs. However, PDSs will need to remain innovators if they want to stay at the forefront of teacher education. We feel that for PDSs to survive, the NAPDS Nine Essentials should be revised to include specific attention to the discourse surrounding clinical practice. NAPDS has the potential to be the leading organization on clinically rich practice found in robust school-university partnerships, but to do so, NAPDS needs to broaden their message and vision. PDSs cannot remain a niche community. “The nation needs an entire

system of excellent programs, not a cottage industry of pathbreaking initiatives” (NCATE, 2010, p.ii). By attending to the national discourse on clinical practice and offering a strong, unified voice to define PDSs and what they can do to transform teacher education, PDSs can thrive. Transforming teacher education will require robust school-university partnerships, and who better to be the national leaders of this movement than PDSs? Rather than reinventing the wheel, the field of teacher education needs to capitalize on the knowledge, research, and experiences of the PDS literature created over the past 30 years.

To return to the muffin analogy, robust school-university partnerships focused on clinical practice will require individuals who can work across the boundaries of schools and universities and who can teach in and through clinical practice. These clinical educators, whether they are school- or university-based, are all teacher educators. They are the “chefs” who must bring the ingredients together to make the muffins. Much like chefs who attend years of technical training to learn their craft, we contest that the same attention needs to be given to teacher educators. Working in and with schools is challenging (Johnston, 1997) and requires individuals with the knowledge, skills, and dispositions to engage in the daily practices of building and facilitating collaboration and community in the partnership (Jacobs, Yendol-Hoppey, & Dana, 2015). Much like teaching, teacher education has a knowledge base and skill set (Loughran, 2006). Just as clinical practice is recognized as a necessary signature pedagogy of preparing teachers, clinical practice is equally important for the professional learning of teacher educators, particularly teacher educators who are going to cultivate robust school-university partnerships (Burns, 2014). Interestingly, only the NAPDS Nine Essentials (2008) attended to the notion educating teacher educators by noting the importance of professional learning for all. Their attention to teacher educators is an excellent example of how NAPDS is visionary in robust school-university partnerships. Raising the next generation of teacher educators who can cultivate the necessary relationships and an integrated curriculum of clinical practice will require an intentional commitment by doctoral programs to use inquiry and clinical practice as signature pedagogies for the education of teacher educators (Jacobs, et al., 2015).

Finally, we end this paper with another thought-provoking concept from Marilyn Johnston and colleagues (1997). In her muffin analogy, she discusses how different kinds of muffins are a matter of personal taste. Some muffins are healthier than others, and some taste better than others. However, the ideal muffin should be both tasty and healthy. To draw parallels to school-university partnerships, there are clearly some school-university partnerships that are healthier than others. Each year, NAPDS identifies PDSs that serve as exemplars of the Nine Essentials and serve as illustrations of both “healthy and tasty” school-university partnerships. However, not all school-university partnerships are “tasty” or “healthy,” and even fewer are “tasty and healthy.”

With the movement towards transforming teacher education, collaboration between schools and universities can no longer be a matter of personal taste. Instead, robust school-university partnerships focused on clinical practice that are dedicated to equity and educational renewal must become a part of the healthy diet for all teacher education programs. Make no mistake - becoming healthy is difficult, but nonetheless, teacher education can no longer afford to be gluttonous. Instead, we must summon the courage and willpower to move beyond superficial relationships and delve deep into school-university collaboration. By drawing upon three national documents to create seven core ingredients, we propose a framework that will help develop school-university partnerships that are both tasty and healthy.

References

- Abdal-Haqq, I. (1998). *Professional development schools: Weighing the evidence*. Thousand Oaks, CA: Sage.
- American Association of Colleges of Teacher Education (2010). *The clinical preparation of teachers: A policy brief*. Washington, D.C.: AACTE. Retrieved from <http://edwebsfiles.ed.uiuc.edu/transitions/AACTE-Policy-Brief-March-2010.pdf>.
- Burns, R. W. (2014). The new teacher educator: Preparing teacher educators for partnership work. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education in Indianapolis, IN.
- Burns, R. W., Yendol-Hoppey, D., & Jacobs, J. (2015). High quality teaching requires collaboration: How partnerships can create a true continuum of professional learning for educators. *The Educational Forum: A Publication of Kappa Delta Pi*, 79(1), 53-67. doi: 10.1080/00131725.2014.971990.
- Dana, N. F. & Yendol-Hoppey, D. (2009). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.
- Field, B. (2009). *Professional development schools: A twenty-year retrospective and a challenge for the future*. Speech presented at the annual meeting of the National Association of the Professional Development Schools.
- Goodlad, J. I. (1988). School-university partnerships for educational renewal: Rationale and concepts. In K. A. Sirotnik & J. I. Goodlad (Eds.), *School-university partnerships in action: Concepts, cases, and concerns* (pp. 3-31). New York, NY: Teachers College Press.
- Goodlad, J. I., & Sirotnik, K. A. (1988). The future of school-university partnerships. In K. A. Sirotnik & J. I. Goodlad (Eds.), *School-University partnerships in action: Concepts, cases, and concerns* (pp. 205-225). New York, NY: Teachers College Press.
- Jacobs, J., Burns, R. W., & Yendol-Hoppey, D. (2014, April). *What do we know about preservice teacher supervision since the release of the NCATE PDS Standards and the NCATE Blue Ribbon Report? A Meta-Analysis*. Paper presented at the annual meeting of the American Education Research Association. Philadelphia, PA.
- Jacobs, J., Yendol-Hoppey, D., & Dana, N.F. (2015). Preparing the next generation of teacher educators: The role of practitioner inquiry. *Action in Teacher Education*, 37(4), 373-396.
- Johnston, M. (1997). *Contradictions in collaboration: New thinking on school/university partnerships*. New York, NY: Teachers College Press.
- Loughran, J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. New York, NY: Routledge.
- National Association for Professional Development Schools. (n.d.). *Nine Essentials*. Retrieved from <http://napds.org>.
- National Association for Professional Development Schools. (2008). *What it means to be a professional development school*. South Carolina: The Executive Council and Board of Directors.

- National Center for Teacher Residencies. (n.d.). *National Center for Teacher Residencies*. Retrieved from <http://nctresidencies.org/about/>.
- National Council for Accreditation of Teacher Education. (2010, November). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Washington, DC: Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning.
- Noguera, P. (2003). *City schools and the American dream: Reclaiming the promise of public education*. New York, NY: Teacher College Press.
- Rutter, A. (2011). Purpose and vision in professional development schools. In J. Neopolitan (Ed.), *Yearbook for the National Society of the Study of Education, 110(2)*, 289-305. New York, NY: Teachers College Press.
- Schlechty, P. C., & Whitford, B. L. (1988). Shared problems and shared vision: Organic collaboration. In K. A. Sirotnik & J. I. Goodlad (Eds.), *School-University partnerships in action: Concepts, cases, and concerns* (pp. 205-225). New York, NY: Teachers College Press.
- Villegas, A. & Lucas, T. (2002). *Educating culturally responsive teachers: A coherent approach*. Albany, NY: State University of New York Press.
- Yendol-Hoppey, D. & Franco, Y. (2014). In search of signature pedagogy for PDS teacher education: A review of articles published in school-university partnerships. *School-University Partnerships, 7(1)*, 17-34.
- Zenkov, K., Parker, A., Dennis, D., & Degregory, C. (2015). *How do YOU speak PDS?: Survey research on the state of a common language across our programs*. Paper presented at the annual meeting of the American Association for Colleges of Teacher Education. Atlanta, GA.

Rebecca West Burns is an Assistant Professor at the University of South Florida. Her research agenda focuses on supervision in teacher education, school-university partnerships, and teacher leadership. Jennifer Jacobs is an Assistant Professor of Elementary Education at the University of South Florida. Her research interests center on equity-centered teacher education, practitioner inquiry, and teacher leadership. Wendy Baker is a Partnership Resource Teacher and an educator for two decades in Hillsborough County Public Schools. Her research interests include preservice teacher education, supervision, and school-university partnerships. Denise Donahue has been an educator for 25 years, working in early childhood, elementary, exceptional, and gifted education. She is currently a partnership resource teacher in Hillsborough County Public Schools.

Considering Professional Development School Partnerships in Light of CAEP Standard Two

Drew Polly
University of North Carolina at Charlotte

Abstract: With the adoption of the 2013 Standards from the Council for Accreditation for Educator Preparation (CAEP), educator preparation programs and partner schools are revisiting what effective clinical practices look like. To that end, this article examines the overlap between CAEP Standard 2 focused on clinical practice and the relevant essentials from the NAPDS *Nine Essentials* document. The article includes two vignettes of Professional Development School (PDS) partnerships that provide contrasting images of what PDS relationships could look like. Implications include examining as a field and as individual partnerships how closely partner activities align with the standards and goals widely accepted by our institutions.

KEYWORDS: CAEP Standards, Professional Development Schools, clinical experiences, elementary education, mathematics education, tutoring

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration

Author Note: While this article was written by a university faculty member, this work would not be possible without partnerships with both Charlotte-Mecklenburg and Kannapolis City Schools.

Introduction

Context of Educator Preparation

The 2013 Council for Accreditation of Educator Preparation (CAEP) Standards were adopted in recent years by multiple educator preparation programs in the United States. These new standards have a great influence on the program and curriculum revisions occurring in Educator Preparation Programs (EPPs). In the 2013 CAEP Standards, Standard Two and all of its components focus on Clinical Practice and Partnerships, topics that resonate with individuals involved in Professional Development School (PDS) work. In the past decades, most PDS

partnerships have framed their work around the *Nine Essentials*, a document written by leaders of the National Association for Professional Development Schools (NAPDS), reflecting research-based practices about school-university partnerships (NAPDS, 2008). As is the case when new accreditation standards are created, there is a need to critically analyze the fit and alignment of those standards and other frameworks. In this article I provide an analysis of the 2013 CAEP Standards and the NAPDS Nine Essentials with a focus on similarities and commonalities. I also describe two vastly different vignettes and examine how these two Professional Development School (PDS) partnerships reflected and addressed the CAEP Standards.

PDS Partnerships historically involve relationships between educator preparation programs (EPPs) and P-12 schools. Due to the requirement for EPPs to meet accreditation standards, these PDS partnerships usually align to Standards. In the early 2000s, the National Council for Accreditation of Teacher Education (NCATE) published PDS Standards as well as a set of descriptors to describe what it looked like for school partnerships to be considered beginning, developing, at standard, and leading in PDS work (Polly, Smaldino, & Brynteson, 2015). These NCATE PDS Standards and other research on the field were used to develop and frame the National Association for Professional Development Schools (NAPDS) Nine Essentials (NAPDS, 2007), which were created by NAPDS members to describe the characteristics of PDS partnerships. The current climate of accountability and standards driven alignment in educational programs calls for leaders of PDS partnerships to ensure that their work is driven by and meets the expectations of related standards (Smaldino & Luetkehans, 2015). This article examines what it means to be a Professional Development School in light of the current climate of accountability and the 2013 CAEP Standards.

Accountability, Standards, and PDS Partnerships

The role of accountability in Educator Preparation Programs (EPPs) is not new. Multiple studies have cited the experiences of creating and sustaining PDS' while P-12 schools and EPPs are in the midst of high-stakes accountability related to learning outcomes (Steel, Shambaugh, Curtis, & Schrum, 2015; Zeichner, 2007). The publication of the NCATE-sponsored Blue Ribbon Panel Report (NCATE, 2010) encouraged EPPs to examine and reform their programs, including ways to enhance or develop strong partnerships between programs and K-12 schools (van Scoy & Eldridge, 2012) and provide comprehensive documentation and evaluation of that work. In a synthesis of the recommendations in the Blue Ribbon Report and the NAPDS *Nine Essentials*, van Scoy and Eldridge (2012) found commonalities in both documents related to: deliberate planned partnerships, comprehensive clinical preparation, high standards for all, and data-driven practice, with a heavy emphasis on data-driven practice and continuous evaluation of PDS work in light of accreditation standards.

Heafner, McIntyre, and Spooner (2014) examined the intersection of CAEP Standard 2: Clinical Partnerships and Practice and Standard 4: Program Impact in light of school-university partnerships. They concluded a need for teacher education programs to set up and design comprehensive models for teacher candidates and practicing teachers to develop their knowledge and skills while simultaneously using data and program outcomes to evaluate and modify program implementation.

Field and van Scoy (2014) provided a historical overview of two decades worth of PDS work and program revisions based on program outcomes. They concluded that one of the most critical components of success was flexibility during times when stakeholders examined data and found a need to modify specific aspects of their partnership in order to better serve partner school students or teacher candidates. Another conclusion was that these revisions and modifications were mostly possible due to the strong relationships built over time between administrators and faculty from both the university and partner school.

Many teacher education experts have advocated for PDS Partnerships that support clinical practice and teacher candidate preparation in this era of accountability and teacher reform. Darling-Hammond (2014) was one of those advocates writing:

In highly developed professional development school models, curriculum reforms and other improvement initiatives are supported by the school and often the district; school teams involving both university and school educators work on such tasks as curriculum development, school reform, and action research; university faculty are typically involved in teaching courses and organizing professional development at the school site and may also be involved in teaching children; school-based faculty often teach in the teacher education program. Most classrooms are sites for practica and student teaching placements, and cooperating teachers are trained to become teacher educators, often holding meetings regularly to develop their mentoring skills. (p. 553)

The comments of Darling-Hammond above and others reflect the power of PDS partnerships to support educator preparation programs. Due to the widespread adoption of the 2013 CAEP Standards there is a need to examine PDS work and activities in light of the new standards. In the next section I provide a synthesis of the NAPDS Nine Essentials and the 2013 CAEP Standards, for the purpose of highlighting characteristics of PDS Partnerships that align with both the Nine Essentials and CAEP Standards.

Examining the CAEP Standards and Nine Essentials

2013 CAEP Standards

The council of Accreditation for Educator Preparation (CAEP) published its first set of Standards in 2013. As the organization that replaced both NCATE and the Teacher Education Accreditation Council (TEAC), thousands of teacher education programs are looking to these new Standards and examining their programs in order to make sure they are aligned to the standards. The sub-standards aligned to the work of PDS partnerships are in Standard 2: Clinical Partnerships and Practice (Figure 1).

While the CAEP Standards do not explicitly talk about Professional Development School partnerships they require educator preparation programs (EPPs) and their partners to engage in three large efforts. First Component 2.1, EPPs must form mutually beneficial arrangements (partnerships) that include shared responsibility for clinical preparation of future pre-service teachers. The Standard also says that there must be coherence and consistency between the educator preparation program, which implicitly means that educator preparation programs and school partners must be in constant communication and philosophically aligned when it comes to teaching strategies and approaches.

In Component 2.2, school partners are charged with identifying, developing, and retaining high-quality clinical educators who will host and work with pre-service teachers and mentor them through the process of learning how to teach. The role of EPPs in this Standard is to establish and refine identify criteria for teachers to serve as clinical educators. Further, EPPs are to partner with school partners to ensure continuous improvement and growth of clinical educators' knowledge and skills, which will in turn make them more effective working with pre-service teachers.

The last sub-standard in the cluster, Component 2.3, describes the expectations for clinical experiences. The words depth, breadth, coherence, diversity, and duration are included to describe the types of clinical experiences that EPPs and school partners should provide to their candidates. Sub-standard 2.3 also mandates the use of multiple performance-based assessments to evaluate the progress of candidates in these clinical experiences.

NAPDS Nine Essentials

The nine essentials for PDS Partnerships, as defined by members of the National Association for Professional Development Schools, are shared in Figure 2 (NAPDS, 2008). As the CAEP Standards speak specifically to the goal of supporting the development of teacher candidates and future teachers, that lens will be used to highlight the relevant aspects of the *Nine Essentials* document. Essentials 1, 2, 3, and 7 all have close alignment with the 2013 CAEP Standards.

Essential One sets the stage for the rest of the nine characteristics of PDS partnerships by stating that the partnership has a comprehensive mission that extends beyond the mission of any partner. More specifically, PDS partnerships cannot be formed only to support teacher candidates or on the other hand only the teachers in the partnership school. The comprehensive mission shared by NAPDS partners should simultaneously provide benefit and include goals involving both the EPP and the partner school.

Essential Two calls for a commitment from both EPPs and school partners to preparing future educators and encouraging their active engagement in partner schools. Specifically,

PDSs, however, are more than simply places where teacher candidates complete their clinical experiences. Instead, they are schools whose faculty and staff as a collective whole are committed to working with college/university faculty to offer a meaningful introduction to the teaching profession. As such, PDSs create a school-wide culture that incorporates teacher candidates as full participants of the school community. (p. 4)

The *Nine Essentials* holds that teacher candidates, although they are in schools temporarily and are still learning how to become teachers, are full participants in the school community.

Essential Three calls for ongoing professional development for all stakeholders guided by need. This includes clinical teachers in the partnership school, faculty members, as well as teacher candidates. In the *Nine Essentials*, NAPDS (2008) recommended the design and implementation of professional development specific to the needs of the school that include partner school faculty, teacher candidates, and EPP faculty. Further, the document mentions the need for professional development to be explicitly connected to classroom practice.

Essential Four calls for PDS partnerships to participate in innovative and reflective practice that goes beyond just the status quo of teacher candidates spending time in partner

schools gaining experience. NAPDS calls for the co-mingling of theory, practice, and careful thought when considering partnerships that will benefit all of the stakeholders involved. This innovation must be shared by both the EPP and partner school and not a situation in which one entity controls the projects and efforts. Further, innovative and reflective practice means that teacher candidates should be encouraged to teach freely and hone their knowledge and skills in a positive and nurturing school environment. Essentials 5 through 9 are focused on organizational structure and are not detailed in depth here in order to focus more intentionally on the alignment between the *Nine Essentials* and the 2013 CAEP Standards. In the next section connections are made between the *Nine Essentials* and the 2013 CAEP Standards.

Making Connections between CAEP and NAPDS

While the 2013 CAEP Standards do not specifically mention Professional Development Schools, CAEP Standard 2 specifically delineates the types of partnerships expected between educator preparation programs (EPPs) and partner schools. Table 1 provides alignment between the two documents.

Table 1

Alignment of the NAPDS Nine Essentials and 2013 CAEP Standards

		2013 CAEP Standards		
		CAEP 2.1. Partnerships for clinical preparation	CAEP 2.2. Development of Clinical educators	CAEP 2.3. Strong Clinical experiences
NAPDS Nine Essentials	NAPDS 1: Broad partnerships	X		
	NAPDS 2: Committed to candidate preparation	X		X
	NAPDS 3: Professional development for all		X	X
	NAPDS 4 : Innovate and reflective practices for all	X	X	X
	NAPDS 7: Ongoing reflection	X	X	X

As those involved with Professional Development School work and affiliated with CAEP institutions consider what it means to be a Professional Development School it is critical to keep in mind the alignment between the accreditation Standards and the underpinnings of PDS work as established by NAPDS. In the next section we describe two PDS efforts in light of the 2013 CAEP Standards and NAPDS *Nine Essentials*.

Examples of PDS Partnerships

PDS Partnership Focusing on Tutoring Elementary School Students

Overview. In this unique PDS project, teacher candidates in the first semester of their junior year tutor students in urban schools in which over 90% of their students qualify for free and/or reduced lunch. This project has taken place in 4 different elementary partner schools, but has been the most intensive at 2 of those schools. In their first semester of their junior year, candidates complete 5 education courses: instructional design and technology integration, child development, teaching mathematics to K-2 learners, teaching reading to K-2 learners, and physical activity for elementary school students. As part of the clinical, school-based assignment for the instructional design and technology integration class, students complete this intensive tutoring assignment.

Involvement of Candidates. Students are assigned to a classroom teacher and work with one child in that classroom for 45-60 minutes each week for 10 weeks in a tutoring/individual teaching setting. The instructional materials that candidates use to tutor come from the clinical teacher at first, but towards the end of the semester candidates sometimes bring their own materials.

Candidates reported that their tutoring involves either literacy or mathematics help and that in most cases, the teachers gave them activity sheets or worksheets to do with students or academic games to play with students. Most candidates also completed clinical experiences for other courses in that same classroom, which typically ended up totaling 40 hours of observations, tutoring, small group teaching, and whole class teaching in that classroom.

Involvement of Partner School Faculty. Teachers at the partner school were responsible for identifying students who would be tutored as well as organizing the instructional materials for the candidate to use with the student. Most of the faculty members worked with candidates for the tutoring assignment as well as clinical activities for other courses. This intensive involvement with candidates allowed partner school faculty to give them feedback on lesson plans or lessons that candidates taught, talk with candidates and answer questions about lessons that clinical teachers taught, and serve as an in-school source of mentorship and support.

Still, though, in some cases candidates went to the classroom tutored the student and then left with little interaction with the clinical teacher. In cases that this occurred, candidates completed their other clinical activities with another teacher in a different school. While going to multiple schools gave candidates' exposure to various school settings, it did not allow them to develop as close of a relationship with teachers and students compared to candidates who completed all of their clinical work in one classroom.

Alignment to 2013 CAEP Standards and NAPDS Nine Essentials. This PDS project aligns most directly with CAEP Components 2.1, 2.3 and NAPDS Essentials 1, 2, 4, and 7. For both the university and the school, this effort was mutually beneficial beyond the mission of just the single entities (NAPDS 1). Candidates participated during the semester in an intensive, innovative set of clinical experiences that allowed them to become part of the school community and spend considerable amounts of time working with students (CAEP 2.3, NAPDS 2 and 4). In the past two semesters, both university and partner school leaders modified the program so that candidates were placed at their tutoring school for other clinical experiences as well. Thus,

candidates had an intensive, deep experience in a school culture compared to candidates who tutored at the school but went to other schools for their other clinical activities (CAEP 2.3, NAPDS 7). They were also more immersed in the school community than candidates in previous semesters, who did not tutor and simply spent limited hours observing classrooms.

In terms of improving this project to better align to the standards, a commitment to have all candidates complete all of their clinical experiences in one or two classrooms in the school would help ensure that candidates have an intensive clinical experience and opportunities to engage deeply with the school's culture, students, and teachers. Further, professional development or additional resources could be provided to partner school faculty about how to best support and mentor teacher candidates.

Influence of the PDS Project. Research about the influence of this PDS project is in its preliminary stages. At this point, survey data has been collected about the experiences of both candidate and partner school faculty. Survey data from the first two semesters of this project indicate that candidates enjoy ongoing work with their student that they tutor and that they reported that they made a positive difference on their student. Further, some candidates reported feeling connected to the school due to the amount of time that they spent there for their clinical activities. All candidates tutored in low-performing, urban schools and reported that they felt more aware of the opportunities and challenges to teach in these types of environments.

The partner school teachers reported that their students showed growth academically during the time that candidates were tutoring their students. Further, teachers also reported that they felt positive about being able to support and work with candidates who would become elementary school teachers, and wanted more opportunities in future semesters with tutoring, other clinical experiences, and full-time student teaching.

Plans for future semesters include further support for clinical teachers by providing resources or guidance in working with candidates, as well as flexibility to have candidates either tutor students or work with students during whole class or small group activities. In terms of evaluating the project, both university leaders and partner school administrators have expressed interest in looking at how much tutoring students actually impacts students' academic performance. This type of evaluative work would need to carefully and thoughtfully consider how tutoring influenced student learning in conjunction with other academic efforts, such as daily classroom experiences or other interventions.

PDS Project Focusing on Elementary Mathematics Teaching

Overview. This partnership took place between the university and an elementary school in which over 75% of its students qualified for free and/or reduced lunch, and over 40% of its students were English Language Learners. This PDS partnership emerged from an existing partnership between the author's university and the partner school that was focused on designing interdisciplinary literacy units. However, due to a few consecutive years of low student achievement in mathematics, the school administration asked the author to provide support around their mathematics program to their teachers. This PDS work focused on professional development through workshops, planning sessions, selecting effective mathematics curriculum, and providing in-class support to teachers. In line with Essential Seven from the NAPDS *Nine*

Essentials and CAEP Standard 2, support was school-specific, ongoing and modified to meet the needs of teachers and their students.

Involvement of Partner School Faculty. Clinical teachers and teachers in the partner school were more directly involved in and influenced by this PDS partnership compared to teacher candidates. A few clinical teachers participated in multi-year work with the author that involved co-planning, co-teaching, classroom-based support, and mentorship around mathematics teaching. A few of the clinical teachers even participated at the district level leading mathematics workshops and providing oversight on district pacing and assessment projects.

The entire staff participated with the author in planning meetings and workshops about effective instructional strategies. Further, the entire staff started teaching with and received support using a reform-based mathematics curriculum. Lastly, every teacher participated in district-wide professional development related to mathematics teaching that was a related project to this PDS work. The entire staff engaged in approximately 5 days of professional development in their school and 8 days of district-wide professional development in a two-year period, a total of 78 hours for each teacher.

Involvement of Teacher Candidates. Teacher candidates were primarily involved in this project indirectly through their clinical activities in the classrooms of the partner school. During the first semester of their junior year candidates have to complete whole group teaching, small group teaching, and teacher observations in a classroom. During the second semester of their junior year candidates spend two whole weeks teaching and observing in one classroom. During their senior year, candidates are in their student teaching classroom; they spend one full day per week in their student teaching classroom in the first semester and are in that same classroom full-time for 15 weeks in their final semester teaching and carrying out the duties of a classroom teacher.

The partner school only has four teachers per grade level and 20 teachers in the entire school. Most semesters between one-third to one-half of all classroom teachers work with candidates. More specifically, each year the school hosts between six to 12 first semester juniors, 8 second semester juniors, and between two to four candidates during the student teaching year. Though very few candidates directly participated in mathematics professional development activities they benefited by working with clinical teachers who had developed their knowledge and skills related to mathematics teaching.

Alignment to 2013 CAEP Standards and Nine Essentials. As indicated by the description above this project focused intensively on CAEP Component 2.2 and NAPDS Essentials One and Three by developing the skills and knowledge of clinical teachers. In addition, during the program more teacher candidates were placed in these clinical teachers' classrooms, which made the experience for both clinical teachers and teacher candidates more worthwhile (CAEP 2.3, NAPDS 4). The reflective work on how to bring teacher candidates into the project by placing them in classrooms of teachers who had participated in the professional development made candidates' experiences very valuable (CAEP 2.3, NAPDS 4 and 7).

In terms of ways to improve this project in the future, there would have been an added benefit if teacher candidates' schedule allowed them to participate in the planning sessions and professional development activities. A handful of candidates participated in this manner during their full-time internship, but candidates who were not yet in internship did not have this opportunity. Those candidates who participated in the professional development reported that

they enjoyed participating in professional learning opportunities that aligned so well to what they had learned in their courses and the work in their student teaching classroom. They also reported in turn feeling more confident in their ability to teach mathematics to their students.

Influence of the PDS Project. In the research studies conducted related to this project found gains in teachers' use of student-centered pedagogies (McGee, Wang, & Polly, 2013; Polly, Wang, McGee, Lambert, Martin, & Pugalee, 2014; Wang, Polly, LeHew, Lambert, & Pugalee, 2013), shifts in teachers' beliefs to more student-centered approaches to teaching mathematics (Martin, Polly, McGee, Wang, Lambert, & Pugalee, 2014), and gains in student learning outcomes (Polly, McGee, Wang, Martin, Lambert, & Pugalee, 2015). No formal data was collected from teacher candidates in these classrooms, but anecdotally they were encouraged and supported to use reform-based mathematics pedagogies through co-planning and close work with the classroom teachers. As one of the professional development facilitators, I (the author) benefited from the integrated work supporting classroom teachers, spending time in mathematics classrooms, and working with teacher candidates in coursework. As a university faculty member, a project that connects service to practicing teachers, work in classrooms, as well as courses for teacher candidates truly is a beneficial experience.

Future evaluations and research are needed to look more closely at the influence of this type of PDS work on teacher candidates and teachers. Specifically, there is a need to see how candidates are influenced by working with teachers who have had intensive professional development projects. Data could be collected simultaneously from candidates and school faculty member to understand how teachers' involvement in professional development influences them, candidates in their classroom, and student learning outcomes.

Table 2 provides an overall summary of both PDS Projects described in this article. In the next section we detail implications and recommendations for those individuals involved in PDS work at institutions that have adopted the 2013 CAEP Standards.

Table 2
Summary of PDS Projects

Components of Project	PDS Focusing on Tutoring Students	PDS Project Focusing on Elementary Mathematics Teaching
Involvement of Candidates	Candidates completed 10 hours of tutoring and 40 hours of tutoring, teaching, and observations in a clinical experience.	Candidates completed clinical experiences during courses and full-time student teaching in classrooms of teachers who had participated in the project.
Involvement of Partner School Faculty	Partner school faculty provided candidates with instructional resources and materials to use for tutoring. Partner school faculty members were also in the classroom or building to talk to candidates on a regular basis.	Partner school faculty participated in 78 hours of professional development including school-based experiences and district-wide workshops. Faculty provided support and mentorship to candidates who completed clinical experiences and student teaching in

		their classroom.
Alignment to CAEP Standards and NAPDS Nine Essentials	CAEP Component 2.2 and NAPDS Essentials 1 and 3.	CAEP Component 2.3 and NAPDS Essentials 1, 2, and 4. CAEP Component 2.2 was indirectly related due to candidates working with teachers who had participated in the PDS project.
Influence of PDS Project	Candidates reported learning more about low-performing, urban schools and being a part of the partner school environment. School faculty reported that tutoring influenced positive student growth and that they had positive experiences working with candidates.	Increase in school faculty members' use of reform-based pedagogies, increase in student-centered beliefs in mathematics, and gains in student learning outcomes on state-wide assessments in Grades 3 and 4.

Implications and Future Directions

Addressing Both the Nine Essentials and CAEP Standards

The 2013 CAEP Standards in light of the NAPDS *Nine Essentials* require educator preparation programs (EPPs) and their PDS partner schools to consider how to best design, implement, and analyze partnership work and projects. The CAEP Standards specifically address the creation of comprehensive partnerships (CAEP 2.1, NAPDS 1), the development of clinical faculty committing to candidate preparation (CAEP 2.2, NAPDS 2 and 4), and the creation of innovative rich clinical experiences for candidates (CAEP 2.3, NAPDS 2).

In this article I described two distinctly different PDS partnerships that align to aspects of the CAEP Standards and NAPDS *Nine Essentials*. The first focused on an intensive tutoring clinical experience for candidates (CAEP 2.3) and clinical faculty intensively with candidates (CAEP 2.2). The second emphasized professional development of partner school clinical faculty (CAEP 2.2) and involved indirectly some clinical experiences for candidates (CAEP 2.3). In both of these vignettes innovative partnerships had been formed to strengthen teaching and learning in for both partner school faculty and candidates. There is a natural alignment between the *Nine Essentials* that are focused on candidate preparation and CAEP Components 2.1 and 2.3. Meanwhile, the *Nine Essentials* focused on developing clinical or partner school faculty aligns directly to CAEP Components 2.1 and 2.2. In response to the call for articles for this themed issue of *School-University Partnerships*, PDS partnerships need to comprehensively address the Nine Essentials as well as the substandards that make up CAEP Standard Two.

Looking Forward

The purpose of this article was not to advocate for throwing the baby out with the bath water by redoing PDS partnerships just to fit the CAEP Standards. Rather, due to the strong

alignment between the NAPDS *Nine Essentials* and the 2013 CAEP Standards, my goal was to demonstrate through vignettes how high quality PDS work is already aligned to the recommendations of CAEP. As we look to the future of PDS work, it is critical to continue to revisit within our own context, as well as in national and international contexts, what constitutes an *effective* PDS.

Perhaps the answer is as easy as a school-university or PDS partnership examining their work in light of the alignment between CAEP Standards and recommendations in the *Nine Essentials* from NAPDS. However, it may not be that easy or cut and dry. In the case of the vignette on tutoring, we entered the partnership wanting to provide service to students by having teacher candidates tutor, yet there was a clear need to support clinical teachers in the partner schools about what instructional materials to provide and how to support the tutoring program. Likewise, the second project focused on mathematics professional development was started to support students' mathematics by working closely with teachers to deepen their mathematics knowledge and skills. In that case, there was a need to deliberately place candidates in teachers' classrooms, yet also ensure they were prepared and well equipped to be involved in classrooms with reform-based mathematics pedagogies.

The two vignettes provide different ways that PDS projects can align to the 2013 CAEP standards and support the learning of students in partner schools. This addresses the question of this themed issue about "What is a PDS?" by highlighting the need for universities using the CAEP Standards for accreditation must ground their work in both the *Nine Essentials* and CAEP Standard Two. Optimistically, there is strong alignment between the NAPDS *Nine Essentials* and Standard Two from CAEP. As PDS partnerships continue to navigate the waters of the CAEP Standards and other accreditation processes, the beacon should always be on the simultaneous support of students' learning in the partner schools, and the development of partner school faculty, candidates and university faculty (Polly, Spooner, & Chapman, 2015).

Standard 2:
CLINICAL PARTNERSHIPS AND PRACTICE

The provider ensures that effective partnerships and high-quality clinical practice are central to preparation so that candidates develop the knowledge, skills, and professional dispositions necessary to demonstrate positive impact on all P-12 students' learning and development.

Partnerships for Clinical Preparation

2.1 Partners co-construct mutually beneficial P-12 school and community arrangements, including technology-based collaborations, for clinical preparation and share responsibility for continuous improvement of candidate preparation. Partnerships for clinical preparation can follow a range of forms, participants, and functions. They establish mutually agreeable expectations for candidate entry, preparation, and exit; ensure that theory and practice are linked; maintain coherence across clinical and academic components of preparation; and share accountability for candidate outcomes.

Clinical Educators

2.2 Partners co-select, prepare, evaluate, support, and retain high-quality clinical educators, both provider- and school-based, who demonstrate a positive impact on candidates' development and P-12 student learning and development. In collaboration with their partners, providers use multiple indicators and appropriate technology-based applications to establish, maintain, and refine criteria for selection, professional development, performance evaluation, continuous improvement, and retention of clinical educators in all clinical placement settings.

Clinical Experiences

2.3 The provider works with partners to design clinical experiences of sufficient depth, breadth, diversity, coherence, and duration to ensure that candidates demonstrate their developing effectiveness and positive impact on all students' learning and development. Clinical experiences, including technology-enhanced learning opportunities, are structured to have multiple performance-based assessments at key points within the program to demonstrate candidates' development of the knowledge, skills, and professional dispositions, as delineated in Standard 1, that are associated with a positive impact on the learning and development of all P-12 students.

Figure 1. CAEP Standard 2: Clinical Partnerships and Practice (CAEP, 2013).

The nine required essentials of a PDS are:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
9. Dedicated and shared resources and formal rewards and recognition structures.

Figure 2. Nine Essentials of PDS Partnerships (NAPDS, 2008).

References

- Council for the Accreditation of Educator Preparation (CAEP) (2013). CAEP Standards. Retrieved from: http://caepnet.files.wordpress.com/2013/09/final_board_approved1.pdf
- Field, B. E., & van Scoy, I. J. (2014). The challenges never stop! Two decades of reaching for the best in clinical practice. *Peabody Journal of Education*, 89(4), 436-452.
- Heafner, T., McIntyre, E., & Spooner, M. C. (2014). The CAEP standards and research on educator preparation programs: Linking clinical partnerships with program impact. *Peabody Journal of Education*, 89(4), 516-532.
- Holmes Group (1990). *Tomorrow's schools: Principles for the design of professional development schools*. East Lansing, MI: Author.
- Martin, C. S., Polly, D., McGee, J. R., Wang, C., Lambert, R. G. & Pugalee, D. K. (2015). Exploring the relationship between questioning, enacted tasks, and mathematical discourse in elementary school mathematics. *The Mathematics Educator*, 24(2), 3-27, <http://tme.journals.libs.uga.edu/index.php/tme/article/view/308/266>
- McGee, J. R., Wang, C., & Polly, D. (2013). Guiding teachers in the use of a standards-based mathematics curriculum: Perceptions and subsequent instructional practices after an intensive professional development program. *School Science and Mathematics*, 113(1), 16-28. DOI: 10.1111/j.1949-8594.2012.00172.x
- National Association for Professional Development Schools (2008). What it means to be a professional development school. Retrieved from: <http://napds.org/9%20Essentials/statement.pdf>.

- National Council for the Accreditation in Teacher Education (NCATE) (2010). Transforming teacher education through clinical practice: A national strategy to prepare effective teachers. Report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning. Retrieved from:
<http://www.ncate.org/LinkClick.aspx?fileticket=zzeiB1OoqPk%3d&tabid=715>
- National Council for the Accreditation in Teacher Education (NCATE) (2001). Standards for professional development schools. Retrieved from:
<http://www.ncate.org/LinkClick.aspx?fileticket=FcHbf2B%2B670%3D&tabid=610>
- Polly, D., McGee, J. R., Wang, C., Martin, C., Lambert, R., Pugalee, D. K. (2015). Linking professional development, teacher outcomes, and student achievement: The case of a learner-centered mathematics program for elementary school teachers. *International Journal of Educational Research*, 72, 26-37.
- Polly, D., Smaldino, S., Brynteson, K. (2015). Developing a rubric to support the evaluation of professional development school partnerships. *School-University Partnerships*, 8(1), 20-23.
- Polly, D., Spooner, M. C., & Chapman, M. W (2015). Developing a more systematic approach to Professional Development School partnerships: The case of PDS efforts at a large urban university. In D. Polly, T. Heafner, M. C. Spooner, & M. W. Chapman (Eds.), *Professional Development Schools and Transformative Partnerships* (pp. 22-29). Hershey, PA: IGI Global. DOI: 10.4018/978-1-4666-6367-1.ch002
- Polly, D., Wang, C., McGee, J.R., Lambert, R.G., Martin, C.S., Pugalee, D.K. (2014). Examining the influence of a curriculum-based elementary mathematics professional development program. *Journal of Research in Childhood Education*, 28(3), 327-343. DOI: 10.1080/02568543.2014.913276.
- Smaldino, S., Luetkehans, L. (2015). Transformative partnerships. In D. Polly, T. Heafner, M. C. Spooner, & M. Chapman (Eds.), *Professional Development Schools and Transformative Partnerships*. (pp. 74-82). Hershey, PA: IGI Global. doi: 10.4018/978-1-4666-6367-1.ch006.
- Steel, S., Shambaugh, N., Curtis, R. & Schrum, L. (2015). In D. Polly, T. Heafner, M. C. Spooner, & M. Chapman (Eds.), *Professional Development Schools and Transformative Partnerships*. (pp. 1-21). Hershey, PA: IGI Global. doi: 10.4018/978-1-4666-6367-1.ch001
- van Scoy, I. J., & Eldridge, D. B. (2012). NCATE's Blue Ribbon Panel Report and NAPDS: Working Together. *School-University Partnerships*, 5(1), 7-12.
- Wang, C., Polly, D., LeHew, A. J., Pugalee, D. K., & Lambert, R. (2013). Supporting teachers' enactment of an elementary school student-centered mathematics pedagogies: The evaluation of a curriculum-focused professional development program. *New Waves-Educational Research and Development*, 16(1), 76-91.
- Zeichner, K. (2007). Professional development schools in a culture of evidence and accountability. *School-University Partnerships: The Journal of the National Association for Professional Development Schools*, 1(1), 9-17.

Drew Polly is an associate professor in the Elementary Education program at the University of North Carolina at Charlotte. His work examines how to support teachers' enactment of learner-centered pedagogies.

**Cultivating, Connecting, and Capitalizing on our Merged Spaces:
Voices from a PDS**

Jon Yoshioka
University of Hawai'i at Mānoa

Vail Matsumoto
University of Hawai'i at Mānoa

Lori Fulton
University of Hawai'i at Mānoa

Cesceli Nakamura
Waipahu High School

Abstract: While the foundation and principles of Professional Development School (PDS) partnerships have been present for decades, the relationships, connections, and results derived from these partnerships are ever evolving. This paper examines one University-PDS partnership that was developed as an alternative to the traditional teacher preparation model. The merged spaces of this University-PDS collaboration empower teacher candidates to develop skills in teacher leadership, advancing access and equity and responsiveness to critical needs, along with foundational competence in collaboration, innovation, and reflective practice. The voices of the teacher candidates and PDS personnel echo the sentiment that the seeds they have planted, and continue to cultivate, will allow the stakeholders of the partnership to capitalize on the skills and talents of all involved and reflect on what was, is, and, most importantly, what could be.

KEYWORDS: equity, agents of change, complex-wide PDS, partnership, teacher leader

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and

9. Dedicated and shared resources and formal rewards and recognition structures.

Introduction

In union there is strength.

—Aesop

The preceding quote defines the partnership between the University of Hawaii at Manoa (UHM) and Waipahu High School (WHS), which began informally in 2010. In 2014, the Superintendent of the Hawaii Department of Education signed a Memorandum of Understanding with the Master of Education in Teaching (MEdT) Program, formalizing the work all of the Professional Development School (PDS) stakeholders had been doing, the relationships that had been developed, and the merged spaces that had been cultivated and maintained. In this paper, we present a University-PDS partnership that was developed as an alternative to the traditional teacher preparation model. The merged spaces of this University-PDS collaboration empower teacher candidates to develop skills in teacher leadership, advance access, equity and responsiveness to critical needs, along with building foundational competence in collaboration, innovation, and reflective practice.

When posed with the question, “What is a PDS?” we reflected upon this shared history between WHS and the MEdT Program with respect to the Nine NAPDS Essentials (NAPDS, 2016). We determined the factors that came into play as we first cultivated the partnership, worked to connect all of the various stakeholders, and finally capitalized on the strengths that emerged as all the players worked in union. In the paragraphs that follow, we will demonstrate how foundational proficiencies have been married with progressive competencies to produce a portrait of a PDS that honors tradition while consistently evolving and improving.

Context of the University-PDS Partnership

The University

The University of Hawaii at Manoa is a land, sea, and space grant university dedicated not only to academic and research excellence but also to serving the local, national, and international communities that surround it. The University’s hallmark is a culture of community engagement that extends far beyond the classroom to bridge theory and practice, fostering creative and critical thinking, and promoting students’ intellectual growth and success as contributing members of society (University of Hawaii at Manoa Strategic Plan, Draft, 2011-2015). Toward this end, the UHM’s College of Education (COE) seeks to develop knowledgeable, effective, and caring educators.

The Program

As part of UHM’s COE, the MEdT Program follows the COE’s mission of preparing educators who, through their sense of purpose and sense of place, contribute to a just, diverse, and democratic society. This is particularly evident in the MEdT Program’s four guiding principles of (a) Integrating Theory and Practice; (b) Inquiry Based Learning; (c) Collaboration;

and (d) Reflection. These principles, when combined with the PDS' foci, formed the basis for a collaborative partnership where the University, PDS, and community work together to improve student learning by (a) researching the problems of educational practice; (b) collaboratively supervising pre-service teachers; (c) connecting educational theory to practice; (d) implementing and modeling innovative practices; and (e) sharing available resources for the benefit of all parties.

The MEdT Program is one of the most successful teacher preparation programs in UHM's COE. Founded in 1991, the MEdT Program has over 750 graduates who have excelled not only in the classroom, as three State Teacher of the Year winners indicate, but in other areas such as school administration in positions ranging from Deputy Assistant Secretary at the U.S. Department of Education to local leadership positions including deputy superintendent, principals, and assistant principals of various schools. The success of this program is due in part to the idea that we work collaboratively with a PDS partner to define mutually beneficial goals and assign personnel from both sides to work with teacher candidates. The blurring of the traditional roles of school and university personnel allows the goals of the partnership to be realized and achieved.

The PDS Partner

Waipahu High School's student-centered motto is "My Voice, My Choice, My Future." This focus not only helps WHS prepare students for success in the 21st century by engaging them in learning opportunities that promote academic, physical, and emotional growth, but also made them an excellent choice to partner with. In the classroom, students experience rigorous and relevant coursework and develop relationships with teachers, mentors, and their peers in Smaller Learning Communities and Career Academy Pathways. Teachers design standards-based lessons/units which include a variety of effective instructional approaches and strategies for all learners, emphasizing literacy and math and encouraging innovation using the Design Thinking (DT) process. To measure the success of the school initiatives, data teams inform instruction by analyzing student achievement data. Students can also receive support and enrichment via an array of comprehensive support services that include a school mentor program, student learning time, a positive behavior support system, co-curricular clubs/organizations, student government/class leadership opportunities, and athletics. Dual high school and college credits can be earned through the Waipahu High School Early College (WEC) program. College readiness and academic success nights, organized for parents and students, prepare grade 9-12 students for college and careers (SSIR report, 2015).

What is a PDS?

As Levine (2006) mentioned, a PDS can "offer perhaps the strongest bridge between teacher education and classroom outcomes, academics and clinical education, theory and practice, and schools and colleges" (p. 105). In the following sections, we will demonstrate how this bridge has allowed us to develop, what Sharon Robinson, president and CEO of the American Association of Colleges for Teacher Education (AACTE), described as "particularly effective, evidence-based school-university partnership models in many sites across the nation,

providing academic content and pedagogical instruction that is well integrated with extensive, closely supervised, hands-on in-school clinical experience” (2007, p. 2).

Below we describe how each of the nine essentials of a PDS are woven throughout the UHM-WHS partnership.

PDS Essential #1: Advancing Equity

The purpose of life is to contribute in some way to making things better.

- Robert F. Kennedy

To create change, one must act. Simply talking about things like advancing equity in one’s classroom, school, and community will not get the job done. The importance of choosing to make a contribution is emphasized in both the quote above and the PDS partnership. The WHS – UHM – MEdT (Waipahu High School-University of Hawaii at Manoa-Master of Education in Teaching Program) PDS mission focuses on action and is far broader in both outreach and scope than the mission of either partner; it is focused altruistically on the greater good of all community stakeholders, with special attention toward advancing equity (NAPDS Essential #1). To achieve this end, the MEdT faculty began the relationship by asking WHS’s teachers and administrators a simple question: “What can we do for you?” This modest inquiry opened the door to previously unavailable learning opportunities that were designed to build community among all PDS stakeholders and advance equity for all of the PDS students.

One example of how a new learning opportunity was created arose from a discussion between stakeholders about a common problem - teacher candidates (TCs) who would benefit from additional fieldwork prior to entering student teaching. A specific matter that came to light was the TCs’ need to be able to address the issues of equity and access in their classrooms. The MEdT and WHS personnel discussed the situation and came up with a novel idea - the TCs would enroll in a University summer course designed to support them while they taught summer school at the PDS. This simultaneous experience of taking a University class, combined with teaching a condensed, fast-paced curriculum with support from mentors, was designed to incorporate the needs of all stakeholders while at the same time focusing on equity and access. Each stakeholder group benefitted in this arrangement: secondary students (taught by qualified, dedicated TCs), the PDS (filled summer school positions with qualified, enthusiastic instructors), the University (TCs developed a summer school curriculum for the PDS and TCs were able to participate in an invaluable field experience), and the TCs (gained more teaching experience and increased confidence).

The summer school experience was formatted in such a way that TCs were paired up as co-teachers, supported by PDS and University staff, and as the teachers of record, were responsible for everything from setting up the classroom, to developing a management system, to planning and executing lessons. This work was paired with University course assignments that consisted of weekly reflections, peer-to-peer advising, and culminating in curricular development in the form of a course compendium. Most importantly, the TCs were provided with authentic and hands-on experiences dealing with equity and access, which, at times called for decisive action or adjustment to curricular decisions. Being faced with these situations and having the opportunities to put what they had learned about equity into practice was a valuable piece of the summer experience. The success of the summer school venture was important to document, as it

was an innovative win-win-win solution developed for and by members of the partnership. The highly favorable results were confirmed in reflections and surveys as 100% of the teacher candidate participants cited the experience as being valuable and one that they would definitely recommend for future teacher candidates in our program.

A second example of how the PDS mission is broader in scope than that of either partner is evidenced in how the PDS views the TCs. That is, the PDS views the TCs as continuing assets who will be vital contributors to the long-term vision for the PDS stakeholders and community. The PDS is currently expanding their already successful Waipahu Early College Program (WEC) for their students as part of their commitment to equitable access to college for each and every student. The TCs, who have received professional development from the University, community organizations, and the PDS on issues including equity, are being groomed to take positions not only as teachers in the PDS, but as instructors for the WEC classes as well as other potential higher education classes. The TCs' ongoing professional development gives them the knowledge of what equity and access mean in practice, the ability to recognize when either or both are absent, and the tools to create a safe, supportive classroom for their students, making for a seamless transition into teaching in the WEC. Thus, the educational benefits of the TCs can be leveraged by the PDS to benefit multiple stakeholders within and among those in the school community.

These educational benefits are transferred into the TCs' classrooms, when they are hired, specifically targeting the equity of the students at the partner school. When a TC says, "The MEdT Program was definitely effective in contributing to the understanding of equity," we know that what we have done has shaped their understanding of equity in education. Further evidence of this was mentioned by the quote's author, TC Bruce (pseudonym), who elaborated,

Reflection was a key in my education in the MEdT Program and I've used that to help students evaluate themselves, their peers and their teachers. This reflection, in addition to adding a level of accountability for everyone, gives the students a feeling of justice because their voice is directly involved in the progression of their education.

This partnership focused on advancing equity via collaboration among PDS stakeholders including TCs, classroom teachers, administrators and University faculty. This resulted in the creation of new learning opportunities and viewing the TCs as assets to the long-term vision of the school and the community, providing TCs with a means to contribute and make things better. Such an idea is aligned with Pantic & Florian's (2015) view that teacher education programs should serve as places to highlight issues of equity through the promotion of social justice and teachers as agents of change. In the next section we explore how the TCs served as agents of change.

PDS Essential #2: Agents of Change

I have one life and one chance to make it count for something... My faith demands that I do whatever I can, wherever I am, whenever I can, for as long as I can with whatever I have to try to make a difference.

- Jimmy Carter

Fostering a school-university culture of active engagement in the PDS community and making a difference are tenets that are laid down from the first day of the MEdT's cohort orientation (NAPDS Essential 2). Being an active participant and agent of change is not a choice but an expectation of being a member of the PDS stakeholder team in both the PDS and University settings. Instead of beginning with a handbook or guidelines for the program, we began with a philosophical discussion about the call to teaching and how the variety within the cohort allows for strength. While each candidate's call to teaching might differ, they were all called upon to embrace the idea of being actively involved in their classroom, school, and community and were expected to act upon it, in their own way, as agents of change.

The design of the MEdT Program, as a two-year program where the TCs are together in a cohort for the entire length of the program, made the call to action much easier to put into motion. Since all TCs were located at one school, we developed a "critical mass" of candidates, which allowed TCs to increase their hours of fieldwork, and immediately become contributing members of the school and greater community. The contributions the TCs made were immediate, but all contributions were part of a bigger picture and an ongoing process. The foundation of everything we do began with developing and nurturing the relationships between stakeholders which started with carefully designed learning experiences that helped TCs understand the socio-cultural, historical, and political nature of their relationships within the school community, the University setting, and with their peers.

We began by attempting to build a free and open communication structure by asking our PDS partners for input that included their needs. This initial dialogue became a signature component of the relationship and a piece that was sustained through continual conversation, frequent check-ins, and with the understanding that the process would be an ongoing commitment. To be clear, however, this needs-inventory approach was always considered a journey and not a destination. The results of the needs assessment included after school tutors, a volunteer base for working in athletic study halls, Advanced Placement apprentices, and assistant coaches for athletics, to name a few.

Through these conversations and check-ins, we were able to determine where our TCs' skills would be best put to use, helping to lay the groundwork for their journey to becoming agents of change. An additional benefit was that our TCs were immediately welcomed as contributing members of the PDS community and received opportunities not normally associated with a traditional "school placement." The PDS administration treated our TCs like faculty members, holding them to the same high standards, expecting good work ethic, professionalism, collegiality and ethical behavior. We started the cohort by having a two-day in-depth on-site orientation that included information about all school-wide policies, initiatives, and strategies led by PDS administration, faculty, and students. This foundation allowed the TCs to begin their practicum with a clear understanding about the PDS and the fundamental attitude of growth and change.

The primary benefit of the intensive orientation at the beginning of the cohort was that our TCs immediately felt like members of the community and not "guests" of the school. Clearly, this reciprocal relationship was important to the school, as evidenced by the various administrators (e.g. principal, assistant principals, athletic director) taking time out of their day to address the group, to the school issuing IDs to each candidate, and the inclusion of TCs immediately into action groups, house meetings, data teams, department meetings, focus groups, and the like.

The immediate welcoming and inclusion of our TCs into the school community provided them with a variety of benefits. The PDS' open door policy on campus encouraged all of the faculty and staff to embrace and mentor the TCs, not limiting their experience to one mentor teacher or even one department. Teacher Candidate Bruce said,

We were encouraged to observe and interview a number of teachers, both in and outside of our discipline, that created a broad spectrum of professional approaches to teaching and also created a portfolio of strategies to use that directly addresses equity from a multitude of angles.

This policy also allowed our TCs to interview and observe Special Education teachers, English Language Learner teachers, and a variety of different content area teachers. Teacher Candidates were also given free reign to help advise and work with clubs, organizations, and athletics with the understanding that these extracurricular commitments would not affect either their classroom teaching or University program requirements. These relationships provided our TCs with, among other things, the opportunity to (a) apply for paid tutoring positions; (b) take on leadership roles; (c) serve as Senior Project judges; (d) plan and execute a school-wide community fair; (e) enroll in a Substitute Teaching course tailored to the TCs' schedule and needs; and (f) teach summer school and simultaneously take a University class designed to incorporate the PDS' (summer school teaching) and University's (curriculum development and field experience) needs.

The reciprocal nature of the PDS relationship allowed our TCs to (a) fill open positions on campus as emergency hires, long-term substitutes and in contracted teacher positions; (b) tutor students after school in a variety of areas, including but not limited to, SAT/ACT prep, core subjects, a Summer Bridge program for freshmen, college bound students with deficient SAT scores, athletes on academic probation, and Advanced Placement students; and (c) make community contributions such as working together as a team to collaborate, innovate, and execute a large school/community project which met Hawaii's Department of Education's General Learner Outcomes.

While the in-program experiences shaped the TCs into teachers who would always be grounded in active community engagement, the promise of TCs continuing with this philosophy was an essential component as well. Teacher Candidate Diana said,

One of the last assignments I was given in my pre-service [preparation] asked me to reflect on where I'd like to be professionally in ten years. This assignment was given to our class shortly after we watched the documentary *American Teacher*, a film that offered a sobering look at the tough realities facing teachers today. The documentary was a solemn note on which to end our time together as a class, but the film and its accompanying homework assignment left us with important questions to answer: "Are we willing to weather these real challenges, and stick with this profession for the long haul? Without sugarcoating the realities of teaching, what would *we*, personally, do to rectify the inequities in our profession?" Implicit in the writing prompt was the assumption that, ten years from now, we *would* still be teachers, we *would* be advocates, and we *would* be agents of change.

This “larger than me,” globally-driven, equity and access focused framework that TCs were asked to consider as part of their teaching philosophy was one that resonated with many TCs as they completed the program. Teacher Candidate Reed said,

I think that being an agent of change is realizing that there is more that you can do in a classroom with your students to change the flawed society that produces this kind of poverty. And people can argue that you'll never get rid of poverty, inequality, corruption, or whatever. Not with that attitude. Guess who can help change an attitude?

This attitude of working to become a contributing member of the school community had the TCs involved in a variety of ways including: (a) taking what was learned in a place-based ethnomathematics professional development, bringing it back to the classroom, and sharing it with the greater school community; (b) integrating culture, place, and action by helping the students create an *imu* (traditional Hawaiian underground oven); and (c) participating in a variety of extracurricular activities like the drum line, speech & debate, coaching, etc. Our TCs' commitment to make a difference wherever, whenever, and by doing whatever they could for the school community was the foundation of everything they did. In the following section, we look at how not only the TCs sought out opportunities and responded to the needs of the school, but more importantly, how all of the stakeholders of the partnership discovered, defined, formulated, and executed plans to satisfy each other's needs in mutually beneficial ways.

PDS Essential #3: Needs-based Responsiveness

No work is insignificant. All labor that uplifts humanity has dignity and importance and should be undertaken with painstaking excellence. - *Martin Luther King, Jr.*

The sentiments in the preceding quote are what allowed us to focus on providing needs-based, ongoing, and reciprocal professional development (PD) for all members of our PDS community (PDS Essential 3). During the past year, our TCs and the PDS have shared multiple resources including (a) offering PD opportunities for TCs and PDS personnel in a variety of areas including the use of technology (e.g., SmartBoards, apps, etc.); (b) including TCs in the PDS' ongoing new teacher mentoring sessions; and (c) sharing of content and pedagogical resources.

University courses also contributed to this need-based focus by (a) creating the summer elective course where TCs taught or co-taught courses that provided the partner school with the ability to staff and offer more selections of summer courses for their students; (b) giving TCs additional opportunities for field experience prior to student teaching through real-world experience with support and the opportunity to develop curricula; (c) making the TCs' capstone project focus on topics and issues relevant to the classroom, valuable to the context of the school, and something that would be of benefit to the school and associated stakeholders; and (d) hosting a statewide Job Fair where TCs volunteered as manpower and were able to experience the event as observers, have opportunities to talk with administrators, and engage in community service to the greater educational community.

The conversations that occurred between the MEdT program and the PDS staff allowed for the needs-based inventory to be updated and assessed on a continuous basis. Having TCs fulfill these needs was a way to sustain their involvement in the school and community and continue their preparation in areas normally outside a program's reach, while providing critical manpower and/or skills to the PDS. Teacher Candidate Bruce said,

One assignment stands out above all else and that is the Safety Fair. The Safety Fair is put on every year by WHS and the first semester of our time in the MEdT program, our cohort was responsible for taking over the responsibilities in preparing for the fair. It was really challenging. We were given free reign over the fair, which really exposed our inadequacies as student-teachers in a lot of ways. The project was a fantastic realization that teaching is more than just the 20' by 20' learning sanctuary that we provide for ourselves and our students. Teaching involves professional collaboration with other teachers, administration, and the entire community.

Other examples of responses to specific needs on the part of the school, University, or the community include (a) mathematics professional development for the school math department led by University faculty; (b) end-of-course exam for TCs led by district personnel; and (c) substitute teacher preparation and certification for TCs and other community members on site.

The work from all members of the partnership was significant in that it was based on the needs of the school community. The University was able to meet needs by aligning course work with school goals and providing professional development opportunities. In turn, this allowed our TCs to give back to the community by planning and facilitating a school event. By paying attention to the needs of all involved, the partnership was able to come up with innovative ideas that addressed multiple stakeholder needs. The concept of innovation and reflection will be explored in more depth in the next section.

PDS Essential #4: Innovation and Reflection

The true sign of intelligence is not knowledge but imagination.

- Albert Einstein

One of the most powerful illustrations of how innovative and reflective practice can transform a school and community (PDS Essential 4) can be seen by our TCs every time that they look at the PDS principal. By thinking outside of the box, focusing on success through innovation, having the courage to act on one's ideas and convictions, honoring the vision he has for the school and by defying odds too numerous to list here, the leader of WHS has steered the school and the community out of the shadows and into the forefront of education in Hawaii, to the point where, when the US Secretary of Education came to visit the state of Hawaii, WHS was one of the first schools on his agenda.

One example of this commitment to innovative practices is WHS's adoption of the Design Thinking (DT) framework (Rowe, 1987). According to the PDS' School Improvement Resource Teacher (SIRT), Linda,

Design Thinking has helped educators and students at Waipahu High School develop a "can do" mindset, encouraging all contributors to think outside of the box to innovate for solutions that benefit both the user/customer and his/her community. By learning and implementing DT the PDS teachers and students have learned to welcome any challenge because they believe that solutions are possible.

Our team of University and PDS personnel show commitment to innovative and reflective practices by collaborating on research and projects that later become presentations for conferences and papers for publication. In the past year, members of our PDS team have presented at and have had papers published in international, national, and local conferences and journals.

We believe that the best way for TCs to learn is by doing. The PDS and University enhance student learning by (a) committing to honor a mutually beneficial relationship and make it the priority for all stakeholders; (b) having TCs serve as willing volunteers in a variety of roles; (c) documenting and publicizing the PDS teachers' best practices, which may have formerly been unrecognized or underappreciated; (d) honoring outstanding programs at the school, to enhance what is already in place, and to help fill any remaining gaps; (e) having TCs serve as a means of gathering new ideas and strategies; and (f) having TCs fill substitute teaching jobs, emergency hire positions, and become part of a high-quality pool of applicants familiar with the school and its culture to hire for openings. As TC Diana describes,

My goal as a teacher is to help my students develop certain habits of mind -- I want them to become curious, questioning and creative truth-seekers. To that end, I think teachers need to model those qualities, too. Within our pre-service [preparation], my classmates and I were constantly engaged in inquiry-based, project-based, collaborative and discussion oriented learning. We were expected to embody the same probing, experimental, passionate attitude in our teaching that we hoped to nurture in our students. ...So, one essential question I've developed recently is: "how does one foster a school culture of critically thoughtful, self-reflective teaching that is open to experimentation?" Qualities like metacognition and inquiry, both of which were emphasized in my pre-service [preparation], are what I think will ultimately lead to more enriching educational experiences for students and teachers alike.

Another view comes from TC Hank, who found reflection to be an important part of the program. Hank was able to take his skills in reflection and find ways to blend them with the sometimes frenetic pace of teaching and to create a plan for next year.

I know that one of my flaws (or strengths) is in the art of rumination. My mind is most active, when I am doing nothing. Unfortunately, doing nothing doesn't bode well for educational practitioners, and the time that I would have liked to devote to meticulous and scrupulous upfront research and planning had to be put aside to give way for impromptu executions and last-minute turns of the tide. Teachers simply cannot rely entirely on proactive and preventative measures, they must also be skilled in reactive or responsive measures as well. The latter, and I presume much more valuable and difficult to come by, grows with experience. A craft is best learned through apprenticeship, first-

hand practice and experience. My plan for next year is, well, to plan enough but not too much. My new mantra: As simple as possible, and as complex as necessary.

To reiterate Einstein's words, "the true sign of intelligence is not knowledge but imagination." Whether it be by observing the innovative ideas of the PDS principal, adopting and implementing the Design Thinking framework, learning by doing, or reflecting on past actions, imagination can take many forms and is a key component for our TCs to use the knowledge that they have to benefit the school community. While the learning and the creation of knowledge is both a commendable and worthwhile endeavor, it is the dissemination or sharing of what one knows with others that truly helps to create a community of learners. The next section will describe how the PDS stakeholders, realizing that self-reflection and learning from one another are critical parts of creating a knowledge base, attempt to create opportunities to share their successes with others.

PDS Essential #5: Sharing Successes

To know, is to know that you know nothing. That is the true meaning of knowledge.

- *Socrates*

At first glance, the Socrates quote may seem a bit harsh, but in reality it is just succinctly stating the idea that self-reflection is a key component of not only knowing oneself, but also in coming to the realization that we as individuals cannot know everything and that, to be truly knowledgeable, we must acknowledge this fact, share what we know, and make use of the skills, talents and experiences of others. What we know about not only ourselves, but one another - especially when related to what we do in the classroom - is a critical piece of our PDS.

The best practices of any educator are rarely shared outside of a small group. In our PDS partnership, both PDS and University personnel believe that best practices should be open, accessible, and celebrated (PDS Essential 5). Toward this end, the MEdT Program has required each TC, as part of a class assignment, to interview a variety of teachers to determine their best practices. No one teacher can be interviewed more than once, and each TC must interview teachers in their content area, outside of their content area, in ELL, SPED, etc. This information is collected, organized and presented for the entire school community to access and view at any time. This assignment serves multiple purposes, including (a) TCs get to know a variety of teachers who they may not otherwise seek out; (b) all the best practices of teachers are recorded and available for all members of the school community to access and view; and (c) PDS teachers' work is shared with a greater audience and celebrated.

Additional sharing of these best practices takes place beyond the stakeholder community when the members of the PDS are fortunate enough to be able to attend local, national or international conferences to present about the University-PDS relationship or write papers such as this one for a wider audience. The COE also participates in the sharing of successes by compiling the results of the surveys given to the PDS stakeholders and sharing the information on its website.

With first-hand experience in sharing the PDS' success with others on local, national, and international levels, PDS SIRT Linda describes her experience as follows,

Presenting at national conferences provided the team with the opportunity to reflect upon and share successful practices, as well as provide implementation support to other interested schools. In the sharing process, the partnership also learned about practices other schools found success with that could be beneficial to our PDS. Meeting with other PDS educators helped to broaden our support network, gave us ideas for new research based practices to implement, and provided us with encouragement that our efforts were on the right track.

Sharing information with one another inside of the PDS, within the University setting, and on a national level has helped create the foundation of shared understanding between all stakeholders. Through reflecting and sharing our successes with others, we have learned what works in this partnership, but also realized that like Socrates instructed, there is still much to learn. While this sharing has been extremely beneficial for the PDS and University, other schools within the same complex as our PDS recognized the benefits that were being reaped by our partner school and wanted to find a way to also participate. The following section details the creation of a complex-wide articulation - something that had never been done before in the scale and scope that we were attempting.

PDS Essential #6: Complex-wide Articulation

Do I dare disturb the universe?

- *T.S. Eliot*

Is there a better way? The answer to this simple question can easily form the basis for great change. Previous COE relationships with partner schools followed a more traditional, hierarchical model of teacher education where the University provided TCs and the school provided placements where TCs could practice what they learned in their classes. Little, however, was done by either party to go beyond the completion of observation, participation, and student teaching hours and the knowledge that the school and community could provide to the TC was neglected (Zeichner, Payne, & Brayko, 2015). The relationship described in this paper was started with the vision that it did not need to follow the status quo and could and would become something different.

The current PDS arrangement started with two cohort coordinators from the MEdT Program and a few teachers and administrators from the PDS discussing and agreeing to what TCs would be doing in the course of their teacher education program. By the second year of the relationship, PDS stakeholders (School, DOE, Program, University, etc.) formalized an articulation agreement defining the roles and responsibilities of each stakeholder (NAPDS Essential 6). In 2014, the agreement grew to include the entire school complex - from elementary to middle to high school, involving all of the school principals, the complex area superintendent, COE Dean, Associate Dean, various department chairs, and many faculty. The newest 2016 version will include a general agreement between all schools in the complex and the University, with addendums addressing each school's specific needs. There will be a governing committee and provisions for a more formalized structure since more people are involved - that is there will be multiple cohorts, multiple PDS sites, and many different administrators and faculty involved.

The initial vision for this complex-wide articulation started as a straightforward conversation reflecting on the benefits of working together towards mutually beneficial goals. Its creation did, in effect, “disturb the universe” because nothing like it had ever been done before in the scope and scale that we were attempting. One major component that will be essential to the success of this endeavor, described in the next section, is both self-reflective and metacognitive in nature but stems from the ability to be open with one another - typified by having open access and communication.

PDS Essential #7: Open Access and Dialogue

To know that we know what we know, and to know that we do not know what we do not know, that is true knowledge.

- Nicolaus Copernicus

In order to find out what we know, what we think we know, and what others know and think about us, it is essential to begin, expand and continue an open dialogue between all stakeholders (NAPDS Essential 7). The relationship between WHS and the MEdT Program has always been one of open access, where any stakeholder could simply pick up the phone or email another if questions or problems arose. The willingness and openness among all stakeholders to communicate with one another is the foundation of our relationship - and just as importantly, it must be something that can be initiated from either side, depending on the needs at the time.

The key, as it is in any successful partnership, is having open lines of communication. Both the University and PDS recognize the importance of this and have designated an individual from each partner to serve as a liaison so that there is always a go to person to contact when necessary.

The importance of open access and dialogue cannot be understated and is the foremost reason why the PDS created a liaison position to work directly with the University. PDS liaison Linda describes her role as follows

A PDS liaison is vital to the partnership. The PDS liaison's role is to help the TCs by working with administration and faculty members to provide opportunities for the TCs to learn about the school - its history, current educational practices, cultural practices, traditions, teachers, students, parents, and community. The PDS liaison works with the PDS partners to create the first day orientation experiences, organize community tours of the different feeder schools and neighborhoods to provide TCs with an understanding of student's backgrounds and home situations, and are always looking for opportunities/roles for the TCs to learn and be a part of the school.

Another example of the open access and dialogue in action includes the proactive rather than reactive communication necessary to deal with issues that may arise between a TC and/or mentor teacher (MT). If a situation like this occurs, the MT or school administrator would immediately notify the MEdT cohort coordinator about the issue with the candidate. A meeting would be held with all parties involved in order to clarify the situation and, based on the results of the meeting, appropriate actions would be taken.

As PDS liaison Linda eloquently describes, in order to capitalize on the connections we cultivate:

Open access and dialogue are key...By clearly communicating what our school needs help with, our PDS partner was able to work with the TCs to fill those needs. Both the school and the TCs benefited from the partnership.

Open access to each other and open dialogue at any time, allow stakeholders to share and use information to make the best possible decisions for all of the parties involved and allows us to know what we otherwise may not have known. Transparency is a key component in creating a trusting working relationship and information sharing creates the foundation for each stakeholder to work together for the common good. This collaboration among stakeholders is described in the next section.

PDS Essential #8: Stakeholder Collaboration

Coming together is a beginning; keeping together is progress; working together is success.

- Henry Ford

The successful creation and cultivation of the PDS partnership were feats to be proud of, but the continued work in sustaining that success was what stakeholders could truly take pride in. The collaborative effort of all stakeholders was the crucial piece that allowed for steady growth and it is one of the foundational pillars of our PDS relationship.

While there are formal roles in both the PDS (principal, assistant principals, teachers, mentor teachers, etc.) and the University (Dean of College of Education, department chairs, instructional faculty, field supervisors, etc.) the relationships are fluid (NAPDS Essential 8). That is, each individual functions in the manner as delineated in their job description, but is also able to work in other capacities as required by the situation. For example, field supervisors often take on the role of mentor for the TCs when needed, and MTs often take on field supervisor responsibilities, as the situation requires it. This flexibility can be a blessing as described by TC Bruce.

I think the beauty of this program is its freedom to find your niche, your teaching style. There are immense amounts of guidance and mentoring along the way, but the candidates get out what they put in. We were given a lot of autonomy within the classroom to “figure things out.” We were encouraged to experiment with a variety of strategies, and we bounced practice and ideas off each other.

Another view, based on experiences in the UHM summer school class created to work in concert with the WHS summer school class she was teaching, comes from TC Sue.

I know that student teaching and my future teaching positions may not be structured in this exact same way [*with the need to collaborate with many different teachers and to plan things out on a quickly changing timeframe*] but I will have to be flexible. As a teacher, there are any number of things that are unpredictable....through it all, I need to

try to remain as calm and collected as possible and not lose sight of why I am there in the first place.

While there was a great deal of stakeholder collaboration in the creation and development of the merged University and PDS summer school program, there was an additional layer of collaboration that was required for a portion of the cohort. One TC, Jean, along with several other candidates, was selected to teach in a special program within the WHS summer school lineup, called Summer Bridge. Summer Bridge, designed to ease the transition for incoming freshmen, incorporated collaboration between the lead summer school teacher, an unseasoned TC serving as co-teacher, a team of veteran teachers who served as curriculum guides, and college-aged volunteer assistants. Collaboration with the intermediate and middle schools also took place, ensuring a smooth passage for the students. Jean recalled,

Working with another teacher, especially one who has more experience...caused a few changes to occur. In the middle of a lesson sometimes there would be a request or suggestion because of her experience...and I had to be ready to adjust on the spot...It made me think of a single school year and how fast a quarter will most likely go by.

The view of stakeholder collaboration looks very similar to those described by the TCs when seen from the PDS side of the relationship as described by SIRT Linda.

The TCs hired as Summer Bridge teachers were integral to the program's success. The TCs were responsible for designing and teaching math and literacy lessons, as well as taking the lead in facilitating DT career pathway projects for the students. The TCs had great ideas to share and were excited to implement the different teaching strategies learned in their University preparation courses. The veteran teachers learned new strategies from them as everyone collaborated to design different learning experiences for the students.

Our TCs learn early and often that collaboration is something that the MEdT Program not only encourages but requires. We believe, and emphasize to the TCs that, while they could work alone to complete any or all of their tasks, collaborating will allow them to leverage each individual's talents. The benefits of this collaboration are not just additive but rather, multiplicative or at times exponential and are a great example of the group being stronger than the individual. Toward this end, it is imperative that we share what we know with one another. This facet of our PDS is described in the next section.

PDS Essential #9: Sharing the Wealth

Alone we can do so little; together we can do so much.

- *Helen Keller*

While working together usually means the workload is lessened, the opposite is true of sharing the fruits of the labor. By sharing resources across both the PDS and University settings,

all stakeholders are able to make the formal rewards and recognition meaningful parts of an authentic partnership that shares both the work and the wealth (NAPDS Essential 9).

One of the most meaningful examples of sharing resources occurred on the very first day that the TCs met the members of the PDS. The relationship building began when members of the PDS, including the principal, the assistant principals, the athletic director, the MTs, and a variety of other stakeholders coordinated and hosted a two-day intensive session about the PDS and school culture. This served as an introduction for the TCs and allowed them to get a feel for the school, the community, and the students; along with helping the TCs become contributing members of the school community from day one.

A second example occurred when members of the PDS (school liaison and two TCs) accompanied members of the University (two faculty members) to a national conference to do a presentation covering the intricacies of the partnership. Two other TCs from the partnership accompanied a third instructor to a national conference to present about their experiences in the PDS and shared their experiences with the cohort. These relationships also formed the basis for additional articles and presentations.

A third example occurred when a TC shared his expertise with the PDS faculty by doing a PD session on how to integrate SmartBoard technology into the classroom. This session, based on a shared need by both the cohort TCs and the PDS faculty, was attended not only by these two groups, but also members of the school community.

Physical resources are also shared. An explicit example of this occurred when the TCs were given the opportunity to plan and execute a school-wide community event for the school and surrounding community. Over 2000 students, 180 faculty and many members of the surrounding community attended this event that brought together businesses, non-profit organizations, schools, members of the armed forces, and others. Another example of physical resource sharing occurred when the PDS or University needed a place to conduct meetings or classes – each partner willingly found the other a place to conduct the event.

One of the most joyous occasions the PDS partnership shared with all stakeholders was the end-of-program celebration, held on the PDS campus. After laboring over the course of two years, PDS faculty, TCs, community members, and University faculty came together to celebrate and commemorate the partnership and its results. This shared event that included a welcome by the PDS principal, slideshow, student performances, food, and fellowship allowed people who worked closely within the partnership as well as those who contributed in peripheral roles to see and hear from the TCs themselves. Program evaluation, while a continually ongoing process, was also a highlight of this event. The celebration set the tone for the evaluation, which encouraged all participants to openly assess the strengths and contribute solutions to improve any facet of the program.

This mindset, to celebrate the accomplishments of others and share the benefits with all stakeholders, influenced the TCs as demonstrated by what Sue did for her students.

Today was the last day of Summer Bridge and the other teachers and I decided to hold a mini-graduation ceremony for our students. We presented a slideshow with pictures that were taken throughout the five weeks that we were together and called up every student to receive a Summer Bridge diploma. As I watched the students come up to be recognized, I started to tear up because despite all of the challenges, I was proud of them. Following the ceremony, one student approached me and said, “Thank you for everything

Ms. Richards. I hope all of my high school teachers are like you!” With those words, I was reminded of why I wanted to become a teacher.

All stakeholders in the partnership have the goal of helping TCs become the best teachers that they can be. It is, however, the TC who must take in and internalize the shared philosophy of the University and the PDS. When this happens, it is clear that the TC has grown into someone who is an agent of change. TC Diana described her experience with a global perspective.

I think this actually connects back to the idea of a “poverty of gratitude” that Levy (Smoot, 2010) [talked] about. If we become so attached to our own entitlements, our own sense of material well-being, our own ego-attachments, we lose some very crucial human values that allow us to see the larger picture of what we’re doing here on earth, and what really has significance.

With big picture, introspective views like this, clearly, this would be a TC that any program would be proud of.

Another critical key in the cultivation of the University-PDS partnership is documentation of all that has been done, the challenges encountered, solutions discovered, and roads that lay ahead. The principal method of recording these data has been in the form of reflection. As one of the MEdT Program’s four guiding principles, reflection is a tool that we not only preach, but practice as well. Reflective pieces are gathered not only from TCs, but also University faculty, PDS stakeholders, and community constituents.

This documentation of progress within the PDS also allows various partners to assess the impact of the partnership on all collaborators and the students we serve. This assessment is based on the following areas: (a) student teaching/practicum evaluations; (b) mentor teacher surveys; (c) PDS hiring from within the cohort; (d) student surveys; (e) PDS faculty surveys; and (f) TC reflections.

One of the most formidable challenges of documenting and assessing PDS progress and impact has been trying to get all stakeholders together at the same time. While the data has been plentiful, the opportunities to meet and share what has been done have not been, because the constituents in this PDS, University and other stakeholders are busy doing the work that they have been called to do. However, because the team understands the importance of sharing what we do with one another, it has resolved to work diligently to create more opportunities in which all parties can come together for assessment, evaluation, and celebration.

Conclusion

During the initial stages of our partnership, we worked diligently to cultivate the relationships that were essential to developing the trust necessary to create effective working relationships. We then worked to connect all of the various stakeholders and to capitalize on their expertise and experiences to constantly evolve and improve what we were doing.

With the nine PDS Essentials in mind, the accomplishments and achievements of the PDS partnership that we are most proud of are demonstrated by the quality of the teacher candidates that come out of the MEdT Program. Over half of the TCs in Cohort A were hired prior to or during their student teaching semester. These individuals, guided by both the University and PDS personnel, were all hired after completing the University program by public, private, or charter schools in the state. This is the ideal result for the TCs in a successful University-PDS partnership. Cohort B saw an even better outcome with nearly three-quarters of the group being hired before or during student teaching. Most notable was the partner school's interest in hiring these candidates who were "homegrown" by being trained in the PDS. The deep belief in the candidates that the PDS staff had, was instrumental in developing TCs into knowledgeable, effective, and caring educators and illustrates the commitment to sustaining the partnership that cultivates, connects, and capitalizes on our merged spaces.

In its most basic form, this University-PDS partnership is a successful alternative to the traditional teacher preparation model. The collaboration between all stakeholders and the merged spaces of this University-PDS partnership empowered our teacher candidates to develop skills in teacher leadership, advancing access and equity and responsiveness to critical needs, along with foundational competence in collaboration, innovation, and reflective practice. The voices of the TCs and PDS personnel are evident in the examples documenting the contributions that have been made, which echo the sentiment that the seeds have been planted and will continue to grow. This collaboration has allowed all the stakeholders of the partnership to capitalize on the skills and talents of everyone involved and reflect on what was, is, and, most importantly, what could be.

References

- Hawaii State Department of Education. (2015). *School status and improvement report 2014-2015*. Accountability Section, Assessment and Accountability Branch, Office of Strategy, Innovation, and Performance.
- Levine, A. (2006). *Educating school teachers*. Washington DC: Educational Schools Project.
- NAPDS. (2016, Jan 1). *9 essentials*. Retrieved from: <http://napds.org/nine-essentials/>
- Pantic, N., & Florian, L. (2015). Developing teachers as agents of inclusion and social justice. *Education Inquiry*, 6(3), 333-351.
- Robinson, S. (2007). *Response to educating school teachers*. Washington, DC: American Association of Colleges for Teacher Education
- Rowe, P.G. (1987). *Design thinking*. Cambridge, MA: MIT Press.
- Smoot, B. (2010). *Conversations with great teachers*. Bloomington, IN: Indiana University Press.
- Zeichner, K., Payne, K. A., & Brayko, K. (2015). Democratizing teacher education. *Journal of Teacher Education*, 66(2), 122-135.

Jon Yoshioka is an associate professor and chair of the MEdT program at the University of Hawai'i at Mānoa. His research interests include teacher preparation and PDS/University partnerships. Vail Matsumoto is an assistant professor in Institute for Teacher Education at the University of Hawai'i at Mānoa. Her research interests include teacher preparation, PDS/University partnerships, and teacher leadership. Lori Fulton is an assistant professor at the

University of Hawai'i at Mānoa. Her research interests include teacher preparation, teacher leadership, and teaching and learning in hybrid environments. Cesceli Nakamura is a School Improvement Resource and former ELA Teacher at Waipahu High School. She is the liaison between the school and university and an administrative leadership team member.

**Advancing a Professional Development System:
Evolution and Evaluation**

Somer Lewis

University of North Carolina Wilmington

Tamara M. Walser

University of North Carolina Wilmington

Abstract: This article describes the evolution of the University of North Carolina Wilmington's Professional Development System (PDSsystem) School-University Partnership, which began more than 25 years ago. In addition, authors discuss the development of a monitoring and evaluation system for the PDSsystem, including results of a recent evaluability assessment, and related implications for practice. For others engaged in professional development school (PDS) work, evaluability assessment may serve as a useful approach in the development of a monitoring and evaluation system, including outcomes and impact evaluation. Its focus on context, stakeholder involvement, and use of evaluation results provides information useful for formative improvement and for forwarding meaningful and feasible outcome and impact evaluation.

KEYWORDS: professional development schools, school-university partnerships, evaluability, assessment, program theory

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
9. Dedicated and shared resources and formal rewards and recognition structure

Author Note: The authors would like to acknowledge Dr. Donyell Roseboro, former PDSsystem Director, for her initiation and support of the evaluability assessment, as well as Candace

Blanke, Brian Brinkley, Joy Childs, Stephanie Glowa, Dr. Ann Potts, Deloris Rhodes, and Cindy Wiseman for their input to the evaluability assessment process

Introduction

Since the mid-1980s, the professional development school (PDS) movement has sought to simultaneously revitalize teacher education programs and reform P-12 schools. In a comprehensive examination of initial PDSs from this era, Abdal-Haqq (1998) cites two major concerns that stirred what he referred to as a “second wave” of school reform and the conception of the PDS model: fear that our country was losing its position as an economic power, and social justice concerns regarding the “growing disparity between the economically advantaged and disadvantaged” (p. 1). In response to the demands placed on public schools and teacher preparation programs during this era of reform, the PDS model advocated school-university partnerships, which served as sites for best practice, pre-service teacher preparation, and simultaneous renewal of both basic and higher education. The model was highlighted in several influential reports, and by 1993 was adopted by over 46% of schools, colleges, and departments of education (AACTE, 1995; Carnegie Forum, 1986; Goodlad, 1990; Holmes Group, 1986). Since this initial wave of development, the PDS model has remained a critical component of ongoing P-12 school reform efforts and has aided in the reexamination of schools of education. In 2016, engaged in what many would agree is yet another wave of reform and prompted by similar fears, public schools and teacher education programs continue to hone the PDS model in an effort to positively impact both teaching and learning worldwide.

Although PDS initiatives have been heralded as an important element of school reform, they have simultaneously been criticized for the resources they require (Latham & Vogt, 2015). Along with higher education in general, and teacher education programs specifically, evaluation, and related accountability of PDSs has become increasingly important. Teitel (2004) noted a shift in PDS work from a focus on the process of starting and implementing a PDS during the first decade of PDS initiatives to a focus on PDS outcomes, including P-12 student learning. Whereas early PDS literature was often descriptive of how to implement a PDS, later research began to investigate outcomes and impacts. For example, studies have provided evidence that student teacher interns at PDS schools achieve higher outcomes than those at non-PDS schools (Castle, Fox, & Souder, 2006; Ridley, Hurwitz, Hackett, & Miller, 2005) and that teachers who were educated within a PDS system enter the teaching profession more often and stay in it longer (Latham & Vogt, 2015). Additionally, many of the published PDS studies report on the evaluation and outcomes of specific PDS initiatives and contexts (see for example, He, Miller, & Mercier, 2010; Pepper, Hartman, Blackwell, & Monroe, 2012; Reed, Kochan, Ross, & Kunkel, 2001; Theiss & Grigsby, 2010). The increased focus on outcomes is likely a reflection of the maturation of the PDS model along with increasing educational accountability, including the need for data and results about student outcomes, teacher quality, and teacher retention (Teitel, 2004).

Despite strides in PDS research, there remains a lack of empirical studies on PDS models (Capraro, Capraro, & Helfeldt, 2010; Reed et al., 2001). Challenges to studying PDS outcomes and impacts include the time and energy needed to conduct systematic evaluation (He et al., 2010), as well as the diverse and unique designs of the numerous PDS models in existence

(Capraro, Capraro, & Helfeldt, 2010). Reed et al. (2001) offer considerations for evaluating PDSs, such as the importance of context in determining what should be assessed and how, and evaluation as an ongoing process that includes “all PDS participants in determining goals, identifying data collection processes and materials, analyzing data, and using data to make decisions” (p. 191). In addition, the National Association of Professional Development Schools’ (NAPDS, 2008) “Nine Essentials” of a PDS provide guidance useful for evaluation, including as one “essential” the need to disseminate the work of the PDS and its impact on student learning.

The purpose of this article is to describe the current University of North Carolina Wilmington (UNCW) Professional Development System (PDSsystem) School-University Partnership, the development of a monitoring and evaluation system for the PDSsystem, and implications for practice. The following sections include an overview of what a PDS is; a description of the UNCW PDSsystem, which began more than 25 years ago; the monitoring and evaluation system for the PDSsystem, including the results of a recent evaluability assessment; and related implications for practice.

Defining PDS

While PDS organizational structures have shifted over time, PDS literature reveals several commonalities. Supported by Goodlad’s (1988) concept of simultaneous renewal, teacher candidate preparation, reciprocal teacher/faculty development, and the examination of educational practice to support student achievement, continue to be a mainstay in PDS literature (Cozza, 2010; Darling-Hammond, Bullmaster, & Cobb, 1995; Teitel, 2004; Trachtman, 2007). This includes the need to alter teacher education programs to support the professional growth of pre-service teachers in the field, as well as create support systems for improving the practice of teachers on site where partnership teachers take on new leadership roles and engage with university faculty to rethink practice (Cozza, 2010; Graham, 2002; Teitel, 2004). According to Darling-Hammond et al. (1995), these interactions create “an opportunity for the profession to expand its knowledge base by putting research into practice- and practice into research” (p. 88). PDSs serve as sites for the development of new instructional models and the examination of educational practice where students, teachers, and faculty challenge beliefs about both teaching and learning.

Collaboration is key to any PDS model (Ball & Rundquist, 1993; Cozza, 2010; Grisham et al, 2002; Lieberman, 1995; Taymans et al, 2012; Trachtman, 2007). Both teachers and university faculty take on shared responsibility for the development of pre-service teacher candidates. In addition, these collaborations seek to rethink “values, beliefs, and paradigms for schools and school change while negotiating two worlds and inventing new programs” (Darling-Hammond, 1994, p. 37). Graham (2002) identifies the importance of collaborations “built on mutual trust, willingness to communicate, flexibility, and a dedication to renewal in pursuit of excellence in teaching” (p. 8). Over time, these collaborations develop so that a PDS site is one of shared growth and exemplary practice.

Researchers have long proposed several “stage theories” in an attempt to capture the development of the PDS model (Dixon & Ishler, 1992; Teitel, 2003; Walmsley, Bufkin, & Rule, 2009). In 2001, the National Council for Accreditation of Teacher Education (NCATE), now consolidated with the Teacher Education Accreditation Council as the Council for the

Accreditation of Educator Preparation, recognized the power of PDSs to impact teaching and learning and developed a set of defining characteristics that are “interconnected and developmental in nature” to better assess and measure the impact of the PDS model (Cozza, 2010). These characteristics include Learning Community; Accountability and Quality Assurance; Collaboration, Equity, and Diversity; and Structures, Resources, and Roles (NCATE, 2001). With a rise in the number of PDSs nationwide and varying interpretation of the PDS model, the NCATE standards attempt to “direct PDS development, evaluation, and accountability” (Taymans et al., 2012, p. 226). In 2008, NAPDS released a policy statement articulating the organization’s definition of a PDS and encouraging school-university partnerships to embrace the Nine Essentials of “What it Means to be a Professional Development School.” While the language of the Nine Essentials are tangible, rather than abstract, the organization recognizes the differing contexts in which these PDSs are formed and opportunities for growth and evaluation of a model that has long served as a main component of school reform movements over the last thirty years (NAPDS, 2008).

Origins of a PDSystem

The origins of the Professional Development System (PDSystem) in the Watson School of Education at UNCW surfaced in 1989. At that time, a proposal was submitted to establish the Consortium for the Advancement of Public Education (CAPE) and the Model Clinical Teacher Program (MCTP). CAPE’s initial effort emphasized school reform while MCTP focused on the reform of teacher preparation schools across three districts. In the years that followed, faculty-led self-study and external evaluation of the partnership revealed the need to redesign teacher preparation and refocus collaborative efforts on school reform. In 1993, the decision was made to merge the most successful components of each parallel initiative into one focused system across programs in the entire School of Education. The consensus was for the partnership to transition to a more systemic model, which, in essence, became what we know as our present day PDSystem.

As the system developed, so too did the reciprocal nature of its collaborative efforts. Early on, PDSystem faculty focused on developing high quality sites by formalizing processes, identifying roles and responsibilities of faculty and school partners, and implementing policies to guide the development of pre-service teachers. As relationships matured and processes became institutionalized, the emphasis of the system transitioned to one of providing professional development and the systemic adoption and implementation of a well-defined framework for supervision (Wetherill & Calhoun, 2011). Through the years, our PDSystem has continued to evolve in both breadth and depth. As a larger number of schools and districts expressed interest in partnering, our System has transformed to include flexible options for meaningful partnership based on the needs of individual schools and districts. In addition, this growth has led to a re-examination of the reciprocal nature of our partnership and a recommitment to opportunities for mutual renewal.

At present, the PDSystem at UNCW has established collegial working relationships among the Watson College of Education (WCE) and 146 public schools across 12 school districts in the southeast region of our state. Our PDSystem improves the quality of teacher and administrator preparation and performance by offering an array of professional experiences,

including site-based seminars and a coaching and supervision model that pairs interns with trained partnership teachers. The partnership is intensive in that it collaborates with districts in placing students; provides professional development to build quality teaching capacity; offers opportunities to develop research, grants, and other initiatives; values reciprocity; and helps redesign our teacher education programs by building a community of reflective learners (University of North Carolina Wilmington, 2016b). Unlike some professional development school initiatives detailed in the literature which may impact a single school, the UNCW PDS system represents a more comprehensive approach to partnership: “It has become broad based and powerful enough to include the entire teacher education faculty, representatives from departments in the College of Arts and Sciences, over 2,100 partners and more than 500 public school educators each year” (University of North Carolina Wilmington, 2016a).

The growth of our partnership and our shared commitment to improve student learning by enhancing the quality of our teacher education programs, teacher performance, and school leadership has led to the development of a three tiered system of engagement. Organizing our partnership in this manner has allowed us to continue to create opportunities for school partners to have a shared voice in the PDS system at all levels. District partners and individual schools have the flexibility to move in and out of tiers dependent upon their readiness to partner in (Tier 1) Professional Development, (Tier 2) Pre-Service Teacher Placements, and (Tier 3) Comprehensive Support.

Our PDS system negotiates formal agreements with district superintendents and public charter school directors once every three years. These agreements reaffirm the importance of partnership goals and the responsibilities inherent in them while also reflecting the importance of flexibility in meeting the needs of individual partners, ensuring that the program goals are not compromised and that continuity and equity in partnerships remain foremost in the PDS system vision. Tier 1 partners build capacity in their schools to one day support the needs of pre-service teacher candidates. Teachers participate in professional development opportunities alongside College faculty and request support on site in individual schools or through district-based initiatives. Through collaborative initiatives such as the First Years of Teaching Support Program, the Promise of Leadership Award Program, and the National Board Support Program, among others, P-12 teachers, administrators and community partners collaborate alongside College faculty to re-examine current practice, provide meaningful feedback to teacher education programs, and participate in mutual opportunities for growth and shared decision-making.

Tier 2 schools serve as hosts for pre-serve teacher field and internship placements. In a given semester between 80-100 school sites serve as Tier 2 partners. Each Tier 2 school designates a school-based Site Coordinator who works directly with university faculty to place students and lead site-based seminars during the internship semester. These seminars, which take place on-site in our partnership schools, involve teacher interns, school partners, and university-based supervisors, offering shared opportunities for reflective practice by all partners. Partnership teachers in Tier 2 schools, as well as university supervisors, participate in 10 hours of professional development in our adapted Cognitive Coaching Model (Costa & Garmston, 2002) for learner-driven supervision prior to hosting a pre-service teacher intern. In addition to this initial orientation, partnership teachers, PDS faculty and university supervisors participate in annual Professional Learning Days (PLD), share feedback during PLD focus group sessions, and

engage in extensive conversations regarding clinical practice across programs and PDS school sites.

As our PDSsystem moves into a more advanced phase of its development, new roles, responsibilities and initiatives continue to emerge. These opportunities for shared collaborative growth and school reform are positioned in Tier 3 of our partnership and supported by Trachtman's (2007) research on the exploration of "inquiry directed at improving practice" whereas "the inquiries in which the participants engage provide the rationale for their cross-institutional partnership" (p. 197). Tier 3 partners are committed to systemic reform efforts and are connected to the PDSsystem at multiple points. Several Tier 3 initiatives, such as our Elementary Block, Master Teacher Program, and Partnership in Action Initiative, allow PDS partners to collaborate in meaningful ways to not only support the growth of our teacher preparation programs and teacher candidates, but to initiate change in both our partner schools and College of Education through small and large scale collaborations. Our Master Teacher Program, for example, selects partnership teachers from our Tier 2 schools and pairs them with faculty who share common interests for professional growth and research-based initiatives. These partnerships are supported through our PDSsystem Office and by other Master Teacher/faculty partners to initiate inquiry-based professional growth and enrichment opportunities. Master Teacher meetings provide a foundation for focused discussions regarding teacher preparation, recruitment and retention efforts. Additional PDS initiatives and advisory committees, such as our PDS Advisory Board and PDS School Partners Luncheons provide faculty and P-12 school partners with an opportunity to participate in the shared governance and reciprocal growth of our partnership.

As a result of the tremendous growth of our PDSsystem and our tiered approach to providing flexible support and opportunities for more intensive collaboration, a comprehensive system to monitor and evaluate the work of our PDSsystem was developed. Similar to our PDSsystem, however, our evaluation efforts and the ways in which we monitor and measure impact have evolved to meet the ever-growing demands of accountability and the needs of our school partners. In addition, several years of change in PDSsystem leadership and focus led to an in-depth examination of the evaluability of our current model.

Monitoring and Evaluating Our PDSsystem

In the WCE, we have a comprehensive system in place for monitoring our PDSsystem and conduct ongoing assessment of each of our degree and licensure-only programs. The WCE Database and Collaborative Portal is used extensively by the Office of Teacher Education and Outreach, which includes the PDSsystem and Professional Experiences Office. It provides a system for collecting and managing data on teacher education candidates; faculty; P-12 partnership school districts, schools, administrators, teachers; and alumni. The database includes applicant information, teacher education and graduate candidate profiles and coursework, key assessment results (e.g., Praxis scores), field experience data, teaching internship data, and administrative internship data. The Office of Professional Experiences uses the database to identify and monitor field experiences and teaching internships for teacher education programs. The PDSsystem uses the database to monitor training of teachers who supervise interns, as well as to communicate with school partners through the "portal" function, which allows a level of

database access to partners for providing updates and regular communication. With the database, we can create program and unit reports in response to internal monitoring and assessment needs, and in response to external requests.

In addition, the PDSsystem regularly administers and uses results of training and other surveys to improve professional development, document reach of services, and identify needs of partnership districts and schools. These assessments help to inform the work of the partnership and serve to highlight opportunities for mutual collaboration. Further, the WCE Assessment Office works with faculty to conduct assessment of each of our degree and licensure-only programs. This work is focused on student learning and program outcomes for each program with a goal of continuous improvement and includes data such as exit survey results, alumni survey results, student capstone project results, and performance ratings of student interns. Annual reports are submitted to the Office of Academic Affairs and provide reporting for university and college accreditation in addition to formative assessment for programs.

Although we have a comprehensive monitoring system in place and the PDSsystem routinely collects data to inform practice, in fall 2013, the PDSsystem Director initiated discussion with the WCE Assessment Director, seeking answers to bigger questions of effectiveness and impact. Given the growth and evolution of the PDSsystem and changes in leadership of the PDSsystem and college, the directors decided to conduct an evaluability assessment before engaging in larger-scale outcomes and impact evaluation. Trevisan and Walser (2014) define evaluability assessment (EA) as the systematic investigation of program characteristics, context, activities, processes, implementation, outcomes, and logic to determine:

- The extent to which the theory of how a program is intended to work aligns with the program as it is implemented and perceived in the field,
- The plausibility that the program will yield positive results as currently conceived and implemented, and
- The feasibility of and best approaches for further evaluation of the program. (14)

Thus, EA served as exploratory evaluation to clarify how the PDSsystem is intended to work, the extent to which stakeholders understand and agree with that intention, the extent to which PDSsystem implementation aligns with that intention, and the best approaches for further and ongoing evaluation of the PDSsystem. As others have similarly noted (Pepper et al., 2012), we needed to first understand what our PDS model had become and if that was what it should be before embarking on a resource-intensive outcomes and impact evaluation. The EA approach also emphasizes context and stakeholder involvement, which are important to PDS evaluation (Reed et al., 2001). The following sections describe the EA process and methods. Subsequent sections include EA results, findings and recommendations, and implications for practice.

Evaluability Assessment Process and Methods

The evaluability assessment process included (a) focusing the EA, (b) developing an initial program theory, (c) gathering feedback on program theory, and (d) using the EA (Trevisan & Walser, 2014).

Focusing the EA. The WCE Assessment Director and PDSsystem Director determined the purpose of the EA and that an EA work group of key PDSsystem stakeholders was needed to support the EA. Thus, the EA was a collaborative effort of the WCE Assessment Director and an

EA work group including the Associate Dean for Teacher Education and Outreach, Data Administration Specialist, Director of Professional Experiences, PDSsystem Director, PDSsystem Administrative Associate, Teacher-in-Residence, Director of the Education Laboratory, Field Experience Coordinator, and Outreach Liaison.

Developing an initial program theory. The EA work group met weekly for one and a half months to develop an initial program theory of the PDSsystem—the logic of how the PDSsystem is intended to work. Document review and discussion led to the resulting theory, which was depicted as a framework of key activities, outcomes, and impacts of the PDSsystem (see Table 1). The outcomes are intended for teacher candidates, P-12 teachers, and WCE faculty. The framework is in alignment with the Nine Essentials of a PDS (NAPDS, 2008), highlighting teacher preparation and professional development as key activities and including student outcomes as an intended impact of the PDS.

Table 1
Program Theory Framework of the PDSsystem

Key Activities	Outcomes	Impacts
Teacher Preparation	Increase content and pedagogical knowledge and skills:	Improve the lives, learning, and opportunities of all students:
Professional Development	<ul style="list-style-type: none"> ▪ Think critically, using inquiry, reflection, and data to problem solve and make decisions. 	<ul style="list-style-type: none"> ▪ Improve B-12 student academic achievement. ▪ Enhance the curriculum, structures, and school culture and community ties for B-12 school and UNCW staff and faculty.
Grant and Research Support	<ul style="list-style-type: none"> ▪ Integrate academic and practitioner knowledge, applying theory to practice. 	<ul style="list-style-type: none"> ▪ Engage B-12 students in enrichment activities.
Communication and Advocacy	<ul style="list-style-type: none"> ▪ Differentiate instruction based on student needs and changing instructional environments. 	<p>Advance the education profession:</p> <ul style="list-style-type: none"> ▪ Prepare quality educators. ▪ Increase the longevity of educators in the profession. ▪ Advocate for best practices.
Monitoring and Evaluation	<p>Improve skills related to professional dispositions:</p> <ul style="list-style-type: none"> ▪ Demonstrate leadership and professionalism. ▪ Engage in innovation and collaboration to impact positive change. ▪ Develop empowered and confident professionals. ▪ Believe that all students can learn. 	

Improve leadership capacity for teacher preparation, professional development, grant and research support, communication and advocacy, and monitoring and evaluation:

- Engage as a professional network and learning community.
 - Model best practices.
 - Increase the relevance of program and course content, using a theory to practice model.
 - Produce meaningful school-based research.
-

As part of EA work group deliberations, members also identified stakeholder groups to collect data from for the next phase of the EA, gathering feedback on program theory. The PDSsystem Director and WCE Assessment Director later narrowed the list given priorities and resource constraints.

Gathering feedback on program theory. The purpose of this component of EA is to determine if the theory of a program aligns with program reality—reality being perceptions of the program and its implementation. Thus, we gathered feedback to determine if stakeholder perceptions of the program and its implementation aligned with the initial program theory framework (see Table 1). The following evaluation questions related to perceptions and implementation of the PDSsystem guided this work; questions are based on the evaluability assessment work of Trevisan and Walser (2014), and Smith (1989):

1. What is the overall perception of the PDSsystem, including its benefits and implementation? How do different groups perceive the benefits and limitations of the PDSsystem?
2. Who is the perceived audience for the PDSsystem? Who does it serve? Who should it serve? What do different groups perceive the audience of the PDSsystem to be?
3. What are the perceived goals of the PDSsystem? What should the goals be? What do different groups perceive the goals of the PDSsystem to be?

Additional evaluation questions were included to determine best approaches for further evaluation of the PDSsystem:

4. What type of evaluation information would be useful to PDSsystem stakeholders?
5. How available and accessible have different groups been in the EA process? How available and accessible would they be for further evaluation?
6. What types of data are already collected as part of PDSsystem implementation and operations?
7. What factors are facilitators or barriers to further, ongoing evaluation of the PDSsystem?

Data collection methods for gathering feedback are described below (see appendix for instruments).

Partnership teacher focus groups (N=8). The purpose of these interviews was to gain partnership teacher perspectives on the theory, or intent, of the PDSsystem; PDSsystem implementation; and the type of evaluation information that would be beneficial. The PDSsystem Director recruited focus group participants by sending an email invitation, and a follow-up email, to all partnership teachers with the scheduled dates and times for each of the three focus group interview sessions. Those who chose to participate confirmed their intent with the PDS Director and served as volunteer participants. Two focus groups included two participants and one focus group included four participants. The WCE Assessment Director conducted the focus groups at the College of Education. They were recorded and transcribed; thematic analysis was conducted. This included an initial reading of the transcriptions; subsequent readings, coding, and identification of recurring themes in the data; and categorization of data according to themes.

Key PDSsystem personnel individual interviews (N=5). The purpose of these interviews was to gain key PDSsystem personnel perspectives on the theory of the PDSsystem, PDSsystem implementation, and the type of evaluation information that would be beneficial. Items closely paralleled those asked of partnership teachers. The WCE Assessment Director contacted key PDSsystem personnel by email and asked them to participate in an interview; all who were invited to participate did. The WCE Assessment Director scheduled the interviews and conducted them at the College of Education. They were recorded and transcribed; thematic analysis was conducted. This included an initial reading of the transcriptions; subsequent readings, coding, and identification of recurring themes in the data; and categorization of data according to themes.

PDSsystem partnership district/school administrator survey (N=25). The purpose of this survey was to gain administrator perspectives on the theory of the PDSsystem and PDSsystem implementation. Items align closely with the key activities, outcomes, and impacts identified in the PDSsystem program theory framework (see Table 1). The PDSsystem Director administered the electronic survey by sending an email containing the survey link to all partnership administrators, along with a follow-up reminder about the survey. Data analysis included descriptive statistics for rating scale items and thematic analysis for open-ended items; that is, open-ended responses were coded, recurring themes were identified, and responses were categorized according to themes.

Faculty focus group (N=8). The purpose of this interview was to gain [name deleted for blind review] faculty perspectives on the theory of the PDSsystem, PDSsystem implementation, and the type of evaluation information that would be beneficial. Faculty were recruited through department chairs to make sure there was representation for each of the departments in the college; faculty responded to an email from their department chair to volunteer to participate. The WCE Assessment Director conducted the focus group at the College of Education. It was recorded and transcribed; thematic analysis was conducted. This included an initial reading of the transcriptions; subsequent readings, coding, and identification of recurring themes in the data; and categorization of data according to themes.

Additional data analysis. Once data were analyzed for each data collection method as described above, the results from the partnership teacher focus groups, key PDSsystem personnel individual interviews, and faculty focus group were further analyzed. Parallel items and the

development of a within-case, role-ordered matrix (Miles, Huberman, & Saldana, 2014) facilitated the review of results across each stakeholder group (partnership teachers, key PDSystem personnel, and faculty) for common and discrepant themes.

Using the EA. The WCE Assessment Director shared the EA results with the EA work group in a scheduled meeting for discussion and development of findings and recommendations. Based on this discussion, the WCE Assessment Director drafted an evaluation report, shared it with the EA work group for their feedback, and finalized the report (Walser, 2014).

Evaluability Assessment Results

Results are organized by evaluation question and include results regarding perceptions of the PDSystem and its implementation and best approaches for further PDSystem evaluation.

What is the overall perception of the PDSystem, including its benefits and implementation? How do different groups perceive the benefits and limitations of the PDSystem? Overall, the PDSystem was viewed as a true and beneficial partnership. When those interviewed in focus groups or individually were asked to jot down or say the first three words that came to mind in thinking about the PDSystem, the most common word was “collaboration.” Other words indicating the spirit of partnership included: community, connected, cooperative, reciprocal, communication, partnership, assistance, coaching, nurturing, support, and respect.

Based on results of focus group and individual interviews, a commonly identified strength was that there is a positive perception of the PDSystem in partnership schools. Other identified strengths and impacts of the PDSystem differed somewhat depending on the group being asked and their relationship with the PDSystem. This was also the case when asked about areas of concern/areas for improvement. Partnership teacher responses focused on strengths related to teacher candidates, noting better preparation of candidates in recent years (e.g., content knowledge, pedagogy, and professional dispositions). One partnership teacher described teacher candidates as having “fewer tears” and being “more confident.” Key PDSystem personnel and faculty identified strengths more broadly, noting PDSystem support of teacher candidates, P-12 teachers, schools, and faculty. PDSystem personnel and partnership teachers identified several specific PDSystem impacts on teacher candidates and P-12 teachers—a common impact identified was that the relationship with the partnership teacher allows teacher candidates to try new things. Partnership teachers also cited impacts on P-12 teachers, such as learning about new and innovative ideas from teacher candidates, and partnership teachers having to be “on their A-game” when hosting an intern.

Regarding areas of concern/areas for improvement, partnership teacher responses focused on teacher candidate preparation (e.g., classroom management and using data for decision making) and communication with faculty supervisors. A notable response theme was that partnership teachers want to be more involved with the PDSystem and want to get other teachers involved with PDSystem and hosting teacher candidates during their internships. Common response themes from key PDSystem personnel and faculty included concerns about ensuring that partnership teachers are rewarded, financially and otherwise, for their work hosting teacher candidate interns and the limited resources of the PDSystem given its breadth. As one PDSystem personnel noted, “There’s a difficulty in developing and extending the strategic vision for the PDS when the maintenance of it takes so much time.”

Another important theme was the need to improve faculty understanding of and engagement with the PDSystem. Key PDSystem personnel identified this as a need, and based on responses, and sometimes a lack of responses from faculty, greater understanding of the PDSystem, its purpose, and its work is needed. One faculty member was processing what PDS means during the focus group interview, commenting, “Who is PDS? It’s me. It has to be all of the faculty...our collective responsibility.”

In addition, based on the results of the partnership school and district administrator survey, overall, administrators rated the PDSystem highly on the seven items related to the work of the PDSystem, indicating a positive perception of the PDSystem. The seven items, rated on a 4-point scale, were: increases content and pedagogical knowledge and skills of pre-service educators through teacher preparation (mean = 3.24); increases content and pedagogical knowledge and skills of in-service educators through professional development (mean = 3.12); improves skills related to professional dispositions of pre-service educators through teacher preparation (mean = 3.28); improves skills related to professional dispositions of in-service educators through professional development (mean = 3.29); improves leadership capacity for teacher preparation, professional development, grant and research support, communication and advocacy, and monitoring and evaluation (mean = 3.24); improves the lives, learning, and opportunities for all students (P-12) (mean = 3.17); and advances the education profession (mean = 3.46). The highest rated item was “advances the education profession” (mean = 3.46), defined in the survey as preparing quality educators, increasing the longevity of educators in the profession, and advocating for best practices. As one administrator responded to the open-ended survey item, which provided space for additional comments, “The Watson College of Education has done a great job reaching out and partnering with school districts. This collaboration should continue as we work together to prepare new teachers for the field and improve upon the practice of current teachers.”

Who is the perceived audience for the PDSystem? Who does it serve? Who should it serve? What do different groups perceive the audience of the PDSystem to be? Audiences identified by partnership teachers and key PDSystem personnel included P-12 students, teacher candidates, principals, and the school system/administration. Partnership teachers also identified the community; key PDSystem personnel also identified parents and WCE faculty who work with teacher candidates. Similarly, when asked to rate where the PDSystem should focus its efforts, overall, school and district administrators rated teacher preparation the highest (mean = 2.92 on a 3-point scale) followed by professional development (mean = 2.56), communication and advocacy (mean = 2.52), and grant and research support (mean = 2.38); indicating that teacher candidates should be a primary focus of the PDSystem.

What are the perceived goals of the PDSystem? What should the goals be? What do different groups perceive the goals of the PDSystem to be? Key PDSystem personnel and faculty noted positive impacts on P-12 students and professional development for P-12 teachers as goals for PDSystem. Faculty also identified research as a component, and key PDSystem personnel noted the importance of collaboration, connection, and reciprocity between the college and school partners. Partnership teachers saw the goals of the PDSystem as being focused on teacher candidates and providing them with real-world experiences. Based on ratings of school and district administrators regarding where the PDSystem should focus its efforts, all four areas—teacher preparation, professional development, communication and advocacy, and grant

and research support—received mean ratings above 2 on a 3-point scale, indicating that the PDSsystem should focus on all areas. Teacher preparation had the highest mean rating (mean = 2.92) indicating that this should be a main focus.

What type of evaluation information would be useful to PDSsystem stakeholders? Key PDSsystem personnel identified formative evaluation and impact evaluation as approaches needed to provide information for improvement and to determine impacts of the PDSsystem on P-12 students, teacher practice, and the region. As one key PDS personnel suggested, “Because it’s been around for 22 years now...what impact has there been socially, economically on the region?” They also noted the need to determine how they are doing in addressing the goals of school partners. Further, partnership teachers’ evaluation needs focused on information about how they are doing and how they can improve in their role. For example, one teacher commented, “In their first year of teaching what do grads want...what worked well? Help us improve.” Partnership teachers and WCE faculty are also interested in reviewing evaluation results from previous and future evaluations. Additionally, key PDSsystem personnel noted needing direct and clear recommendations from evaluation. Faculty further suggested comparing what the WCE PDSsystem is doing to other university PDSs, as well as the importance of including all stakeholder groups in evaluation.

How available and accessible have different groups been in the EA process? How available and accessible would they be for further evaluation? Key PDSsystem personnel who participated as EA work group members were particularly generous with their time; several work group members also participated in an individual interview. Faculty who participated in a focus group volunteered; scheduling the interview was surprisingly easy given the busy schedules of faculty members. The availability of partnership teachers for focus group interviews was problematic due to the state’s End-of-Grade assessments. This pushed the interview times into summer, which limited the number of teachers in the focus groups. The response rate for the PDSsystem Partnership District/School Administrator Survey was low: 25 out of 169 administrators completed the survey (14.8%).

What types of data are already collected as part of PDSsystem implementation and operations? As mentioned, the WCE Database and Collaborative Portal provides monitoring data for the PDSsystem and the PDSsystem administers training and other surveys to provide formative information. The WCE Assessment Office also compiles data (e.g., exit survey, alumni survey, teacher candidate performance and teacher performance) as part of program assessment for each degree and licensure-only program.

What factors are facilitators or barriers to further, ongoing evaluation of the PDSsystem? Facilitators to further, ongoing evaluation of the PDSsystem include:

- Stakeholder groups represented in the EA are supportive of evaluation and want evaluation information to help them document strengths and improve their work.
- Data already collected for program assessment for the teacher education programs can be used in evaluation of the PDSsystem.
- State and accreditation requirements are expanding and will result in more data collection that could be used for PDSsystem evaluation.

Barriers to further, ongoing evaluation of the PDSsystem include the following:

- Ongoing evaluation will require the time of the WCE Assessment Office and the PDSystem Office to plan and manage evaluation work and both have limited resources for this.
- School partners will be important stakeholders in the evaluation; however, great consideration will have to be taken to increase their participation while making sure they are not over-burdened.

Limitations of the evaluability assessment. There were several limitations to the evaluability assessment of the PDSystem. This was an exploratory evaluation that was limited in scope. For example, the initial list of stakeholders to interview that was generated by the evaluation work group included school district personnel, principals, teachers, site coordinators, university supervisors, WCE faculty, allied programs faculty (from the College of Arts and Sciences), representatives from across UNCW, and community agency representatives. Given resource constraints, along with the purpose of the evaluation, this list was narrowed. In addition, as mentioned previously, because of the timing of the partnership teacher focus groups, participation was low. The response rate for the administrator survey was also low. Thus, the evaluation results represent the perspectives of stakeholder groups more closely involved with the PDSystem (partnership teachers and administrators, key PDSystem personnel, and WCE faculty); for partnership teachers and administrators, there are additional issues with representation within the groups due to low participation. That said, this was an exploratory evaluation intended to provide initial, formative evaluation and to inform subsequent, more comprehensive monitoring and evaluation.

Evaluability Assessment Findings and Recommendations

The EA was conducted as exploratory evaluation to clarify how the PDSystem is intended to work (the theory of the PDSystem), the extent to which stakeholders understand and agree with that intention, the extent to which PDSystem implementation aligns with that intention, and best approaches for further and ongoing evaluation of the PDSystem. An initial program theory was articulated and depicted as a framework of key activities, outcomes, and impacts that describe how the PDSystem is intended to work (see Table 1). Data were collected from key stakeholder groups to determine if they understand and agree with the theory of how the PDSystem is intended to work and to determine the extent to which PDSystem implementation aligns with the theory. Data were also collected to identify best approaches for further and ongoing evaluation of the PDSystem.

For the most part, the “theory” of the PDSystem was validated. Perspectives and implementation of the PDSystem largely aligned with the framework of how the PDSystem is intended to work and several strengths of the PDSystem were noted. One gap in alignment was a lack of broad understanding of the PDSystem by some stakeholders. For example, partnership teachers and faculty members were only or mostly familiar with the component of the PDSystem that they had been directly involved in, such as teacher preparation. They lacked knowledge of other components of the PDSystem and its broader purpose. A related issue was the lack of evidence from the EA of simultaneous renewal of the College, its faculty, and its teacher education program. The general perception among partnership teachers, key PDSystem personnel, WCE faculty, and partnership district/school administrators was that teacher

candidates and P-12 teachers are main PDSsystem audiences that have been positively impacted by the partnership; however, the College, WCE faculty, and the teacher education program were largely overlooked as an audience and beneficiary.

In addition, resources were a concern that was voiced. Inadequate resources to support the work of the PDSsystem could negatively influence the plausibility of the PDSsystem achieving intended outcomes and impacts. Finally, during the process of developing an initial program theory, it became clear that the EA work group needed to be expanded to include representatives from the Office of Professional Experiences (the Field Experience Coordinator), the Education Laboratory (Director of the Education Laboratory), and the Outreach Liaison. This expansion of the work group evidenced the need for the PDSsystem to be treated as a complex system that relies on relationships with other WCE offices, WCE programs and faculty, and school partners to achieve its outcomes and impacts. A failure to do so would threaten plausibility.

Recommendations

Use the program theory framework to communicate the work of the PDSsystem. To support understanding and consistent communication regarding the PDSsystem, finalize the program theory framework of the PDSsystem (see Table 1) and use this as the basis for communicating the key activities, outcomes, and impacts of the PDSsystem. This will create a common language for discussion and understanding of the PDSsystem.

Identify strategies for increasing involvement of faculty and B-12 teachers with the PDSsystem. The PDSsystem Director, the Associate Dean for Teacher Education and Outreach, and others as needed should consider this recommendation and potential strategies. During the EA work group results discussion, members noted the need for an advisory committee to support the work of the PDSsystem. Such a committee could, as one goal, identify and monitor strategies for increasing involvement and help refocus efforts towards simultaneous renewal.

Use program assessment results for teacher preparation programs as part of ongoing evaluation of the PDSsystem. The WCE Assessment Office works with WCE programs to develop annual program assessment reports. The results of these reports for teacher education programs can be used in evaluation of the PDSsystem.

Develop an evaluation plan for ongoing evaluation of the PDSsystem. The WCE Assessment Office should work with the PDSsystem Director, the Associate Dean of Teacher Education and Outreach, and other stakeholders as needed (potentially a PDSsystem advisory committee—see recommendation 2 above) to develop a plan for ongoing evaluation of the PDSsystem. The key activities, outcomes, and impacts described in the program theory framework of the PDSsystem (see Table 1) should be the focus of evaluation. Attention should be given to faculty outcomes and organizational learning that impacts College and teacher education program work, in addition to outcomes for teacher candidates and P-12 teachers. The plan should include formative evaluation and outcome/impact evaluation, stakeholder involvement, and methods for disseminating evaluation results to key stakeholder audiences.

Implications for Practice

Recommendations from the evaluability assessment have led to several actions in the last year. The PDSystem Office conducted a brief faculty survey to gauge faculty perceptions and their level of connectedness to our PDSystem and has engaged in discussions regarding the distinction between student placements and professional development for partners. The Office has developed a new graphic representation of the simultaneous focus on new teacher preparation, teacher/faculty growth, and school reform. In addition, the PDSystem Director has convened an advisory board, which consists of school partners and university faculty who play key roles in the system.

Since the EA, faculty and school partners have engaged in conversations regarding more authentic opportunities for collaboration and, prompted by a growing teacher shortage, have discussed collaborative opportunities for teacher recruitment and retention. These discussions have also prompted opportunities for more in-depth exploration of practices within our teacher education programs. For example, the PDSystem Office is currently conducting a comprehensive study of our supervision model. In addition, the Office is leading a school partner-faculty workgroup to discuss recruitment opportunities for high school seniors. Collaborative partnerships such as this have prompted our teacher education programs to re-examine core educational coursework. The PDSystem continues to work with partners to identify opportunities for more intensive Tier 3 partnerships and has begun to address opportunities for growth in regards to administrator support and professional development.

The WCE Assessment Director has convened a newly formed Teacher Education Program Evaluation Advisory Group. The purpose of this group is to advise the development of an evaluation plan for the WCE teacher education program as a whole, including the PDSystem. The advisory group includes the PDSystem Director, the Dean of Teacher Education and Outreach, the Professional Experiences Office Director, and the Program Coordinators for each teacher preparation degree or licensure-only program. Results of the evaluability assessment are being used to inform the plan.

For others engaged in PDS work, evaluability assessment may serve as a useful approach in the development of a monitoring and evaluation system, including outcomes and impact evaluation. Its focus on context, stakeholder involvement, and use of evaluation results provides information useful for formative improvement and for forwarding meaningful and feasible outcome and impact evaluation. Each focus serves as a critical component in a process of ongoing reflection and growth, as we continue to explore the impact of our partnership work.

References

- Abdal-Haqq, I. (1998). *Professional development schools: Weighing the evidence*. California: Corwin Press, Inc.
- American Association of Colleges for Teacher Education (AACTE). (1995). *Rate III: Teaching teachers- Relationships with the world of practice*. Washington, DC: Author.
- Ball, D. L., & Rundquist, S. S. (1993). Collaboration as a context for joining teacher learning with learning about teaching. *Teaching for understanding: Challenges for policy and practice*, 13-42.

- Capraro, M. M., Capraro, R. M., & Helfeldt, J. (2010). Do differing types of field experiences make a difference in teacher candidates' perceived level of competence? *Teacher Education Quarterly*, 30(3), 131-154.
- Carnegie Forum on Education and the Economy. (1986). *A nation prepared: Teachers for the 21st century*. Washington, DC: Author.
- Castle, S., Fox, R. K., & Souder, K. O. (2006). Do professional development schools (PDSs) make a difference? A comparative study of PDS and non-PDS teacher candidates, *Journal of Teacher Education*, 57(1), 65-80.
- Costa, A. L., & Garmston, R. J. (2002). *Cognitive coaching: A foundation for Renaissance schools* (2nd ed.). Massachusetts: Christopher-Gordon Publishers, Inc.
- Cozza, B. (2010, June). Transforming teaching into a collaborative culture: An attempt to create a professional development school-university partnership. *The Educational Forum* 74(3), pp. 227-241).
- Darling-Hammond, L. (1994). *Professional development schools: Schools for developing a profession*. New York: Teachers College Press.
- Darling-Hammond, L., Bullmaster, M. L., & Cobb, V. L. (1995). Rethinking teacher leadership through professional development schools. *The Elementary School Journal*, 87-106.
- Dixon, P., & Ishler, R. (1992). Professional development school's stages in collaboration. *Journal of Teacher Education*, 43(1), 28-34.
- Goodlad, J. (1988). School-university partnerships for educational renewal: Rationale and concepts. In K. Sirotnik & J. Goodlad (Eds.), *School-university partnerships in action: Concepts, cases, and concerns* (pp. 3-31). New York: Teachers College Press.
- Goodlad, J. (1990). *Teachers for our nation's schools*. San Francisco: Jossey-Bass.
- Grisham, D. L., Berg, M., Jacobs, V. R., & Mathison, C. (2002). Can a professional development school have a lasting impact on teachers' beliefs and practices?. *Teacher Education Quarterly*, 7-24.
- He, Y., Rohr, J., Miller, S. D., Levin, B. B., & Mercier, S. (2012). Toward continuous program improvement: Using a logic model for professional development school program evaluation, *School-University Partnerships*, 4(1), 15-28.
- Holmes Group. (1986). *Tomorrow's teachers*. East Lansing, MI: Author.
- Latham, N. I., & Vogt, W. P. (2007). Do professional development schools reduce teacher attrition? Evidence from a longitudinal study of 1,000 graduates, *Journal of Teacher Education*, 58(2), 153-167.
- Lieberman, A. (1995). Practices that support teacher development. *Phi delta kappan*, 76(8), 591-596.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage.
- National Association of Professional Development Schools. (2001). Standards for professional development schools. Retrieved from <http://www.ncate.org/LinkClick.aspx?fileticket=P2KEH2wR4Xs%3d&tabid=107>
- National Association of Professional Development Schools (NAPDS). (2008). *What it means to be a professional development school*. Retrieved from <http://www.napds.org/9%20Essentials/statement.pdf>

-
- Pepper, S. K., Hartman, K. J., Blackwell, S. E., & Monroe, A. E. (2012). Creating an environment of educational excellence: The University of Mississippi-PDS partnership—The evolution continues, *School-University Partnerships*, 5(1), 74-88.
- Reed, C. J., Kochan, R. C., Ross, M. E., & Kunkel, R. C. (2001). Designing evaluation systems to inform, reform, and transform professional development schools, *Journal of Curriculum and Supervision*, 16(5), 188-205.
- Ridley, D. S., Hurwitz, S., Hackett, M. R. D., & Miller, K. K. (2005). Comparing PDS and campus-based preservice teacher preparation: Is the PDS-based preparation really better? *Journal of Teacher Education*, 56, 46-56.
- Smith, M. F. (1989). *Evaluability assessment: A practical approach*. Boston, MA: Kluwer Academics.
- Taymans, J., Tindle, K., Freund, M., Ortiz, D., & Harris, L. (2012). Opening the black box influential elements of an effective urban professional development school. *Urban Education*, 47(1), 224-249.
- Teitel, L. (2003). *The professional development schools handbook*. Thousand Oaks, CA: Corwin Press.
- Teitel, L. (2004). Two decades of professional development school development in the United States. What have we learned? Where do we go from here? *Journal of In-service Education*, 30(3), 401-416.
- Trachtman, R. (2007). Inquiry and accountability in professional development schools. *The Journal of Educational Research*, 100(4), 197-203.
- Theiss, D., & Grigsby, C. (2010). Measuring the achievement of professional development schools, *School-University Partnerships*, 4(1), 29-46.
- Trevisan, M. S., & Walser, T. M. (2014). *Evaluability assessment: Improving evaluation quality and use*. Thousand Oaks, CA: Sage.
- University of North Carolina Wilmington. (2016a). PDS Partnership Goals. Retrieved from <http://uncw.edu/ed/pds/mission.html>
- University of North Carolina Wilmington. (2016b). What is the Professional Development System. Retrieved from <http://uncw.edu/ed/pds/about.html>
- Walmsley, A., Bufkin, L., & Rule, A. (2009). Developmental Stages of a Professional Development School: Lessons from a Long-Term Partnership. *School-University Partnerships*, 3(2), 69-79.
- Walser, T. M. (2014). *Evaluability assessment of the University of North Carolina Watson College of Education professional development system partnership*. Wilmington, NC: Watson College of Education Assessment Office.
- Wetherill, K. S., & Calhoun, D. S. (2011). "Connecting teaching and learning: Teacher work samples in a university-school partnership context." In Hilda Rosselli, Mark Girod, & Meredith Brodsky (Eds.), *Connecting Teaching and Learning: History, Evolution, and Case Studies of Teacher Work Sample Methodology*, Rowman & Littlefield Publishers.

Appendix: Data Collection Instruments**Watson College of Education
Professional Development System Partnership
Focus Group**

The purpose of this focus group is to gather perceptions of the Watson College of Education Professional Development System (PDS) Partnership.

Getting Started: Introductions, purpose of the focus group (5-10 minutes)

Ground Rules

- Everyone will be asked to talk during the focus group.
- Each person's opinions count and may be different from those of others in the group.
- Participants should not interrupt each other.
- It is permissible to develop ideas and thoughts based on what others in the group may have suggested.

Question 1: What are the first 3 words that come to mind when you think of the WCE PDS partnership?

Please write down your response.

Question 2: What is your overall perception of the PDS? How has the PDS impacted you and others? What do you think about how the PDS is implemented? What are the strengths? Are there areas of concern? (15 minutes)

Question 3: Who is the audience for the PDS? Who does it serve? Who should it serve? What do you think the goals of the PDS partnership are and/or should be? (10 minutes)

Question 4: In ongoing evaluation of the PDS, what would you like to know? What should the focus of evaluation be? (10 minutes)

**Watson College of Education
Professional Development System Partnership
Individual Interview**

The purpose of this interview is to gather your perceptions of the Watson College of Education Professional Development System (PDS) Partnership.

Question 1: What are the first 3 words that come to mind when you think of the WCE PDS partnership?

Question 2: Who is the audience for the PDS? Who does it serve? How has the PDS impacted these audiences? What do you think the goals of the PDS partnership are and/or should be?

Question 3: What is your overall perception of the PDS? What do you think about how the PDS is implemented? What are the strengths? Are there areas of concern?

Question 4: If you were granted 3 wishes for the PDS, what would they be?

Question 5: In ongoing evaluation of the PDS, what would you like to know? What should the focus of evaluation be?

**Watson College of Education Professional Development System Partnership
Administrator Feedback Survey**

**This survey was administered online through an electronic survey program.*

Part One: Please rate the extent to which you believe the Watson College of Education Professional Development System Partnership currently facilitates each of the following.

Scale: 1 = Does Not Facilitate; 2 = Somewhat Facilitates; 3 = Facilitates; 4 = Facilitates Well

Increases content and pedagogical knowledge and skills of pre-service educators through teacher preparation.

- Think critically, using inquiry, reflection, and data to problem solve and make decisions.
- Integrate academic and practitioner knowledge, applying theory to practice.
- Differentiate instruction based on student needs and changing instructional environments.

Increases content and pedagogical knowledge and skills of in-service educators through professional development.

- Think critically, using inquiry, reflection, and data to problem solve and make decisions.
- Integrate academic and practitioner knowledge, applying theory to practice.
- Differentiate instruction based on student needs and changing instructional environments.

Improves skills related to professional dispositions of pre-service educators through teacher preparation.

- Demonstrate leadership and professionalism.
- Engage in innovation and collaboration to impact positive change.
- Develop empowered and confident professionals.
- Believe that all students can learn.

Improves skills related to professional dispositions of in-service educators through professional development.

- Demonstrate leadership and professionalism.
- Engage in innovation and collaboration to impact positive change.
- Develop empowered and confident professionals.
- Believe that all students can learn.

Improves leadership capacity for teacher preparation, professional development, grant and research support, communication and advocacy, and monitoring and evaluation.

- Engage as a professional network and learning community.
- Model best practices.
- Increase the relevance of program and course content, using a theory to practice model.
- Produce meaningful school-based research.

Improves the lives, learning, and opportunities of all students (P-12).

- Improve student academic achievement.

- Enhance the curriculum, structures, and school culture and community ties for P-12 school and UNCW staff and faculty.
- Engage students in enrichment activities.

Advances the education profession.

- Prepare quality educators.
- Increase the longevity of educators in the profession.
- Advocate for best practices

Part Two: Please rate the extent to which the Watson College of Education Professional Development System Partnership should focus on each of the following areas.

1 = Should not be a focus; 2 = Should be given some focus; 3 = Should be a key focus

Teacher preparation

- Assess candidate experiences and identify teachers and school settings to align candidate needs with quality placements.
- Explore and add alternate placements—e.g., community organizations, early childhood centers.
- Provide the context for application of content, pedagogy, and professional dispositions.
- Use the Education Lab to demonstrate a model classroom, provide tutoring experiences, provide teaching and learning resources, and provide a “lab” for faculty and student research.
- Facilitate communication with university faculty, partners, and teacher candidates.
- Monitor and evaluate teacher candidate progress (formative and summative).
- Provide Partnership Teacher Orientation, refresher meetings, and ongoing support.

Professional development

For example:

- Professional Learning Day (partnership teachers)
- Technology Workshops (partnership teachers)
- Master Teacher Program (partnership teachers)
- Mini-Workshops (site coordinators)
- On-Site PD for specific schools on topics they’ve requested (all)
- Culturally Responsive Teaching (partnership and other teachers in partnership districts)
- Online Courses—e.g., leadership, literacy, technology (all)
- Mentor workshops (all)
- National Board Certification workshops (all teachers with 3+ years of experience)
- First Year of Teaching and Promise of Leadership Award (first year teachers-all)
- NCDPI Sessions and Instructional Updates (all)
- Yearlong leadership series with the Southeast Education Alliance (all)

Grant and research support

- Assist with writing grant proposals.

- Link WCE faculty with school districts based on needs and interests, grant opportunities, and timeline.
- Provide WCE faculty with information and forms for school district IRB processes.
- PD-related grants—e.g., ELMS, INCOME, MACC, Project-Based Mathematics.
- Fund and support WCE faculty and teacher collaborative research projects.
- Collaborate with community organizations and nonprofits.

Communication and advocacy

- Disseminate relevant research and best practices to partnership districts.
- Disseminate relevant WCE and other information to partnership districts—e.g., publications and newsletters.
- Advocate for policies that support the teaching and learning of all students.
- Southeastern Regional Education Summit
- Dropout Prevention Coalition
- Partner with faculty and units across campus to provide and support PD—e.g., African Americans in Education Conference, Technology Conference, AIG Mini Conference, P-12 student enrichment programs.
- Provide in-reach to UNCW—e.g., provide leadership for working in and partnering with schools.
- Provide awards and recognition—e.g., Roy Harkin Award, Promise of Leadership Award.
- Serve as a liaison and advocate at the regional, state, and national levels—e.g., regional superintendent meetings, professional meetings and conferences.
- Provide a professional network.

Part Three: Please provide comments related to your ratings in Parts One and Two of the survey and any additional areas of focus the Watson College of Education Professional Development System Partnership should consider.

Revealing Dispositions: A Comparison Study of a Traditional Pathway University Model and a Clinical Pathway University Model

Angela Danley
University of Central Missouri

Natalie Tye
University of Central Missouri

Karen Loman
University of Central Missouri

Aprille Barlow
University of Central Missouri

Nicole Nickens
University of Central Missouri

Abstract: Faculty from a Midwestern university require teacher candidates to complete disposition surveys pre- and post-student teaching. The instructors/researchers used the data revealed in the dispositions to make comparisons between a traditional model “Traditional Pathway” (first extended field experience senior year) and a PDS clinical pathway (extended field experience throughout junior and senior year) to determine if there was a significant difference between the two pathways. The data were collected electronically and then compiled to present a picture of the developing perception of professional dispositions of the pre-service teacher.

KEYWORDS: clinical pathway, traditional pathway, dispositions

NAPDS NINE ESSENTIALS ADDRESSED:

1. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
4. A shared commitment to innovative and reflective practice by all participants;
5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants

Introduction

Teacher candidate dispositions, as a predictive measure of future teacher effectiveness, is a recurring topic in teacher education programs (Borko, Liston, & Whitcomb, 2007; Brewer, Dottin, 2009; Lindquist, & Altemueller, 2011; Liston, Whitcomb, & Borko, 2007; Schussler, Stocksberry, & Bercaw, 2010). Though the research on teacher dispositions remains inconsistent, the impact of dispositions on teaching cannot be ignored (Thornton, 2013). Teacher education

programs must select learning opportunities that grow and develop these dispositional skills through coursework and field experiences (Cummins & Asempapa, 2013).

NCATE (2002) defined professional dispositions as, “professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities (p. 89). As the new accrediting body for teacher education resulting from the unification of TEAC and NCATE, CAEP expects teacher education programs to ensure that candidates “demonstrate an understanding of the 10 InTASC standards at the appropriate progression level(s) in the following categories: the learner and learning; content; instructional practice; and professional responsibility” (Standard 1). “Unlike desire, dispositions are accompanied by behavior and thus assume the requisite ability to carry out that behavior” (Ritchart, 2001, p. 5). The teaching and assessment of dispositions are critical components of teacher education programs. Disposition assessments in the classroom and in the field provide teacher educators with a holistic profile of a given candidate (Almerico, Johnston, Henriott, & Shapiro, 2011).

Knowledge, skills, and dispositions are embraced within the former NCATE standards as well as the NBTS and CAEP as essential elements of teacher preparation and teacher quality, yet dispositions remain a neglected part of teacher education programs (Thornton, 2006). The conceptual and empirical literature on teacher candidates’ dispositions is sparse (Villegas, 2007). Therefore, this research adds to the existing literature on teacher dispositions and most importantly guides the instructors to strengthen PDS programs in developing qualified teachers.

Traditional Teacher Education Model

The traditional model of teacher education includes individual courses with content embedded within a theoretical framework (Darling-Hammond & Baratz-Snowden, 2007). Traditional programming emphasizes content based on foundations and methods courses (Green, 2010). The individual teacher candidate, along with guidance from his/her academic advisor, selects courses that meet certification requirements. Important to note is how the traditional model provides a variety of learning experiences, which at times may be disconnected from other course offerings and out-of-sync with the natural learning progression (NCATE, 2010). Traditional teaching preparation models have been implemented since the 1800s (Garland, 1982).

Transition to Professional Development Schools

Early in the 1980s and extending through 1990s, new accountability measures challenged traditional teacher education programs to identify what teachers should know and be able to do (Cochran-Smith, 2006). These demands required the generation of new knowledge, steering teacher education toward experiential learning and creating a new component where teacher candidates were able to gain knowledge and skills while applying learned classroom content outside the university environment (Catalfalmo, 2010; Cochran-Smith, 2006; Garland, 1982). This change also allowed for the development of field-based opportunities attached to specific course offerings, referred to as Professional Development Schools (PDS). PDS was designed to introduce teacher candidates to a variety of teaching models and experiences outside the

university classroom, including opportunities to collaborate with professionals in the field (Cochran-Smith, 2006; Dolly & Oda, 1997; Garland, 1982).

The PDS model was implemented during the first semester of the teacher candidates' senior year. The senior PDS experience allowed teacher candidates to spend a half-day, one day a week in practicum work related to literacy and classroom management courses. Teacher candidates were partnered with a classroom teacher where s/he taught whole group and small group lessons. The model at the university was intended for teacher candidates to be dispersed in local elementary classrooms for a pre-student teaching experience (Bell & Morrow, 1998).

The PDS model was first introduced to a Midwestern university in 1996 through a faculty initiative (Bell & Morrow, 1998). This university has a traditional student base serving a western region of a Midwest state about 50 miles away from a large metroplex. The student population in the elementary and early childhood program is primarily white female. The model was written to satisfy the Goals 2000 grant, a federally funded program (Bell & Morrow, 1998). The grant's purpose was to foster and strengthen school partnerships in order to advance effective teacher candidates, increase student achievement, kindle and support growing collaborative relationships with school districts, and integrate communication arts across the curriculum (Bell & Morrow, 1998). Further, the PDS model was created to offer an ideal education program for elementary PK-grade 6 students (students), a laboratory setting for teacher candidates, continuous professional development endeavors for university faculty and district staff, and include research opportunities for exemplary practice (Bell & Morrow, 1998).

After implementing the PDS model for one school year, the outcomes were evaluated (Bell & Morrow, 1998). According to Bell and Morrow (1998), data were derived from classroom performance data, standardized testing, Missouri Show Me Standards Assessment, anecdotal notes, personal interviews, and teacher candidate PDS surveys. Bell and Morrow (1998) found a high level of satisfaction with the pilot PDS experience. They recommended a continuation of the PDS model with some fine-tuning based upon classroom teacher and teacher candidate feedback. Elementary and early childhood teacher candidates at this university have had pre-student teaching field-based experiences since the 1996 implementation. The PDS model was named the Traditional Pathway.

The Traditional Pathway was so well received that junior field experiences were also incorporated into the elementary and early childhood programs. Teacher candidates generally implemented a few small group lessons at the junior level. Although these experiences added to the quality of the junior experience for teacher candidates, the additional time in the field was minimal.

The Addition of a Clinical Pathway

The Traditional Pathway proved to be a successful model for preparing teacher candidates and providing enriching literacy experiences. However, there was an identified need to support the integration of all core subject area content and methods into instruction on campus and in the field (Nickens, personal communication, August 24, 2015). Faculty decided to build upon the successful PDS model and offer more field-based experiences with integrated content methods. The new PDS model, called the Clinical Pathway, provided a different perspective and opportunity for teacher candidates. This allowed for students to choose between the Traditional

Pathway and Clinical Pathway to complete their program of study. Students who selected the Clinical Pathway did so because it allowed for more time in the classroom with a mentor teacher, additional teaching of whole group lessons, and involvement in professional development opportunities.

The development of the Clinical Pathway from vision to implementation, extended over a two-year time frame before the first pilot in fall 2012 (Nickens, personal communication, August 24, 2015). The Clinical Pathway introduced three separate but related blocks of courses: Young Learner junior block, Intermediate Learner junior block, and Senior One block. The Young Learner block focused on developmentally appropriate curriculum and practices for children in grades 1-3 and the Intermediate Learner block on grades 4-6. The heavy clinical component at the junior level was a significant difference from the Traditional Pathway. Another significant difference from the Traditional Pathway was the structure of the senior year. First semester, Senior One, comprised three five-week placements, each at a different grade level, in one school district. Teacher candidates student taught in one of those three placements the following semester. A year and a half later, the faculty added an Early Learner junior block (focusing on PK-K for early childhood teacher candidates).

The Clinical Pathway guides the teacher candidate through blocks of predetermined courses and scheduled field days. Each teacher candidate remains in one classroom per block, and moves through the blocks with a cohort of peers and an assigned instructional team. The instructional teams include two or three university faculty who instruct blocked courses on campus and supervise/support teacher candidates in the field (Nickens, personal communication, April 16, 2015). Teacher candidates in the Clinical Pathway teach a different grade level each block and experience rural, urban, and suburban placements. The experience provides opportunities for teacher candidates to engage in the classroom with a mentor teacher, gain additional feedback, and to improve on instruction to become reflective practitioners. These practices should lead to positive growth in the teacher candidate dispositions.

There is not a formal admittance process for pathway enrollment. Prospective teacher candidates self-select a pathway based on scheduling needs and personal expectations. Teacher candidates do not experience both pathways. Once a pathway is selected, they continue with that program until graduation.

Research Question

With the two pathways in place, the research question guiding the study became clear: Do students' professional dispositions in the Clinical Pathway reveal a statistically significant difference in comparison to those who participate in the Traditional Pathway?

Teacher Dispositions as a Means of Self Reflection and Personal Growth

Teacher candidates at this Midwestern university self-reflect on dispositions pre- and post-student teaching. Reflection is considered significant for teacher professional development (Ayan & Seferoglu, 2011). Reflection was defined by Dewey (1933) "an active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds supporting it and future conclusions, to which it tends" (p.43). Faculty members hold individual

conferences with teacher candidates to discuss candidates' perceptions and reflections of their own dispositions. Disposition conferences provide opportunities to discuss plans for continued growth and development.

Table 1 displays the twelve dispositions, which are aligned to the Interstate Teacher Assessment and Support Consortium (InTASC) and to the Missouri Standards of Teacher Education Programs (MoSTEP). Each disposition has a list of behaviors aligned to the standards to facilitate candidate reflection when completing the form. Teacher candidates are required to self-assess each standard by reviewing the examples of behaviors listed which may infer the associated disposition. Candidates self-rate based on the following indicators: not observed, does not meet, progressing, meets, or exceeds. The candidate rates him/herself based on the extent to which s/he believes s/he meets the standard. Candidates must provide examples of behaviors that match the dispositions. Does not meet would be inconsistent or limited examples; progressing would indicate some examples, but still inconsistent; meets would be readily available and fairly consistent examples; and exceeds would be many illustrative examples that match dispositional descriptions. For the purposes of this study, only candidate self-ratings of dispositions were utilized for data.

Data Collection

Disposition forms were collected and coded for three groups of students in the Traditional and Clinical Pathways. The teacher candidates' Disposition Forms were collected pre- and post-student teaching. Group 1 (spring 2014 student teachers) traditional n=60 and clinical n =16; Group 2 (fall 2014 student teachers) traditional n=41 and clinical n=11; and Group 3 (spring 2015 student teachers) traditional n=30 and clinical n=21. The three groups were analyzed separately to compare the two pathways to determine if there was a statistically significant difference. The researchers assumed fundamental differences might exist among the three groups due to change in faculty instructors in the blocks, placement locations, cohort dynamics, cohort size, and spring or fall student teaching. Thus the separate analyses were conducted to account for external factors.

Data Analysis

Indicators marked on the Disposition Forms were given a numeric value to enable an independent samples t-test analysis: does not meet=0, progressing=1, meets=2, exceeds=3. Independent t-tests were run to compare the means of each of the 12 items on the Disposition Form between the Traditional Pathway and Clinical Pathway candidates in each of the three groups. The significance value for the independent samples t-test was set at the $p \leq .05$ level.

Findings

Were there Differences between the Traditional Pathway and Clinical Pathway?

Data analysis revealed there were some statistically significant differences when comparing the Traditional Pathway to the Clinical Pathway candidate dispositions. When

analyzing the pre-student teaching Disposition Forms for Group 1, all twelve of the dispositions revealed a statistically significant difference for clinical candidates, $p \leq .05$ (see Table 1 for description of dispositions; see Table 2, Figure 1 for the pre- and post-assessment data). When analyzing the post-student teaching data using the 2-tailed values, significant differences remained ($p \leq .05$) for five of the dispositions for Clinical Pathway teacher candidates (see Table 2, figure 1 for the pre- and post-assessment data).

When analyzing pre-student and post-student teaching data for Group 2 there was a significant difference for Clinical Pathway teacher candidates pre-student teaching Disposition 10 and post-student teaching Disposition 7 (see Table 3, Figure 2). The data results from Group 3 pre-student teaching revealed higher average scores on four dispositions for traditional candidates (Dispositions 1, 2, 5, and 7) and six dispositions for clinical candidates (Dispositions 2, 6, 8, 9, 10, and 11). Post-student teaching significant differences were identified on four dispositions for clinical candidates (Dispositions 2, 4, 8, and 9) (see table 4, figure 3).

What Patterns were Revealed When Comparing Traditional Pathway Teacher Candidate Dispositions to the Clinical Pathway Teacher Candidate Dispositions?

Clinical Pathway Group 1 self-rated higher than the Traditional Pathway group on all twelve dispositions prior to student teaching. Post-student teaching five dispositions (Dispositions 2, 3, 7, 9, and 12) remain statistically significantly different and higher for clinical candidates. Disposition 2 and 3 relate to teaching and learning; Dispositions 7, 9, and 12 relate to professional behaviors. The effect on teaching and learning may be attributed to the blocked coursework for clinical teacher candidates beginning their junior year, which is highly integrated and immediately implemented in the field. Additionally, instructors are in the field observing teacher candidates and classroom instruction and providing feedback to make connections between theory and practice. Candidates who spend more time working directly with and instructing children of different grade levels have more opportunities to practice lesson implementation, assessment, critical thinking, and problem-solving as well as promoting autonomy in students of different age groups.

Clinical candidates self-rated higher on professional behaviors and responsibilities (Disposition 7, 9, and 12). The regimen of course- and field-work that closely imitates a teacher workday promotes teacher candidates' self-discipline, responsibility and professional behavior. Teacher candidates logically develop a greater sense of their abilities through experiences with teachers and students in the field. Clinical candidates spend approximately 350 more hours than traditional candidates in the elementary and/or early childhood classroom prior to student teaching, so it may be plausible to assume that clinical candidates would rate themselves higher across these dispositional dimensions than traditional candidates.

Group 2 had one significant difference pre-student teaching for Clinical Pathway teacher candidates (Disposition 10) and one significant difference post-student teaching for Clinical Pathway teacher candidates (Disposition 7). There was no consistency in Group 2 between pre- and post-student teaching. Group 2 teacher candidates student taught in the fall. Overall, Clinical Pathway teacher candidates who student taught in the spring reported higher self-ratings than candidates who student taught in the fall. Teacher candidates who student teach spring semester, teach the same group of students they had in one of their fall placements. These candidates are

able to form relationships, understand achievement levels of each student and how to accommodate and modify instruction to meet the needs of the learners. Clinical Pathway teacher candidates who student teach in the fall are placed with a teacher they had in the spring, but because of the changing school year, the teacher candidates are working with a new group of students. They do not have the same understanding of the specific learners in the classroom as the spring student teachers. Thus Group 2 self-ratings were not as high or consistent as Groups 1 and 3.

For pre-student teaching assessment of dispositions, Group 3 had statistically significant differences between clinical and traditional candidates on ten dispositions, but the pattern was inconsistent. On four of the dispositions, traditional candidates had higher average ratings than clinical candidates (Dispositions 1, 2, 5 and 7). On six of the dispositions, clinical candidates had higher average scores than traditional candidates (Dispositions 3, 6, 8, 9, 10, and 11). Traditional candidates rated themselves higher on average than clinical candidates on dispositions related to planning, teaching and behaving professionally. The pattern seen up to this point may be reversed for traditional candidates due to their coursework focus on lesson planning. They have not yet had opportunities to apply their lessons with students of varied abilities or develop critical thinking skills in elementary age students. Clinical candidates had those opportunities beginning their junior year. They have experienced the challenges of differentiation with high expectations for all learners.

Pre-student teaching Group 3 clinical candidates self-rated themselves higher than traditional candidates on dispositions related to encouraging student thinking including accommodations and modifications (Dispositions 3 and 6) and professional behaviors and responsibilities (Dispositions 8, 9, 10 and 11). The difference in dispositions may be attributed to the increased number of classroom experiences in a variety of classrooms and grades. Clinical Pathway teacher candidates work with teachers and students in urban, suburban, and rural districts during junior and first semester senior year rather than having limited observation in those settings. They have a senior experience in a building with one semester of co-teaching two days a week for five weeks each in three different grade levels. They will then student teach for one semester in one of those three classrooms. The increased exposure to teachers and students in multiple settings may increase their belief in their ability to meet the needs of the diverse students. Traditional Pathway teacher candidates may only observe in rural, urban and suburban districts, with limited opportunities for interaction in specific placements, and only student teach one-semester in one school.

Group 3 clinical candidates maintained statistically significantly higher average self-ratings on Dispositions 8 and 9 from pre- to post-student teaching. Teacher candidates in the Clinical Pathway have more field experience than candidates in the Traditional Pathway. They were able to establish early in their academic career the belief that teachers make a difference. Clinical candidates work collaboratively with different faculty members at a variety of grade levels, in varied settings, with a range of demographics and school cultures. The clinical teacher candidates were able to reflect upon the ability of the teacher to impact student learning based upon their own interactions with children and their discussions with classroom teachers. They self-rated higher on their attitudes for teaching and learning and beliefs about how students and colleagues should be treated and should treat one another.

Conclusion

The results of this study provide insights into the effect of the Clinical Pathway model. The Clinical Pathway teacher candidates begin Senior One in the same building where they will student teach the following semester. This allows the candidate to form relationships with staff members, build confidence, and grow as a reflective practitioner. In the Traditional Pathway, teacher candidates have one experience before student teaching in one grade level, one classroom, one school district, one day a week. Due to limitations in time and exposure to a limited range of experiences, the majority of their self-ratings were lower on dispositions both prior to and after student teaching. Clinical candidates who student taught in the spring had higher self-ratings than those candidates who student taught in the fall.

Limitations

There are some limitations that may affect the findings of this study. The study took place in one Midwestern university and may not be replicable in other settings due to differences in programming, demographics, and state specific certification requirements. The study comprised a small number of undergraduate pre-service teacher candidates over a three-semester period enrolled in defined teacher preparation models. Limitations of data collection for this study include the use of a single measurement and the use of self-ratings. Single measures are one-dimensional and provide limited information. Use of self-ratings may be problematic; accurate assessment of one's own competence may be difficult (Caputo & Dunning, 2005; Leach, 2012; Lepkowski, Packman, Smabe, & Maddux, 2009). Although the researchers were aware of the limitations, the focus of the research was to examine the candidates' own perceptions of growth in professional dispositions during student teaching.

Recommendations

Due to the results of this research, it is recommended that teacher candidates participate in earlier and more meaningful experiences in the school setting. This will allow teacher candidates more collaborative engagement in informal and formal observations, lesson planning, teaching lessons in a whole groups setting, administering and analyzing a variety of student assessments, and meeting the needs of diverse populations. The Clinical Pathway model fosters opportunities for relationship building, as well as continued support and learning through varied and meaningful school interactions that are not available within the Traditional Pathway model. The connection of the coursework and field experience is a critical component of the Clinical Pathway.

It is recommended that additional structures be implemented for students who elect to begin Clinical Pathway spring semester and students teach fall semester. These students will need opportunities to have one of their three placements with students in the grade before their student teaching placement grade (e.g., second grade placement, third grade student teaching), observe and meet with teachers teaching the students who will be in their student teaching placement grade, and/or analyze student achievement data and attend data team meetings in the spring with the teachers teaching the students who will be in their student teaching placement.

The Clinical Pathway is an effective model for teacher education programs. Clinical teacher candidates actively apply theory to practice in structured field experiences. Teacher candidates are able to make the connections because they are receiving feedback from their university instructors and mentor teachers. Teacher candidates gradually gain more autonomy in the classroom through scaffolded experiences, which help the teacher candidate gain confidence in the classroom before student teaching so the student teaching experience is successful.

Based on our findings, future research might focus on the pre-existing dispositions of teacher candidates who self-select a more intensive approach to teacher education, like the Clinical Pathway, over a traditional approach is necessary. Similarly, our work used one measure for assessing differences between pathways. Future study using a variety of measures to understand outcome differences between pathways would be informative for the field.

References

- Almerico, G., Johnston, P., Henriott, D., & Shapiro, M. (2011). Dispositions assessment in teacher education: developing an assessment instrument for the college classroom and the field. *Research in Higher Education Journal*, 11(1), 1-8. Retrieved <http://www.aabri.com/manuscripts/10665.pdf>
- Ayan, D. & Seferoglu, G. (2011). Using electronic portfolios to promote reflective thinking in language teacher education. *Educational Studies*, 37(5), 513-521.
- Bell, B. & Morrow, J. (1998). An evaluation report of year 1 of the PDS partnership implementation. Retrieved from the University of Central Missouri, Elementary and Early Childhood Department.
- Borko, H., Liston, D., & Whitcomb, J. (2007). Apples and fishes: The debate over dispositions in teacher education. *Journal of Teacher Education*, 58(5), 359-364.
- Brewer, R.D., Lindquist, C., & Altemueller, L. (2011). The dispositions improvement process. *International Journal of Instruction*, 4(2), 51-68.
- Caputo, D. & Dunning, D. (2005). What you don't know: The role played by errors of omission in imperfect self-assessments. *Journal of Experimental Social Psychology*, 41(5), 488-505.
- Catalfamo, H. (2010) An examination of leadership development in colleges. *Educational Planning*, 19(4), 8-31.
- Cochran-Smith, M. (2006). Policy, practice, and politics in teacher education: Editorials from the *Journal of Teacher Education*. Thousand Oaks, CA: Sage.
- Council of Chief State School Officers (2011). InTASC model core teaching standards: a resource for state dialogue. Council of Chief State School Officers, Washington, D.C.
- Cummins, L. & Asempapa, B. (2013). Fostering teacher candidates dispositions in teacher education programs. *Journal of the Scholarship of Teaching and Learning*, 13(3), 99-119.
- Darling-Hammond, L. & Baratz-Snowden, J. (2007). A good teacher in every classroom: Preparing the highly qualified teachers our children deserve. *Educational Horizons*, 85(2), 111-132.
- Dewey, J. (1933). How we think: A restatement of the relations of reflective thinking to the educative process. Boston, MA: D.C. Heath

- Dolly, J. P. & Oda, E. A. (1997). Toward a definition of professional development schools. *Peabody Journal of Education*, 72(1), 178-186.
- Dottin, E. S. (2009). Professional judgment and dispositions in teacher education. *Teaching & Teacher Education*, 25(1), 83-88.
- Garland, C. (1982). *Guiding clinical experiences in teacher education*. New York, NY: Longman.
- Green, E. (2010, March 2). Building a better teacher. *The New York Times*. Retrieved from <http://www.nytimes.com>
- Liston, D., Whitcomb, J., & Borko, H. (2007). NCLB and scientifically-based research: Opportunities lost and found. *Journal of Teacher Education*, 58(3), 195-201.
- Leach, L. (2012). Optional self-assessment: some tensions and dilemmas. *Assessment & Evaluation in Higher Education*, 37(2), 137-147.
- Lepkowski, W. J., Packman, J., Smaby, M. H., & Maddux, C. (2009). Comparing self and expert assessments of counseling skills before and after skills training, and upon graduation. *Education*, 129(3), 363.
- National Council for Accreditation of Teacher Education (NCATE) (2002). *Professional standards for the accreditation of schools, colleges, and departments of education* Washington, DC: author.
- National Council for Accreditation of Teacher Education (2010). *Professional standards for the accreditation of schools, colleges, and departments of education*. Washington, DC: author.
- Ritchart, R. (2001). From iq to ic: A dispositional view of intelligence. *Roeper Review*, 23(3), 143-150.
- Schussler, D., Stooksberry, L., & Bercaw, L. (2010). Understanding teacher candidate dispositions: Reflecting to build self-awareness. *Journal of Teacher Education*, 61(4), 350-363.
- Thornton, H. (2006). Dispositions in action: do dispositions make a difference in practice? *Teacher Education Quarterly*, 33(2), 53-68.
- Thornton, H. (2013). A case analysis of middle level teacher preparation and long-term dispositions. *RMLE Online: Research in Middle Level Education*, 37(3). Retrieved http://www.amle.org/portals/0/pdf/rmle/rmle_vol37_no3.pdf
- Villegas, A. (2007). Dispositions in teacher education: A look at social justice. *Journal of Teacher Education*, 58(5), 370-380.

Angela Danley is an Assistant Professor of Elementary Education at the University of Central Missouri where she teaches courses in the undergraduate and graduate programs in teacher education. Natalie Tye is an Assistant Professor of Early Childhood Education at the University of Central Missouri where she teaches courses in the undergraduate and graduate programs in teacher education. Karen Loman is an Assistant Professor of Early Childhood Education at the University of Central Missouri where she teaches courses in the undergraduate and graduate programs in teacher education. Aprille Barlow earned her undergraduate and graduate degrees in education at the University of Central Missouri. Nicole Nickens is the Associate Dean for the College of Education at the University of Central Missouri.

Table 1

Abbreviated Disposition Form with Example Behaviors

Disposition 1: Commits to high expectations for all students, and values the ability/capacity for each student to learn evidenced in behaviors such as persists in helping all children become successful, listens to students, plans to/attempts to differentiate instruction to meet needs of each student

Disposition 2: Values student ability to apply concepts learned to performance activities evidenced in behaviors such as allows students to explore and engage in learning, uses effective communication strategies, applies knowledge from various classes as evidenced by planning, instruction, and assessment techniques

Disposition 3: Commits to the development of critical thinking skills (e.g., problem solving, analysis, etc.) evidenced in behaviors such as uses effective questioning strategies, reflects on experience and uses reflection to inform practice

Disposition 4: Commits to seeking out, developing, and continually refining teaching practices that generate more learning for students evidenced in behaviors such as such as uses informal assessment to adjust and revise lessons, recognizes that learning is an ongoing process, shows focus on student learning in self-evaluation and in conferencing with cooperating teacher

Disposition 5: Commits to development of lessons that are interesting and engaging through a variety of instructional strategies to accommodate all learners, including those from diverse backgrounds, experiences, and cultures (e.g., use of technology, grouping, motivating materials) evidenced in behaviors such as adjusts & revises lesson plans to meet students' needs, displays through behavior a passion for teaching as a profession, demonstrates through behavior a belief that ALL students learn

Disposition 6: Commits to making appropriate adaptations and accommodations for students with diverse needs (e.g., use of technology) evidenced in behaviors such as seems comfortable in discussing different kinds of diversity, seeks to become acquainted with students as individuals, interacts in a respectful and supportive way with students and their families

Disposition 7: Appreciates and promotes acceptance of self-discipline, responsibility, and self-esteem evidenced in behaviors such as shows enthusiasm throughout lessons/teaching, demonstrates professional behavior including coming prepared, dressed appropriately, and ready to work, accepts responsibility for his/her actions, accepts correction graciously—no excuses

Disposition 8: Commits to a positive and enthusiastic attitude for teaching and learning to inspire self and others evidenced in behaviors such as such as accepts responsibility for own actions, demonstrates respect for professor, cooperating teacher, and peers, demonstrates a commitment to the profession

Disposition 9: Believes students and colleagues should be treated and should treat other with kindness, fairness, patience, dignity, and respect evidenced in behaviors such as such as maintains standards of confidentiality, acts as an appropriate representative of school, interacts appropriately with students and peers

Disposition 10: Commits to relationships with school colleagues, parents, and educational partners in the larger community to support student learning and well –being evidenced in behaviors such as maintains standards of confidentiality, demonstrates professional behaviors at all times, works toward creating a community of learners

Disposition 11: Assesses the effects of choices and actions on others and actively seeks out opportunities to grow professionally in order to promote learner outcomes evidenced in behaviors such as shows positive attitude toward learning (self & others), recognizes the value of intrinsic motivation in helping students become lifelong learners, reads and is aware of books that the children are reading in class

Disposition 12: Fulfills professional responsibilities consistent with building and district expectations and policies concerning appearance, punctuality, attendance, and timely and accurate paperwork completion evidenced in behaviors such as arrives at school promptly, is prepared and organized for lessons and responsibilities, manages time & materials

Table 2

Comparison of Group Statistics Results for the Pre- and Post-Assessment Dispositions Group 1 (Student Taught Spring 2014)

	PDS Pathway	Pre N	Pre Std. Deviation	Pre Std. Error Mean	Pre t- test	Post N	Post Std Deviation	Post Std, Error Mean	Post t-test
Disposition 1	T	60	.460	.059	.000	62	.557	.071	.689
	C	15	.516	.133		15	.516	.133	
Disposition 2	T	60	.362	.047	.001	62	.541	.069	.029
	C	16	.515	.129		15	.507	.131	
Disposition 3	T	60	.345	.045	.002	62	.508	.065	.000
	C	16	.625	.156		15	.507	.131	
Disposition 4	T	60	.494	.064	.000	62	.6100	.0776	.160
	C	16	.602	.151		15	.5164	.1333	
Disposition 5	T	60	.436	.056	.011	62	.5990	.0761	.716
	C	16	.632	.158		15	.5071	.1309	
Disposition 6	T	60	.325	.042	.000	62	.5307	.0674	.539
	C	16	.544	.136		15	.5071	.1309	
Disposition 7	T	60	.5921	.0764	.000	62	.5538	.0703	.003
	C	16	.4732	.1183		15	.4140	.1069	
Disposition 8	T	60	.4994	.0645	.000	62	.6032	.0766	.067
	C	16	.6762	.1691		15	.4880	.1260	
Disposition 9	T	60	.6139	.0793	.001	62	.5267	.0669	.023
	C	16	.4732	.1183		15	.4577	.1182	
Disposition 10	T	60	.403	.052	.000	62	.5461	.0694	.118
	C	16	.547	.137		15	.5071	.1309	
Disposition 11	T	60	.597	.052	.001	62	.5307	.0674	.140
	C	16	.680	.137		15	.5164	.1333	
Disposition 12	T	60	.6430	.0837	.013	62	.623	.080	.045
	C	16	.5618	.1405		15	.507	.131	

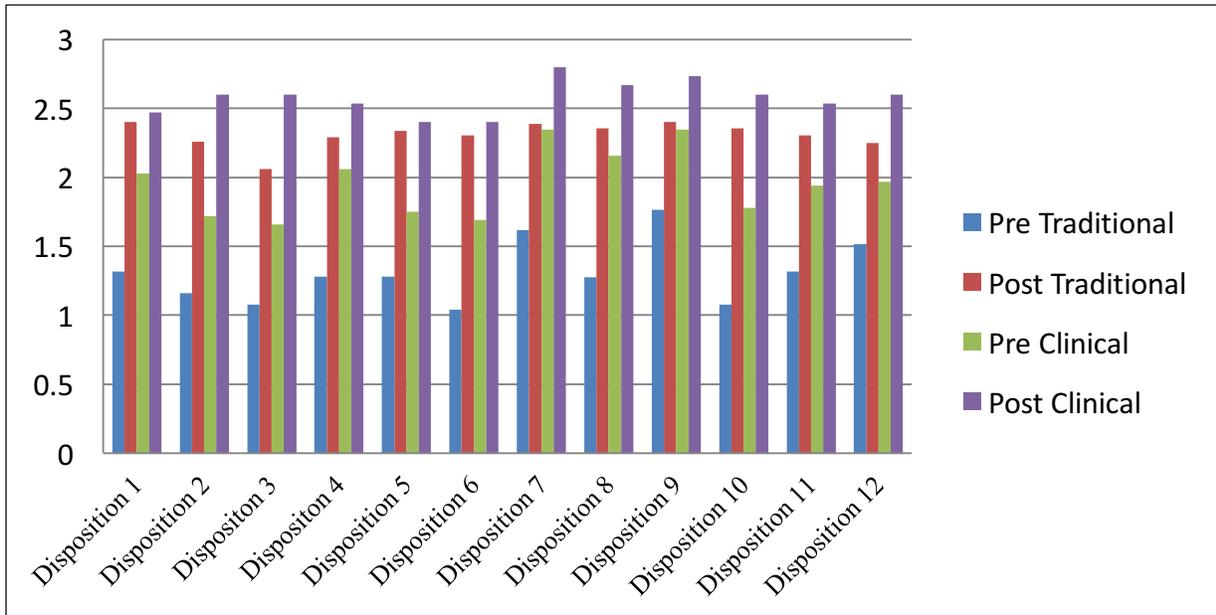


Figure 1. Comparison of Mean Scores for Pre- and Post-Assessment Dispositions Group 1 (Student Taught Spring 2014)

Table 3

Comparison of Group Statistics Results for the Pre- and Post-Assessment Dispositions Group 2 (Student Taught Fall 2014)

	PDS Pathway	Pre N	Pre Std. Deviation	Pre Std. Error Mean	Pre t-test	Post N	Post Std. Deviation	Post Std. Error Mean	Post t-test
Disposition 1	T	41	.614	.096	.409	41	.534	.083	.554
	C	11	.467	.141		11	.467	.141	
Disposition 2	T	41	.634	.099	.167	41	.447	.070	.906
	C	11	.467	.141		11	.647	.195	
Disposition 3	T	41	.520	.081	.745	41	.488	.076	.814
	C	11	.467	.141		11	.701	.211	
Disposition 4	T	41	.568	.089	.088	41	.473	.074	.562
	C	11	.405	.122		11	.701	.211	
Disposition 5	T	41	.671	.105	.836	41	.435	.068	.768
	C	11	.522	.157		11	.783	.236	
Disposition 6	T	41	.5129	.0801	.752	41	.4117	.0643	.253
	C	11	.4101	.1236		11	.6431	.1939	
Disposition 7	T	41	.5483	.0856	.311	41	.5238	.0818	.028
	C	11	.3015	.0909		11	.7006	.2113	
Disposition 8	T	41	.5644	.0882	.252	41	.5653	.0883	.811
	C	11	.4671	.1408		11	.8090	.2439	
Disposition 9	T	41	.5407	.0844	.458	41	.5061	.0790	.076
	C	11	.3015	.0909		11	.5519	.1664	
Disposition 10	T	40	.5187	.0820	.038	41	.5533	.0864	.314
	C	11	.5045	.1521		11	.4622	.1394	
Disposition 11	T	40	.6284	.0994	.101	41	.5421	.0847	.923
	C	11	.4045	.1220		11	.6640	.2002	
Disposition 12	T	39	.5483	.0878	.168	41	.5238	.0818	.086
	C	11	.3015	.0909		11	.7508	.2264	

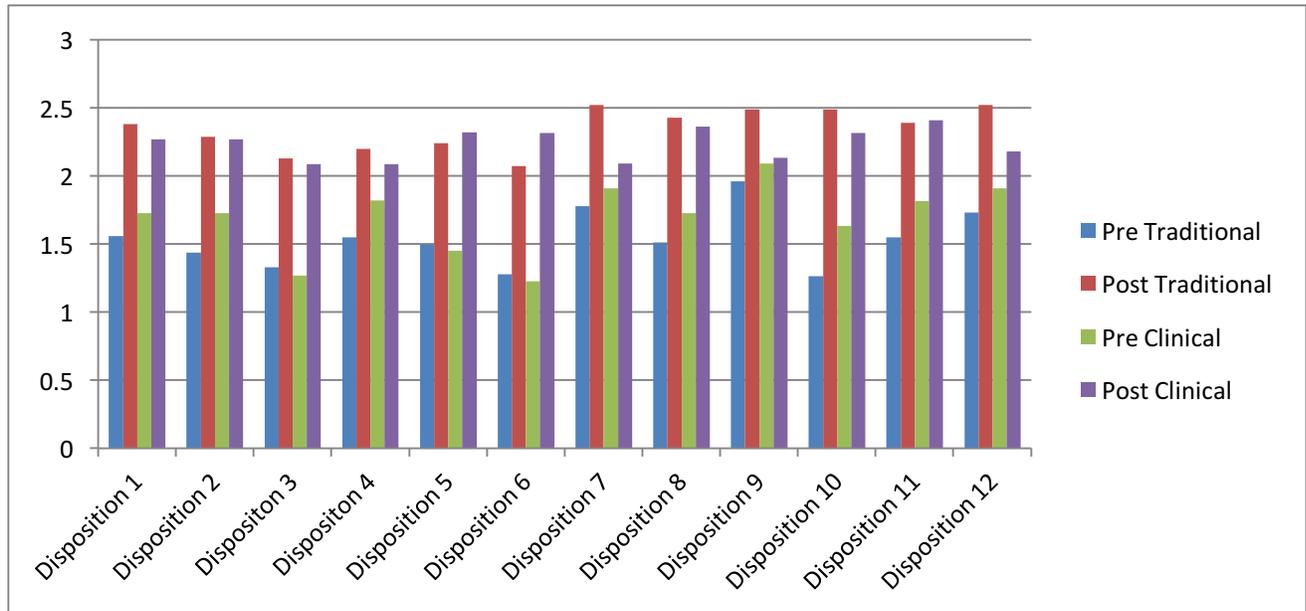


Figure 2 Comparison of Mean Scores for Pre and Post Assessment Dispositions Group 2 (Student Taught Fall 2014)

Table 4

Comparison of Group Statistics Results for the Pre- and Post-Assessment Dispositions Group 3 (Student Taught Spring 2015).

	PDS Pathway	Pre N	Pre Std. Deviation	Pre Std. Error Mean	Pre t-test	Post N	Post Std. Deviation	Post Std. Error Mean	Post t-test
Disposition 1	T	30	.601	.110	.000	30	.466	.085	.310
	C	21	.498	.109		21	.680	.148	
Disposition 2	T	30	.607	.111	.014	30	.568	.104	.046
	C	21	.312	.068		21	.598	.130	
Disposition 3	T	30	.500	.091	.000	30	.531	.097	.229
	C	21	.474	.104		21	.669	.146	
Disposition 4	T	30	.494	.090	.192	30	.484	.088	.008
	C	21	.568	.124		21	.590	.129	
Disposition 5	T	29	.634	.118	.009	30	.596	.109	.080
	C	21	.532	.116		21	.669	.146	
Disposition 6	T	30	.5074	.0926	.000	30	.4611	.0842	.411
	C	21	.4976	.1086		21	.5606	.1223	
Disposition 7	T	30	.6873	.1255	.020	30	.5040	.0920	.067
	C	21	.5118	.1117		21	.5606	.1223	
Disposition 8	T	30	.5438	.0993	.012	30	.4901	.0895	.023
	C	21	.6437	.1405		21	.5606	.1223	
Disposition 9	T	29	.5431	.1008	.035	30	.4795	.0875	.019
	C	21	.4976	.1086		21	.4830	.1054	
Disposition 10	T	29	.5235	.0972	.000	30	.4661	.0851	.843
	C	21	.6381	.1392		21	.6583	.1436	
Disposition 11	T	29	.4152	.0771	.011	30	.4661	.0851	.075
	C	21	.5390	.1176		21	.5976	.1304	
Disposition 12	T	29	.5782	.1074	.056	30	.4983	.0910	.063
	C	21	.6761	.1475		21	.4803	.1054	

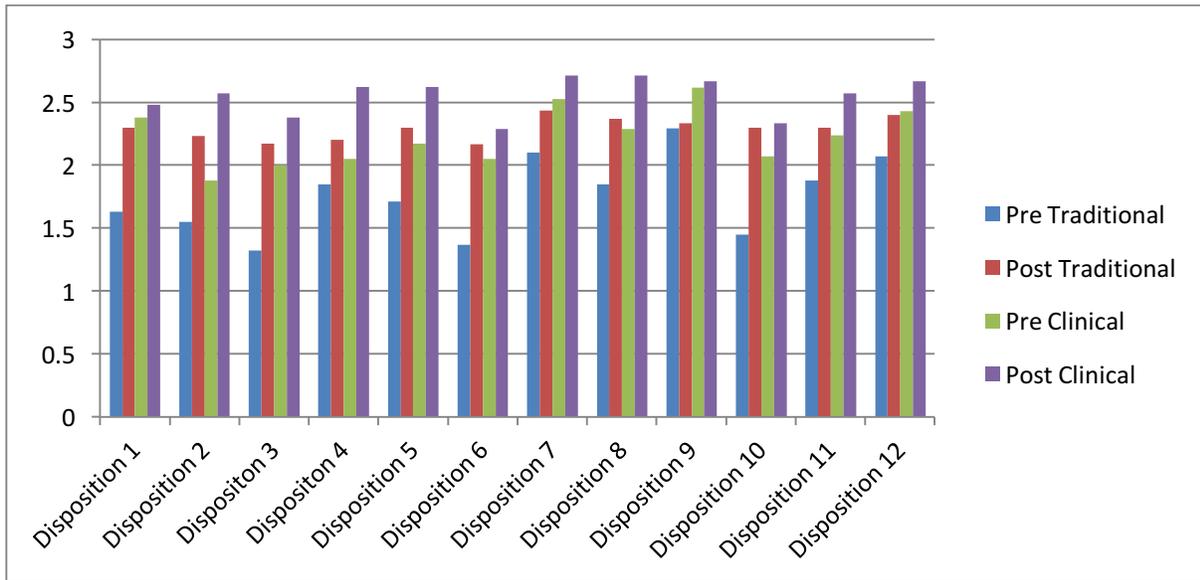


Figure 3 Comparison of Mean Scores for Pre- and Post-Assessment Dispositions Group 3 (Student Taught Spring 2015).

**Graduate Teaching Fellowships as New Teacher Induction:
School-University Partnerships' Impact on Teaching Self-Efficacy**

Sara L. Hartman
Ohio University

Christopher Kennedy
Ohio University

Brian Brady
Ohio University

Abstract: New teacher induction programs, which strive to increase teaching self-efficacy, represent effective ways to increase teacher retention. This year-long qualitative case study examines the impact of a Teaching Fellowship program on the teaching self-efficacy of 14 new teachers in 11 Professional Development Schools (PDS). Beginning the school year, participants identified low self-efficacy related to Differentiation, Classroom/Behavior Management, Parent/Caregiver Communication, and Collaboration (co-teaching). High self-efficacy was found in relation to Collaboration (mentor teachers, school personnel, and other teaching fellows) and Developing Positive Student Relationships. Significantly, after a year in the Teaching Fellowship program, participants reported an increase in teaching self-efficacy in all areas. The findings provide important data about the value of PDS Teaching Fellowships as induction programs for new teachers, and the implications are relevant to stakeholders in both higher education and public school settings.

KEYWORDS: teaching fellowships, new teacher induction, professional development school (PDS), self-efficacy, school-university partnerships

NAPDS NINE ESSENTIALS ADDRESSED:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
3. Ongoing and reciprocal professional development for all participants guided by need;
9. Dedicated and shared resources and formal rewards and recognition structure

Introduction

Retaining new teachers presents an ongoing challenge for districts across the United States (Gonzalez, Brown, & Slate, 2008; Ingersoll & Strong, 2011), and a plethora of research about the reasons for high rates of new teacher turnover exists (Gonzalez et al., 2008; Ingersoll & Strong, 2011). Research supports new teacher induction programs as a way to retain new

teachers in the profession (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011), and superintendents and principals often devote significant time and monetary resources to develop induction programs aimed at increasing teacher self-efficacy (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011). However, despite their efforts, an estimated 40-50% of all new teachers leave the profession within the first five years (Ingersoll & Strong, 2011). These significant statistics became the impetus for an examination of the impact that a Professional Development School (PDS) Teaching Fellowship program has on new teacher self-efficacy and the ability of a Teaching Fellowship program to function as an effective new teacher induction program.

Not to be confused with self-confidence, teacher self-efficacy refers to teachers' beliefs about their ability to engage with students in order to successfully achieve desired learning outcomes (Tschannen-Moran & Wolfolk-Hoy, 2001). Significantly, a person's perception of high self-efficacy is strongly correlated to increased effort and persistence to succeed at a task (Bandura, 1997). Given this connection, new teachers who feel high self-efficacy about their ability to be successful teachers are more likely to stay in the teaching profession and express greater satisfaction with the teaching profession (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Wolfolk-Hoy, 2001). This year-long qualitative research study examines the impact of a Teaching Fellowship program on the teaching self-efficacy of 14 participants¹ who are first-year teachers in 11 Professional Development Schools (PDS). Specifically, this study describes the self-identified teaching challenges and strengths of first-year teachers who are participating in a PDS Teaching Fellowship program at Foothills University¹ and examines the impact on teaching self-efficacy when new teachers engage in a PDS Teaching Fellowship as part of a new teacher induction program. The findings provide important data about the value of PDS Teaching Fellowships as induction programs for new teachers, and the implications are relevant to stakeholders in both higher education and public school settings. Researchers Carr and Evans (2006) reported on a similar Teaching Fellowship program, but more data are needed to fully assess the value of such programs. In order to frame the research presented, a careful review of the literature is necessary.

Review of the Literature

New Teacher Retention

The amount of teacher turnover is high, with one study estimate stating one in five teachers leave in their first year (Gonzalez et al., 2008) and another noting 40-50% leave within five years of entering the profession (Ingersoll & Strong, 2011), costing tax payers approximately \$2.2 billion dollars per year (Hughes, 2012). Reasons for teachers leaving the profession center largely on teachers feeling unsupported, isolated, and overwhelmed by stress and monetary factors (Buchanan et al., 2013; Ingersoll & Strong, 2011). The task then is to find ways to better equip new teachers to be able to face the challenges that prompt new teachers to leave the profession. The creation of teaching induction programs for all new teachers is becoming more prevalent in the U.S., and almost 80% of new teachers report having an induction program (Ingersoll & Strong, 2011; Kane, & Francis, 2013). New induction programs

¹ Pseudonyms are used throughout the article.

may vary widely, from single meetings with a mentor teacher to a highly structured program that involves frequent meetings over the course of several years (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011). While there is research support for the effectiveness of new teacher induction programs (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011), the effectiveness of Teaching Fellowships as a new teacher induction program is underreported.

In recent years, Teaching Fellowships have become an avenue for teacher education programs and schools to create more effective and confident teachers in the classroom (Carr & Evans, 2006). Fellowship programs differ from one university to another, though teaching fellows are often offered a middle ground between being a student teacher and a full-time professional, with pay and other benefits while taking graduate school classes. For new teachers struggling with professional isolation, having a readily accessible mentor in the classroom at all times allows for a constructive dialogue on teaching practices and shows promise for maintaining a realistic and healthy teaching self-efficacy (Carr & Evans, 2006; Ingersoll & Strong, 2011). Teaching Fellowships offer promise as induction programs for new teachers (Carr & Evans, 2006), though more research about their ability to impact teacher self-efficacy and retention is needed.

Teacher Self-Efficacy

Past self-efficacy research has had the narrow goal of having teachers leave teacher preparation programs with high levels of self-efficacy which only tells researchers and teachers how high their perceived self-efficacy is at that particular moment (Wyatt, 2015). However, researchers know that self-efficacy exists on a spectrum that must be maintained over time through support and further education (Bandura, 1997; Wyatt, 2015). A high level of self-efficacy is not achieved but rather maintained and constantly requires one to reflect and assess one's capacity for any given occupation or task. Many new teachers have faced various forms of pressure and stigma to express positive teacher self-efficacy at the end of a teacher preparation program or be seen as not ready to enter the field (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Wolfolk-Hoy, 2001) and "teachers responding to Likert scale items might feel obliged to fake their answers" (Wyatt, 2015, p. 139). Simply measuring teacher self-efficacy in terms of purely quantitative data is not enough and indicates the need for ongoing qualitative and longitudinal research on individual teachers and their reported self-efficacy.

Personal Awareness of Self-Efficacy and Knowledge Calibration

Due to the misplaced goals and misunderstanding of self-efficacy in the past, there is a dearth of research regarding teachers having a high sense of teacher self-efficacy and how that can actually be negative for a new teacher in the field (Wyatt, 2015). If one's perceived teacher self-efficacy is considered very high or artificially inflated (perhaps due to pressure to report high levels in teacher preparation programs) upon entering a classroom setting and the desired results of one's teaching practices are not met, teaching self-efficacy will drop (Doney, 2013; Jamil, Downer, & Pianta, 2012; Wyatt, 2015). Research powerfully calls into question the idea of positive self-efficacy beliefs being an absolute good as they could signal to administrators and to the teacher that no more work needs to be done on enhancing teaching practices and

professional development (Wheatley, 2005; Wyatt, 2015). However, this also brings up the one consistent truth in self-efficacy studies; once a teacher feels that they are not effective in the classroom, the chances of them leaving the profession become greater (Wyatt, 2015).

Knowledge calibration, or being able to accurately gauge one's understanding of a topic, also influences self-efficacy (Al-Hazza, Fleener, & Hager, 2008; Cunningham, Perry, Stanovich, & Stanovich, 2004). As they are often unaware of what they do or do not know, new teachers often have an artificially inflated or overestimated sense of self-efficacy (Al-Hazza et al., 2008; Cunningham et al., 2004). Researchers of this phenomena report that in order to make accurate judgments of one's self-efficacy, teachers need to be able to sufficiently calibrate their knowledge. Doing so allows them to address the gaps in their knowledge base and teaching practices and promotes an accurate reflection of teaching self-efficacy (Al-Hazza et al., 2008; Cunningham et al., 2004). Well-calibrated teachers are also more likely to be receptive to new ideas and teaching strategies to keep their pedagogy modern and relevant, while an overestimation of one's knowledge base (poor knowledge calibration) leads teachers to become passive and unengaged in any sort of professional development and may lead to teachers leaving the profession (Cunningham et al., 2004).

Resiliency Factors and Retention

A teacher's self-efficacy is a measure of many factors, with resiliency factors being particularly important. Resiliency factors include personal, social, family, and school supports that may help someone persist and maintain high self-efficacy in the face of challenges (Doney, 2013). If a new teacher's formative years are filled with stress, professional isolation, and a lack of personal and social skills required to cope with the shocks that accompany the teaching profession, it should come as no surprise when they leave the profession (Buchanan et al., 2013; Hughes, 2012).

Coupled with ideas of teacher self-efficacy, building and increasing resilience in teachers by providing institutional safeguards against stress and mishaps in the workplace have been shown to keep teacher self-efficacy intact over time (Buchanan et al., 2013; Doney, 2013; Jamil et al., 2012). If the emotional and social foundation from family and the institution where a teacher is employed wanes over time, a teacher's resilience and self-efficacy may be jeopardized (Doney, 2013). Understanding and addressing the different forms of isolation (geographic, emotional, physical and professional) that new teachers experience in the field is crucial for supporting and building resiliency factors for new teachers (Buchanan et al., 2013). Additionally, building and fostering an early sense of community is critical for retaining new teachers within the profession (Buchanan et al., 2013). Induction programs that place emphasis on building resiliency factors show promise for helping new teachers maintain a healthy teaching self-efficacy, thereby increasing new teacher retention.

Understanding PDS Teaching Fellowships at Foothills University

Teaching Fellowship Structure

Teaching Fellowships are an integral part of PDS programming at Foothills University, so an understanding of Teaching Fellowships' structure and work is important for contextualizing the findings of this study. Brindley, Field, and Lessen (2008) speak to the dedicated and shared resources that are essential when conducting PDS partnership work. In the region where this study was conducted, teaching fellows constitute a resource that is shared by local P-12 schools and Foothills University's College of Education. At Foothills University, teaching fellows are graduate assistants who do their graduate appointment work in a P-12 school as a fully licensed teacher. Teaching fellows teach in a local PDS school for 20 hours/week, are granted a tuition waiver, and receive a stipend as they fulfill their teaching commitment and take master's level coursework.

Originally, the Teaching Fellowship program was developed as a resource that allowed release time for school-based teacher liaisons to conduct undergraduate PDS work in local schools. However, in an effort to meet the needs of local school partners, Teaching Fellowship programming has grown and evolved. Currently, Teaching Fellowships are either funded by Foothills University's College of Education or are collaboratively funded by the university and local school. University funded teaching fellows provide release time for teacher liaisons in cooperating PDS schools. Essentially, these teaching fellows share teaching responsibilities with the teacher liaison. This allows the teacher liaison to work with undergraduate teacher candidates, with intervention programming, or to engage in other school initiatives. Collaboratively funded teaching fellows fulfill many needs in local PDS schools. In this structure, the participating school pays the teaching fellow's stipend, while the college provides the tuition waiver. Often, these teaching fellows provide much needed intervention support, but they are also classroom teachers in various content areas and across multiple grade levels. Due to financial constraints in an impoverished, rural area, collaboratively funded teaching fellows present a cost efficient option for PDS schools.

Additionally, collaborative practices are essential in the hiring and placement of teaching fellows. Prospective teaching fellows must submit applications to Foothills University's graduate college, their particular master's program, and a detailed Teaching Fellowship application that contains lesson plans. Although teaching fellows are technically employed by the university, teaching fellows engage in a rigorous interview process that is led by local school stakeholders. The hiring process demonstrates all PDS partners' commitment to a collaborative PDS structure that is mutually beneficial to all stakeholders (Brindley et al., 2008). Finally, the university demonstrates its PDS commitment to sharing resources and ongoing professional development by fully funding a Teaching Fellow Faculty Coordinator. This university faculty member serves as the connection between schools, teaching fellows, and the university. By building relationships and maintaining open lines of communication, the Teaching Fellow Faculty Coordinator is an essential part of the structure of the Teaching Fellowship program.

Teaching Fellowship Implementation

During the year of data collection, several specific practices were integral to the implementation of PDS Teaching Fellowships at Foothills University. Foundational implementation practices included each teaching fellow working with a mentor teacher in their PDS school setting, graduate college instructors connecting course content to classroom practices, and a Teaching Fellow Faculty Coordinator providing monthly/semi-monthly professional development seminars that addressed graduate school and first year teaching challenges and concerns (see Figure 1 for a list of seminar topics)

Figure 1. Seminar Topics

Topics
Starting the school year
Time management
Instructional pacing
Planning for a substitute
Meeting the needs of all learners
Writing a literature review
Recognizing & responding to suspected child maltreatment
Effective instructional strategies
Technology
Classroom/Behavior management
Crisis response
Co-teaching
Applying & interviewing

Researchers have long known the importance of providing mentoring to new teachers (Billingsley, Griffin, Smith, Kamman, & Israel, 2009; Ingersoll & Smith, 2004), and mentor involvement in PDS Teaching Fellowship work at Foothills University was essential. This model allowed both mentor teachers and teaching fellows to learn from one another, furthering the PDS ideals of mutual commitment to innovative and reflective practices (Brindley et al., 2008). Also, although new to the profession, teaching fellows are fully licensed teachers, and mentors modeled and encouraged teaching fellows to become actively involved within their school community. Connecting college coursework to classroom practice should be an essential component of 21st century teacher preparation programs (Darling-Hammond, 2006). Consequently, teaching fellows' graduate school instructors made it a priority to connect coursework to teaching fellows' classroom teaching experiences, creating a meaningful link between theory and practice. As a final component of Teaching Fellowship implementation, the Teaching Fellow Faculty Coordinator responded to teaching fellows' needs by offering ongoing professional development through monthly and/or semi-monthly seminars that addressed a

variety of topics pertaining to successfully completing a master's degree and first year of teaching.

Methodology

This year-long qualitative research project utilized case study design to investigate a group of first-year Teaching Fellows' perceived self-efficacy. Stake (1995) calls case study research valuable for both its "uniqueness and commonality" (p. 1). The research was guided by the following questions: At the beginning of the school year, in what areas did Teaching Fellows feel most prepared to teach; least prepared to teach? In what areas did Teaching Fellows identify the highest perceived self-efficacy; the lowest? How did Teaching Fellows' perception of self-efficacy change throughout the year? What was the impact of the Teaching Fellowship program on fellows' perceived self-efficacy? Did the Teaching Fellows' program provide an effective induction model for new teachers?

Participants

During the year of data collection, Foothills University had 25 teaching fellows, and 14 chose to participate in the study. Participants were ages 22-24 and recently (within the last 6 months) graduated from a teacher licensure program. Participants represented multiple licensure areas, including three in Special Education (K-12th grade), seven in Early Childhood (preschool-3rd grade), one in Middle Childhood (4th-9th grade), and three in Adolescent to Young Adult (7th-12th grade). All participants were teaching fellows, meaning that they were both teaching in a preK-12th grade classroom and were full-time graduate students at Foothills University. Foothills University is a hub of learning in a rural area with limited access to urban settings, and teaching fellows are part of Foothills University's College of Education's PDS work. Participants were pursuing their master's degrees in a variety of content areas, which included Reading Education, Curriculum & Instruction, Educational Technology, Critical Studies, and/or Educational Administration. All participants were graduates of an undergraduate teacher licensure program that utilized a PDS model of teacher preparation.

Research Sites

Eleven PDS buildings within six public districts were the teaching locations of the participants. Schools were located in a midwestern, economically depressed area. Four of the schools were the result of rural consolidation efforts and housed children from preK-12 grade in one building. Two other districts still maintained separate buildings for elementary, middle school, and high school aged students. Participants commuted between 10 and 45 minutes to their teaching sites.

Data Collection

Data were collected through multiple interviews and school visits over the course of the 2014-15 school year. Site visits began the first week of school and continued until the last week.

Informal interviews, formal interviews, and detailed field notes provided the methods for data collection. Informal interviews occurred throughout the year during site visits to participants' schools and were typically conducted individually. However, at times more than one participant gathered by happenstance for an informal interview. Participants were interviewed formally at the beginning and end of the school year. Fellows' busy schedules necessitated that formal interviews be conducted in small groups of 2-3 participants. Formal interviews lasted approximately one hour per interview. When participant schedules permitted, interviews were conducted with teaching fellows who shared the same licensure area. As there was only one middle childhood participant, this fellow was interviewed with a special education fellow who was teaching in the middle grades. Due to scheduling considerations at the start of the school year, one formal interview was conducted individually. All formal interviews were audio-recorded and transcribed. Field notes were recorded during site visits throughout the year and provided observations of participants' interactions with students and the school's faculty and staff.

Data Analysis

A large amount of transcribed data was collected, which required the researchers to utilize Creswell's (2013) guidelines regarding data management. Data were initially organized in files labeled with the time of year they were collected and by the licensure area of the participant. After multiple readings of the data, a coding system was created to allow for reliable analysis (see Figure 2 for coding categories). Created by the lead researchers, the coding system was inductive and used a method of categorical aggregation, allowing for patterns and multiple instances of data to be more readily identified (Creswell, 2013; Stake, 1995). Initially, lead researchers coded the data into eight broad categories. After additional readings, the data was eventually coded into five categories, with each category further categorized with considerations discrete to each category and by the licensure area of the participants. For example, when coding information related to collaboration, it was necessary to differentiate between collaboration with a participant's mentor teacher, other school personnel, other fellows, and in co-teaching situations. Oftentimes, data were applicable within more than one coded category. Called reflective analysis by Gall, Borg, and Gall (1996), at times personal intuition and judgment were utilized to identify important elements and patterns within the data. With reflective analysis, it was important to examine the data multiple times to identify interconnected pieces of information.

Figure 2. Coded Categories

Category*	Additional Coding per Category
Differentiation	<ul style="list-style-type: none"> a. Gifted Learners b. Special Education c. Instruction
Classroom and Behavior Management	<ul style="list-style-type: none"> a. Defiance/Non-Compliance b. Time-on-Task Behavior c. New School Expectations

Parent/Caregiver Communication	<ul style="list-style-type: none"> a. Typical b. Concerns c. Parent-Teacher Conferences
Developing Positive Student Relationships	<ul style="list-style-type: none"> a. Greeting Students b. Beginning the School Year c. Sustaining Relationships d. Maintaining Boundaries
Collaboration	<ul style="list-style-type: none"> a. Mentor Teacher b. Co-Teaching c. School Personnel d. Other Fellows

- Each category was also coded according to licensure area.

Several methods were used to provide accurate verification of the data (Creswell, 2013). Researchers engaged in prolonged engagement with each of the participants, with a minimum of monthly/semi-monthly contact made with each participant via a school-based visit, formal interview, and/or informal interview. In order to capture different dimensions of participants' experiences, multiple data sources were sought (Stake, 1995). For example, informal interviews at school sites influenced the development of formal interview questions, and observational field notes recorded during school visits influenced both informal and formal interview questions. Seeking multiple perspectives on the same phenomenon provided an important way to validate the research.

Findings

Year-Long Perceptions of Challenges and Growth

At the start of the school year, of the five coded categories and their subcategories, participants indicated low self-efficacy related to four areas, including Differentiation, Classroom and Behavior Management, Parent/Caregiver Communication, and Collaboration (Co-Teaching). High self-efficacy was found in relation to Collaboration (Mentor Teachers) and Developing Positive Student Relationships. While it was clear that participants perceived low teaching self-efficacy in several areas at the start of the school year, by the end they expressed significantly higher self-efficacy in all areas.

Differentiation. As the year began, all participants indicated that they felt ready to deliver an appropriate and rigorous curriculum for their typically performing students. However, Early Childhood, Middle Childhood, and Adolescent to Young Adult teaching fellows reported feeling unprepared to adapt their curriculum for students who were high performing or gifted, and in particular felt low self-efficacy about their ability to accommodate students with special needs or with Individualized Education Plans (IEPs). Indicative of many fellows' feelings one said, "Something that I struggle with - still struggle with - is how I'm going to group my kids. Too high or too low. I mean how am I going to help them within those groups?" In agreement, another said, "We learn in our course books how to differentiate, but I don't think there's a way to completely prepare you." New teachers' feelings of inadequacy related to meeting the needs

of diverse learners are not uncommon, and many teacher preparation programs are addressing this concern (Blanton, Pugach, & Florian, 2011; Florian & Linklater, 2011). Quite significantly, teaching fellows with special education licenses did not report differentiation as an area of low self-efficacy. Indicating that their teacher preparation program sufficiently prepared them to differentiate instruction one fellow responded to another fellow's concerns about differentiating saying, "I would have to disagree with that just because, being special ed I know how to differentiate things." Feelings of high self-efficacy related to differentiation were reiterated by each of the three special education fellows. Perceptions of low self-efficacy about differentiation persisted as the school year reached its mid-point. Queried again about meeting the needs of diverse learners a fellow reported, "I've been playing around with it for a few months, and I still don't know if I've figured it out." This was a sentiment repeated throughout the school year.

By the end of the school year, participants all felt that they had developed skills that would allow them to better meet the needs of diverse learners, though they emphatically stated that they still had a lot of room for improvement. One fellow illustrated this feeling well in an end of year interview saying, "I think it's something that I'll always have to reflect on. I have been doing it from the beginning of the year, but it's still something that I think, I could be meeting their needs better." In particular, teaching fellows who did not have special education licensures felt that they needed more experience during their undergraduate preparation programs with meeting the needs of children with learning disabilities and identified this as an area of low teaching self-efficacy. Despite feeling underprepared at the start of the year, participants felt that the structure of the Teaching Fellowship program allowed them to gain essential practice in a supportive environment and felt that they would be better prepared to independently differentiate instruction during their next year of teaching.

Classroom and behavior management. Classroom or behavior management was a universal concern for participants and all expressed low self-efficacy related to managing student behavior during the early weeks of the school year. A connection between new teachers' self-efficacy and struggles with classroom management has long been known (Melnick & Meister, 2008; Woolfolk, Rosoff, & Hoy, 1990). In an early year interview about managing student behavior, one fellow summed up her frustration with managing student behavior by saying, "There's already been at least a couple of days when at the end I take them to the bus, and when I get back to the classroom, I just let go of my tears." Careful analysis of the data revealed that fellows' perceived low self-efficacy about classroom management was specifically related to several factors. Some concerns were related to typical classroom concerns such as students raising hands, being out of their seats at inappropriate times, or refusing to follow directions. "There's that child who is running around, and crawling on the floor, and you have to focus your attention to him instead of the nineteen other children." Teaching fellows universally agreed that more experience would help them feel better about these issues. Another concern about classroom management was related to establishing boundaries with students. Said one teaching fellow, "I don't know when I am crossing the line being too much like a jerk or if it's appropriate." This was of particular concern for teaching fellows who worked with students in grades five and older.

Many participants struggled with adopting behavior management systems that were unlike the systems they utilized during their professional internship (student teaching)

experiences. Teaching fellows wrestled with personal and professional beliefs about the systems they were asked to use, and often did not feel the school-wide behavior management programs were best for children. Describing the clip system her school used a teaching fellow explained,

It's a school-wide thing so we kind of have to do it. We actually move their clips right now. Unless they do something really great in the morning, we'll move them up after nap time. We started moving clips up if they stayed on their cot and took a nap, which is what our mentor teacher was doing too. I just don't really like it.

School-wide behavior management plans contributed significantly to their perceived low self-efficacy about their abilities to manage their students' classroom behaviors. By mid-year, teaching fellows' perceived some improvement with their ability to manage student behaviors. Said a teaching fellow, "I have noticed it's progressed throughout the year. I think it comes with the kids getting accustomed to me and how I am teaching." Despite this, classroom and behavior management continued to be an area of challenge.

During end of year interviews, participants reported significant growth in managing classroom behaviors and universally communicated that, "I just think this whole experience has in general has made me more prepared like dealing with student behaviors and management." No matter their perceived growth, however, teaching fellows also reported that they had continued anxiety about managing classroom behaviors and still felt low self-efficacy related to classroom management. One fellow illustrated this viewpoint well saying, "I think I was lucky to have had so much support when we had difficult behavior situations so lately I've been wondering how much support I'll have in the future and being a little worried about that." By the end of the year, participants realized that each year they would encounter new and challenging behaviors. So, while they reported an increase in self-efficacy related to behavior management, they still communicated that it remained an area of low self-efficacy.

Parent/caregiver communication. Connected to both differentiation and classroom management was parent/caregiver communication. In a comparative study of new and experienced teachers, researchers Melnick and Meister (2008) found that new teachers feel significantly lower comfort in communicating effectively with parents/caregivers. Similarly, at the start of the year, participants identified low self-efficacy about their abilities to communicate concerns regarding student learning and behavior with parents. "I am very nervous to talk to the parents, because I don't want to say the wrong thing." While they all expressed an intense desire to communicate with their students' families often and could identify effective ways to initiate communication, they felt low self-efficacy about their abilities to convey the messages effectively.

When we have parent-teacher conferences and when we have meetings with other teachers, I don't want them - the parents - to think that their student isn't being helped. I don't want them to feel held back. So there's a lot of anxiety about, 'Am I doing the right thing?' or 'Should I be doing more?'

By mid-year, participants gained considerable experience in talking with parents/caregivers and spent time during graduate school seminars discussing parent interactions. This contributed to an increase in perceived self-efficacy in their ability to effectively communicate with parents/caregivers. One middle level fellow even identified her first parent-teacher conferences as one of the most positive experiences of the first semester saying,

I would say that my positive was parent-teacher conferences. I think they went really well and they were nice because at the beginning of the year, we didn't know the kids yet. Having those weeks with the kids and meeting with the families again was really nice to talk to them and talk about their kid and see how they were feeling about everything.

As the year concluded, while not all teaching fellows identified an increase in self-efficacy regarding parent/caregiver communications, a majority expressed some growth.

One area that participants reported an increase in self-efficacy was related to making parent/caregiver phone calls. Explaining how her self-efficacy about making parent phone calls changed from the start to the end of the school year, one fellow reported proudly, "I remember having my mentor teacher sit with me and I was like, 'Could you just sit here for comfort?' But the other day, she actually wasn't there that day and I just went and did it on my own and told her about it." A few teaching fellows continued to express concerns about future parent/caregiver interactions saying, "I mean you never know what they're going to say, and every year you have to make new relationships, so it's not like you have the same parents every year." While teaching fellows did express these reservations, they also overwhelmingly believed that they did experience an increase in self-efficacy related to parent/caregiver communication.

Collaboration. Collegial collaboration is an essential component of effective PDS work (Brindley et al., 2008), and collaborative partnerships should be founded on mutual trust (Berry, Daughtrey, & Wieder, 2009). Within the subcoded categories of collaboration (i.e., mentor teacher, co-teaching, school personnel, and other fellows), participants reported both high and low perceived self-efficacy. Participants felt low self-efficacy in relation to their ability to effectively co-teach with special education teachers or in reverse for teaching fellows with special education licensures. "I think a difficulty is going in there as a first year teacher and not feeling comfortable enough to say anything or not feeling confident enough to say anything to teachers that have been teaching many years." Other researchers have also identified this paradigm in relation to new teachers and co-teaching. Conversely, participants identified high self-efficacy in relation to forming collaborative partnerships with their mentor teachers, school personnel (e.g. custodial and office staff), and other teaching fellows (Figure 2). Excitedly describing how she felt about her mentor, one fellow said, "She treats me as if I'm a teacher. She treats me as an equal even though I'm clearly half... she's obviously been teaching for a lot of years. But she's like 'You've got this!'" Mentor teachers were found to contribute greatly to fellows' perceptions of their abilities to collaborate with other school personnel.

As the school year came to a close, participants identified collaboration as an area of significant growth and reported having high self-efficacy about their ability to engage in collaborative practices. Illustrating this, one fellow enthused, "I feel confident about going in and going to a brand new school where I have no connection after this year." Teaching fellows identified several PDS structural factors that contributed to their strong self-efficacy about collaboration. Teaching fellows felt that it was particularly beneficial to them to have other teaching fellows as sounding boards for successes and challenges, felt that their mentor teachers were essential for establishing positive collaborative partnerships, and appreciated having a Teaching Fellow Faculty Coordinator who provided collaborative support through seminars outside their school settings. Speaking about seminars as important collaborative experiences one fellow said, "I valued the seminars. I found that time valuable to collaborate and exchange

experiences.” Teaching fellows also believed that the significant amount of time they spent in classrooms during their undergraduate PDS experiences contributed to their high self-efficacy related to collaboration. Building and sustaining collaborative partnerships was a significant area of high self-efficacy for all participants.

Developing positive student relationships. One area of high self-efficacy was in relation to developing positive student relationships. Overwhelmingly, participants felt that they were able to connect and engage with students on a high level and in a manner that communicated their personal care for each of their students. Teaching fellows attributed their comfort with students to the number of hours they spent in clinical placement sites during their undergraduate work. Speaking of the strength of their student relationships one fellow said, “I can't say what's going to happen in five years, but I really enjoy it. I really like having a relationship with my students. I enjoy caring about them.” Indeed, it was positive relationships with their students that seemed to provide a resiliency factor in the face of struggles related to classroom management and meeting the academic needs of all learners. In the face of challenges, resiliency factors help individuals persist (Doney, 2013). When asked what made them feel best about their instruction, teaching fellows replied, “my students!” It was very clear that the formation of positive student relationships was a strength for fellows, one that provided resiliency that increased effort and persistence in other areas. These sentiments continued to grow and develop strongly over the course of the school year and represented an area of sustained high self-efficacy for participants. As the year came to a close, one teaching fellow emotionally expressed,

I made it to a few of their soccer and baseball games, hockey games and saw them be excited that I was there and they're sad that I'm not going to be there anymore. So, I'm really proud of my relationships with them because, I mean, I've, we've all had issues and struggles and ups and downs, so I'm proud that tomorrow we're going to leave and we're going to leave on a positive.

The resiliency factors that participants gained from their strong self-efficacy in developing positive student relationships are hard to quantify, yet these factors were definitely a significant contributor to the findings of the study.

Knowledge Calibration as a Contributor to Self-Efficacy

Participants started the school year expressing equal parts nervousness and excitement about the coming year. Initially, when asked if they felt ready to begin the school year, participants resoundingly replied, “Yes, I am definitely ready to be a teacher and to have my own students!” indicating what, on the surface, appeared to be a high perceived self-efficacy about their abilities to start and finish the school year. For first year teachers, an overestimation of teaching abilities or poor knowledge calibration is not unusual (Al-Hazza et al., 2008; Cunningham et al., 2004). However, upon further probing it became clear that several areas were indicative of extreme anxiety and low teacher self-efficacy. When questioning went deeper, a teaching fellow in an early childhood setting revealed, “I had a lot of anxiety on the first day because I had students coming in... now that I'm thinking about it, that whole first week I was on the edge basically.” When asked how she was managing her teaching and graduate school work,

another fellow replied, “I just feel like I’m not doing my best in anything. I feel like I’m trying so hard, but I don’t think I am excelling in any area, as a teacher or as a graduate student.” Change in self-efficacy was identified in some categories as the year entered its mid-point, and by the end of the school year, participants perceived an increase in teaching self-efficacy in each of the coded categories.

One early childhood fellow passionately reflected during an end of year interview, “I value this experience so much, especially being a partnership student, working with a fellow, and then becoming one. I definitely in the future, not right now, would want to influence some type of program like this in my school.” Participants also recognized that their perceptions of self-efficacy changed over the course of the year and acknowledged that they began the year without a clear picture of their teaching self-efficacy. Said one fellow, “I thought I was comfortable at the beginning of the year but now I look back and I feel a lot more comfortable.” Another reported, “My awareness of where I want to be has immensely changed.” The impact of knowledge calibration was a significant contributor to the study’s findings and its subsequent implications.

Discussion

Teacher induction programs are known to be an effective way to increase teacher retention (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011), though the effectiveness of a PDS Teaching Fellowship program is underrepresented in the research literature. Beginning the school year, participants identified low self-efficacy related to differentiation, classroom/behavior management, parent/caregiver communication, and collaboration (co-teaching). High self-efficacy was found in relation to collaboration (mentor teachers, school personnel, and other teaching fellows) and developing positive student relationships. By the end of the school year, teachers reported an increase in self-efficacy in all areas, though self-efficacy was not rated highly in some categories. Several implications may be drawn from these findings.

As participants experienced the lowest self-efficacy related to differentiation and classroom and behavior management, teacher preparation programs should place particular emphasis on those components of undergraduate work and should continue to emphasize these concepts during PDS Teaching Fellowship seminars and professional development experiences. This is especially true for students who are not pursuing licensure in special education areas. Conversely, participants felt well prepared to collaborate with involved school and university parties. This study confirms that collaborative practices are essential components of PDS work (Brindley et al., 2008). As such, teacher preparation programs should continue to place emphasis on collaborative practices during undergraduate PDS work and should encourage mentor teachers to engage in highly collaborative practices with preservice teacher candidates. Participants also expressed high self-efficacy in relation to developing positive student relationships, adding further support to the large number of hours PDS undergraduate teacher candidates spend in partnership classrooms. As part of building collaborative partnerships and providing necessary quality professional development for new teacher induction, universities and PDS schools should also support the funding of a Teaching Fellow Faculty Coordinator. The findings from this study imply that the use of such a position contributed to new teachers’ increase in self-efficacy, making the position one that Teaching Fellowship programs in other locations should consider implementing.

When questioned at the start of the school year, participants identified levels of high self-efficacy that were soon revealed to be incompatible with participants' experiences and knowledge. This type of overestimation of new teachers' abilities is common and should be expected (Al-Hazza et al., 2008; Cunningham et al., 2004). Consequently, it is imperative that mentor teachers, principals, and other PDS stakeholders anticipate poor knowledge calibration in teaching fellows. They should be prepared to offer integrated and ongoing support that will create and sustain resiliency factors. Doing so may help teaching fellows acclimate to a realistic and sustainable teaching self-efficacy.

Finally, findings from this year-long group case study imply that Teaching Fellowships that are part of a PDS model provide successful induction programming for new teachers. Teaching Fellowships offer supportive and collaborative experiences for new teachers and provide a structure that creates additional resiliency factors that increase teaching fellows' perceived self-efficacy. As high teaching self-efficacy is correlated to teacher retention (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Wolfolk-Hoy, 2001), this creates significant implications for future PDS work and research about Teaching Fellowships. While these findings constitute strong support for continued investment in PDS work, more research is needed to continue fleshing out the study's findings. In particular, it would be useful to have a greater understanding of the impact of Teaching Fellowship programs on new teacher self-efficacy at other universities that use similar and/or different PDS structures. Additionally, an identification of high and low areas of self-efficacy in new teachers who are teaching fellows would contribute meaningfully to the current body of knowledge. As PDS Teaching Fellowships present engaged and supportive structures for new teacher induction, these topics are relevant and meaningful.

References

- Al-Hazza, T. C., Fleener, C., & Hager, J. (2008). Primary teachers' knowledge and knowledge calibration of early literacy practices. *Reading Matrix: An International Online Journal*, 8, 1-11. Retrieved from http://www.readingmatrix.com/articles/al-hazza_fleener_hager/article.pdf
- Bandura, A. (1997). Self-efficacy. *Harvard Mental Health Letter*, 13, 4-7. Retrieved from <https://journals.ebsco.com/>
- Berry, B., Daughtrey, A., Wieder, A., & Center for Teaching Quality. (2009). Collaboration: Closing the effective teaching gap. *Center for Teaching Quality*. Retrieved from http://teachersnetwork.org/effectiveteachers/images/CTQPolicyBriefOn_COLLABORATION_021810.pdf
- Billingsley, B.S., Griffin, C.C., Smith, S.J., Kamman, M., & Israel, M. (2009). A review of teacher induction in special education: Research, practice, and technology solutions. *National Center to Inform Policy and Practice in Special Education Professional Development*. Retrieved from http://ncipp.org/reports/rs_1es.pdf
- Blanton, L., Pugach, M., & Florian, L. (2011). Preparing general education teachers to improve outcomes for students with disabilities. *American Association of College for Teacher Education*. Retrieved from http://www.nclde.org/wp-content/uploads/2014/11/aacte_nclde_recommendation.pdf

- Brindley, R., Field, B. E., & Lessen, E. (2008). What it means to be a professional development school. *National Association of Professional Development Schools*. Retrieved from <http://napds.org/9%20Essentials/statement.pdf>
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38, 112-129. doi: 10.14221/ajte.2013v38n3.9
- Carr, S. C., & Evans, E. D. (2006). Helping beginning teachers remain in the profession: A successful induction program. *Teacher Education And Special Education*, 29, 113-115. Retrieved from <http://tes.sagepub.com/content/29/2/113.full.pdf+html>
- Cunningham, A. E., Perry, K. E., & Stanovich, K. E. (2004). Disciplinary knowledge of K-3 teachers and their knowledge calibration in the domain of early literacy. *Annals Of Dyslexia*, 54, 139-167. doi: 10.1007/s11881-004-0007-y
- Creswell, J.W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57, 300-314. doi: 10.1177/0022487105285962
- Doney, P. (2013). Fostering resilience: A necessary skill for teacher retention. *Journal of Science Teacher Education*, 24, 645-664. doi: 10.1007/s10972-012-9324-x
- Florian, L. & Linklater, H. (2010): Preparing teachers for inclusive education: Using inclusive pedagogy to enhance teaching and learning for all, *Cambridge Journal of Education*, 40, 369-386. doi: 10.1080/0305764X.2010.526588
- Gall, M., Borg, W., & Gall, J. (1996). *Educational research: An introduction*. White Plains, NY: Longman.
- Gonzalez, L. E., Brown, M. S., & Slate, J. R. (2008). Teachers who left the teaching profession: a qualitative understanding. *Qualitative Report*, 13, 1-11. Retrieved from <http://www.nova.edu/ssss/QR/QR13-1/gonzalez.pdf>
- Hughes, G. D. (2012). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *Journal of Educational Research*, 105, 245-255. doi: 10.1080/00220671.2011.584922
- Ingersoll, R. M., & Smith, T. M. (2004). Do teacher induction and mentoring matter?. *NASSP Bulletin*, 88, 28-40. Retrieved from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1134&context=gse_pubs
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81, 201-233. doi: 10.3102/0034654311403323
- Jamil, F. M., Downer, J. T., & Pianta, R. C. (2012). Association of pre-service teachers' performance, personality, and beliefs with teacher self-efficacy at program completion. *Teacher Education Quarterly*, 39, 119-138. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1001446.pdf>
- Kane, R. G., & Francis, A. (2013). Preparing teachers for professional learning: Is there a future for teacher education in new teacher induction?. *Teacher Development*, 17, 362-379. doi:10.1080/13664530.2013.813763

-
- Melnick, S. A., & Meister, D. G. (2008). A comparison of beginning and experienced teachers' concerns. *Educational Research Quarterly*, 31, 39-56. Retrieved from <http://files.eric.ed.gov/fulltext/EJ788428.pdf>
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23, 944-956. doi:10.1016/j.tate.2006.05.003
- Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001). Teacher-efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805. Retrieved from http://mxtsch.people.wm.edu/Scholarship/TATE_TSECapturingAnElusiveConstruct.pdf
- Wheatley, K. (2005). The case for reconceptualizing teacher efficacy. *Teaching and Teacher Education*, 21, 747-766. doi: 10.1016/j.tate.2005.05.009
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching And Teacher Education*, 6, 137-148. doi:10.1016/0742051X(90)90031-Y
- Wyatt, M. (2015). Using qualitative research methods to assess the degree of fit between teachers' reported self-efficacy beliefs and their practical knowledge during teacher education. *Australian Journal of Teacher Education*, 40, 117-145. Retrieved from <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=2582&context=ajte>

Sara Hartman is an Assistant Professor of Early Childhood Education and the Faculty Coordinator for a PDS Partnership in The Patton College of Education at Ohio University. Chris Kennedy is an Associate Lecturer of Reading Education and a Faculty Coordinator for two PDS Partnerships in The Patton College of Education at Ohio University. Brian Brady earned a Master's Degree in Education with an emphasis on K-12 Language Arts at Ohio University. He teaches Language Arts in Shanghai, China.