# National Board Certification: A Career Imprint That Transfers to Teacher Leadership Roles

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National Board Certification:
A Career Imprint That Transfers to Teacher Leadership Roles

Kelly Cannard

Susan Moore Johnson
Monica C. Higgins
Jal Mehta

A Thesis Submitted to the Faculty
of the Graduate School of Education of Harvard University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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Acknowledgments

My earliest memory, at age two, is of climbing out of my crib early one morning to explore. I climbed onto the kitchen counter and made toast. Fifty-two years later, I offer a toast to those who made this journey and project possible. Like the Franz bread (“Franz Bread, the good bread, flavor beyond belief”) wrapper that adhered to our family toaster that day, your inspiration has adhered permanently to my mind and heart. Thank you.

The educators in my life have imprinted me with an insatiable thirst for learning about teaching and learning. My family was a wellspring of educational adventuring. My mother asserted building blocks were on par with groceries in the limited family budget and turned every outing into an intentional, inquisitive field trip. The teachers of Clark Community College Cooperative Preschool and the Catlin Gabel School set me on the path to deep learning. Peter Juville, my advisor at Barnard College taught me to argue vivaciously about policy and still take time to appreciate the arts and a cup of tea together. Maritza Macdonald ushered me into a collaborative and constructivist approach to teaching at Bank Street College of Education. This phenomenal education rests on a history of privilege. I am humbly mindful of the unwilling sacrifices made by others in the past. I am also grateful to each and every one of the hundreds of my students from whom I learned so much about instruction. And, I thank my fellow educators who served as mentors and colleagues.

My fellow HGSE students helped me develop a process for continuously reflecting on and analyzing qualitative research data that continues to guide me. Jill Harrison-Berg provided a thoughtful sounding board based on her own research and work on National Board Certification. I give special thanks to Jen Cheatham, who, despite a very demanding life as a superintendent, life partner, and mom, always made time for a consult on all stages of this project. Her clarity, knowledge, and encouragement have pulled me through.
I have been blessed with an outstanding doctoral committee. Monica Higgins extended a wealth of research about careers that underlies this study. Jal Mehta’s detailed understanding of educational history and policy helped me situate this work in a broader context and offered structure to its possible implication. Susan Moore Johnson, my advisor, has endured me for over a decade, sifting my wandering ideas into coherent arguments and patiently editing my flexible syntax time and time again. And, of course, I am indebted to her vast knowledge about the teaching profession that first attracted me to HGSE.

Teacher leaders are busy working to improve instruction and I thank each of my participants for taking time away from their work to share their perspectives. I hope that I have fairly interpreted their thoughts and that the result will be useful. I thank the Washington network, including the Center for Strengthening the Teaching Profession, the Washington Education, and the Office of the Superintendent of Public Instruction, as well as leaders from Garden, Lake, Prairie, and Mountain Districts and the National Board for helping me reach potential participants.

I first learned about National Board Certification from colleagues in Vancouver Public Schools who piloted the certification process when I was a new teacher. A few years later, I was supported during and following certification by the Washington network described in this dissertation. A special thanks goes to Jeanne Harmon for her inspiration in having brought together individuals and organizations to provide extraordinary support to teachers that enables their expertise to flourish.

Finally, a big hug to my bicycle – yes, an inanimate object. We have spent far more time together through this process than I have with all of my friends and family (whom I appreciate for their diversions). My trusty steed has calmly weathered my emotional storms and cleared my head to write. I owe you a picturesque road trip!
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Abstract

Since its inception in 1987, the National Board for Professional Teaching Standards has certified over 112,000 accomplished teachers in its effort to professionalize teaching. During this same period, districts have added teacher leadership positions to improve the instructional practice of teachers and meet the complex needs of students, something the Board envisioned for National Board Certified Teachers (Carnegie Forum on Education and the Economy, 1986). However, there is a lack of research about if and how NBCTs holding formal teacher leadership roles utilize their expertise to improve instruction among their peers. This qualitative study sought to examine this issue through semi-structured interviews with forty-three teacher leaders who are National Board Certified Teachers in four public school districts and one state context.

In this dissertation, I make the case that National Board Certification served as a career imprint (Higgins, 2005) that National Board Certified Teachers subsequently transferred to their work as teacher leaders and encouraged in their peers. The imprint consisted of capabilities in knowing one’s students, constructivist and differentiated instruction, and observing, describing, and reflecting continuously on instructional practice. The cognitive aspects of the imprint included a belief that understanding one’s students was central to instruction, a commitment to assuming internal responsibility for student learning, and an assumption that reflecting continuously on their instruction would lead to improved teaching and learning. The participants indicated that, although National Board Certification prepared them as excellent teachers, they still needed organizational supports to extend what they learned through the process to other teachers. In the absence of some supports, they said that they could not fully transfer the imprint. In a few unique cases, NBCTs reported that they were able to alter the policy context in order to create a more favorable
environment for the principles and practices from National Board Certification to take hold among other teachers.

The findings suggest that NBPTS could work collaboratively with other organizations and policymakers to more explicitly advance the principles and practices underlying National Board Certification imprint as well as promote NBCTs as teacher leaders beyond their classrooms. Steps that NBPTS, districts, states, and teacher leaders could take to strengthen the extension of the Board imprint in order to improve instruction and learning in schools are outlined. Avenues for further research are explored.
Chapter 1 – Introduction

In response to the sweeping criticisms of public education issued in *A Nation at Risk* (National Commission on Excellence in Education, 1983), a coalition of educational policymakers came together to find and advocate for a solution to the problems of education that was grounded in teacher professionalism. The coalition of educational policymakers, including union leaders, superintendents, and governors, authored *A Nation Prepared*, providing an overall plan to improve public schools by professionalizing teaching (Carnegie Forum on Education and the Economy, 1986). This led to the formation of the National Board for Professional Teaching Standards (NBPTS) tasked with designing a set of high-level teaching standards with matching assessments to evaluate and certify accomplished teachers. National Board Certified Teachers, the Board maintained, would serve as a cadre of expert teachers, such as exist in the medical and legal fields.

*National Board Certification*

To date, 112,000 teachers have successfully certified, approximately half of those who applied as candidates. While the National Board has periodically refined the process of evaluation, the standards have remained consistent. The extensive process includes completing a portfolio of performance-based entries and assessment exercises covering the content and pedagogy germane to twenty-five different certificate areas. Typically, teachers spend 150-200 hours examining, describing, and reflecting on their instructional practice as
candidates.\footnote{NBPTS recently revised the format of the certification process to include fewer components covering the same material. Candidates are able to complete the components within a timeframe of three years. (http://boardcertifiedteachers.org/sites/default/files/Redesigning_National.Board.Certification.pdf). All but two of the participants in this study successfully completed the process as I describe here. Two participants certified under an earlier, yet similar process. Sample portfolio directions may be found in the appendices to Assessing Teachers for Professional Certification: The First Decade of the National Board for Professional Teaching Standards (Ingvarson & Hattie, eds., 2010).} The certification process centers on four portfolio entries and six assessment-center exercises, usually completed over the course of one year. Each of the portfolio entries includes artifacts, teacher commentary, and a reflection. For each certificate area, one entry focuses on individual student work, one on small group instruction, and one on whole group instruction. The student work entry highlights a teacher’s skill and success in furthering students’ learning through feedback. The two classroom instruction entries include unedited, videotaped segments of classroom teaching. The entries on classroom instruction include attention to equitable teaching practices and in-depth learning by students. The last portfolio entry calls for documentation of the teacher’s work as a learner and work with colleagues and community members, including parents. Assessment center exercises vary by certificate and aim to capture both content and pedagogical content knowledge covering the subject matter and developmental range in the certificate area. The certificate is good for ten years.\footnote{Starting in 2021, NBCTs will need to complete a Maintenance of Certificate every five years following certification. The details of this process have not yet been determined. However, the Board has said that it will not include the Profile of Professional Growth that I describe here. (http://boardcertifiedteachers.org/sites/default/files/Redesigning_National.Board.Certification.pdf)}

The renewal process, while less intense than the original certification process, requires teachers to reflect on their practice over the eight or nine years since certifying. Documentation for the renewal certificate also includes student work samples, video segments, a commentary, and reflection similar to what teachers did for their original
certification. When explaining their chosen lesson units and supporting materials, teachers had to highlight how this evidence was an outgrowth of their professional learning and work with colleagues over the course of their career. Prior to the most recent changes, teachers renewing had the option of highlighting their work with colleagues as one of two videotaped samples.

The preparation of portfolio entries for National Board Certification demands reflective inquiry about one’s teaching practice. Several researchers argue that teachers must learn to gather information about their students learning’ and adjust their pedagogy to meet the needs of specific students in their classrooms (Ball & Cohen, 1999; Shulman, 1986). By engaging in continuous, collaborative inquiry they can transform teaching beyond a delivery and test model (Darling-Hammond, Wilhoit & Pittenger, 2014; Hargreaves & Fullan, 2012; Mehta, 2013). Ingvarson (2014), who has studied NBCTs’ teaching practices in depth, using a set of expert teaching practices from a meta analysis and he posits that the design of the portfolio tasks for National Board Certification compels teachers to improve their instruction. And, in several studies, NBCTs reported that they improved their teaching practice through the certification process (Loeb, Elfers, Plecki, Ford & Knapp, 2006; Lustick, 2011; Lustick & Sykes, 2006; National Board for Professional Teaching Standards, 2001; Sato, Hyler & Monte-Sano, 2014; Sato, Wei & Darling-Hammond, 2008; Tracz, Daughtry & Henderson-Sparks, 2005.) Some, but not all, of the impact studies have shown positive effects on student achievement when students are taught by NBCTs compared with non-NBCTs (Cantrell, Fullerton, Kane & Staiger, 2008; Chingos & Peterson, 2011; Clotfelter, Ladd & Vigdor, 2007, 2010; Cowen & Goldhaber, 2015; Goldhaber & Anthony, 2005; Harris & Sass, 2007; Strategic Data Project, 2012, 2012a).
If there is a cadre of accomplished teachers who have not only met difficult National Board standards, but also learned to improve their practice through the certification process, then it could be argued that these individuals likely possess knowledge, skills, and dispositions that would be useful in helping other teachers improve their practice. By design, the National Board Certification process demands that teachers scrutinize their practice in the areas of individual student growth, small and whole group instruction that is both equitable and in-depth, as well as their own professional learning and interaction with peers, parents, and community members. These demonstrated capabilities and the capacity to improve these aspects of teaching could, theoretically, be extended to their peers. NBCTs could transform teaching and student learning beyond their own classrooms. Since its inception, NBPTS has aimed to “capitalize on the expertise of National Board Certified Teachers” (National Board for Professional Teaching Standards, 2014). Whether and how NBPTS has accomplished this goal is not clear.

One way that schools and districts could capitalize on the expertise of NBCTs is to place them into formal teacher leadership roles, an idea that was proposed in A Nation Prepared (Carnegie Forum on Education and the Economy, 1986). In such roles, teacher leaders are released from some or all of their teaching responsibilities or receive additional compensation to work with their peers. These roles typically fall into three categories. Mentors help new teachers as they adjust to full-time classroom teaching with its myriad demands. Later in the first and, often, second year, mentors assist novices with instructional planning and reflection. Instructional coaches work with teachers of all levels of experience and may focus on a particular content area such as math, literacy, or science. Peer consulting teachers coach and evaluate teachers who are new (or new to the district) and struggling teachers.
Consulting teachers present a report in the spring that is an important factor in a panel’s recommendation about whether a teacher receives a continuing contract.

NBCTs, having demonstrated a high degree of instructional expertise and likely improved their practice through the process, are arguably well-prepared to assist other teachers in improving their practice. It is unclear to what extent districts and schools are capitalizing on this expertise by hiring NBCTs in teacher leadership positions. Therefore, I sought to understand, from the perspective of National Board Certified Teachers, how, if at all, their experience with National Board Certification transferred to their work with teachers. I interviewed forty-three teacher leaders who worked as mentors, instructional coaches, or PAR (Peer Assistance and Review) consulting teachers about their experience with National Board Certification and sought to understand how, if at all, that experience transferred to their teacher leadership work and which processes, if any, from the certification process that they reported using in their work with other teachers.

**Career Imprinting**

I argue that the process of National Board Certification “imprinted” the teacher leaders in my sample and that they subsequently transferred that imprint to their work with other teachers. According to Higgins (2005), a career imprint is comprised of four aspects: capabilities, connections, confidence, and cognition:

- **Capabilities** refers to the specific kinds of human capital, skills, knowledge, and know-how regarding work and getting work done. **Connections** refers to the kinds of social capital, including both intraorganizational and extraorganizational relationships related to work and getting work done, including the strength and structure of such connections. **Confidence** refers to the types of individual-level efficacy associated with work and getting work done. **Cognition** refers to the taken-for-granted assumptions, beliefs, and worldviews regarding work and getting work done (Higgins, 2005, pp. 9-10).

In her work, Higgins (2005) demonstrates that the strength of an imprint is determined by social reinforcements, opportunities to stretch one’s self professionally, and demonstrated
success (pp. 80-82). The theory holds that when leaders who have been “imprinted” by their organization choose to leave, they are likely to take these ways of working to their new organization and may influence others with whom they work (Higgins, 2005).

National Board Certification as a Career Imprint

Based on my interviews with forty-three teacher leaders, I argue that the process of National Board Certification acts as a career imprint on teachers and that, when they work as teacher leaders, they transferred aspects of that imprint to their work with peers. I contend that the examination of teaching practice and demonstration of expert teaching through the preparation of portfolio entries developed or strengthened particular types of cognition, capabilities, and confidence, and for some, connections, in accomplished instruction. As teacher leaders, NBCTs could apply these strengths to strongly influence the instructional capacity of schools and districts. Higgins (2005) posits that the context to which an imprint is being transported influences if and how that imprint is cultivated in the new organization. Based on responses from the participants, I also argue that teacher leaders who have access to initial training, ongoing collaborative professional development, teaching frameworks used for growth, and curriculum for constructivist learning can facilitate fuller transference of the expert instructional skills and cognitions developed through the National Board Certification.

Relevance

The career imprint model could be informative for teachers entering and progressing in the profession. Further, it could be of interest to districts and states seeking to improve instruction and learning based on the principles of accomplished teaching as evident in the National Board Certification imprint. The National Board may find the results of this study can inform their efforts to expand NBCT human capital as well as advance the Boards
principles and practices in order to more broadly influence teaching and learning in schools. As the educational policy field moves beyond the NCLB era, it is imperative that districts and states examine their investments in teacher development as it relates to student learning. Hopefully, this work will contribute to the dialogue, both in the field of practice and research.

Organization of this Dissertation

In the next chapter, I elaborate on the literature informing this study. In Chapter 3, I describe my research design in detail. Chapter 4 presents findings related to the specific capabilities, cognition, confidence, and connections the participants said they acquired or were recognized for during the process of National Board Certification. In Chapter 5, I explain how the NBCTs said that they transferred aspects of their NBC career imprint to their work as teacher leaders. Chapter 6 details the factors that, according to the participants, supported them in applying what they had learned or were recognized for with National Board Certification and factors that constrained their ability to fully implement what they had learned when working with other teachers. I end in Chapter 7 with a conclusion and discussion of the implications for further research, practice, and policy on the part of the National Board, school districts and states, and teachers and teacher leaders.
Chapter 2 – Literature Review & Theoretical Framework

To inform this study, I reviewed the relevant literature on teaching, teacher leadership, and National Board Certification. I sought to understand what the research on National Board Certification suggests about the type of capabilities, cognition, confidence, and connections one might expect to be part of the certification’s career imprint. Reviewing literature on teacher leadership would help me understand what capabilities teacher leaders would likely need in their roles. Through these two bodies of research, I wanted to learn what aspects of a career imprint might be likely to transfer from National Board Certification to teacher leadership. I then reviewed relevant literature on the organizational supports and constraints that might influence the degree to which NBCTs could export what they learned from the process to their work as teacher leaders. Drawing on these areas of research, I constructed a theoretical framework based on Higgins’s (2005) theory of career imprinting to guide my analysis.

Teaching Career

Over the past century, both the organizational structure of schools and traditional methods of instruction persist. Teachers operate independently in their own classrooms, resulting in entrenched norms of autonomy and egalitarianism among teachers (Johnson, 1990; Little 1988, 1990; Lortie, 1975). This counters what is seen as a growing understanding that teachers need to collaborate with one another in developing a body of knowledge of teaching and collective understanding of how to improve teaching and learning (Hargreaves & Fullan, 2012; Mehta, 2013). Additionally, teachers continue to be viewed narrowly as presenters of knowledge and evaluators of student learning in a very narrow sense. From this perspective, instruction remains based on “textbook driven lessons, more teacher talk than student talk, mostly whole group with occasional small group work, seatwork for students,
periodic quizzes and tests” (Cuban, 2013, p. 111). However, teaching in this way is at odds with what we know about how people learn; further it fails to adequately address the variation in the experience of students being educated (Bransford, Brown & Cocking, 1999). Nonetheless, educational policymakers have designed systems that reinforce the egg crate model of education with its isolation as well as a narrowly-defined, mechanical view of the work of teachers.

Several researchers have explored why teaching appears to remain fixed in its approach. Mehta (2013) suggests that the real concern is that teaching (in the U.S.) has limited opportunities to “deepen” or “expand” in the ways that professions such as medicine and academia provide. He emphasizes the need for a “commitment” approach to the teaching profession over the bureaucrat approach of “control” because it is more applicable to a profession that “requires significant skill and discretion (Mehta, 2013, p. 270). Likewise, Cuban (2013) contends that the teaching profession remains unchanged despite frequent, recurring attempts to make structural changes, because policymakers apply a “complicated” approach to a “complex” environment. By this, he explains, those in charge of educational decision-making on a system level spell out the steps they think contribute to better teaching and then seek teachers’ compliance. Teachers, meanwhile, have roles that are “complex” in nature and, therefore, have to continuously navigate and adjust to a myriad of organizational and social demands, including those of their students. The complexity, argues Cuban, cannot be successfully navigated in the linear method outlined by a “complicated” approach. The National Board’s core propositions (see Appendix D) and certification process aim to evaluate expertise in responding to teaching’s complexity. Therefore, it is possible that teacher leaders who have successfully certified have acquired or demonstrated the awareness
and strategies that could, if transferred, move others in the profession toward this more complex approach to teaching.

Theories of educational reform that take into account the complexity of teaching combine attention to human capital and inquiry-based instructional capacity. Mehta (2013), in his examination of schooling in the past century, posits that there are four necessary, interconnected elements for changing education: “practice-relevant knowledge, strong human capital, school level processes of improvement, and external support and accountability” (p. 286). Darling-Hammond et al. (2014) propose that professional capacity can be increased through professional development that is continuous and focused on cultivating teachers’ ability to engage students in deep learning.

Hargreaves & Fullan (2012), focusing more specifically on teaching, elaborate on the idea of “professional capital,” which they say is comprised of human capital (based on Odden, 2011), social capital (based on Coleman, 1990; Leana, 2011, and Nahapiert & Ghoshal, 1998) and decisional capital. They define decisional capital as “wise professional judgment” (p.6), which they suggest teachers develop through continuous inquiry both alone and collaboratively with their colleagues (Hargreaves & Fullan, 2012). Within schools where there is an inquiry approach to improvement, City, Elmore, Fiarman & Teitel (2009) argue that educators can develop a process of internal accountability for meaningful student learning among their peers. One of the core tenets of the NBPTS is that accomplished teachers engage in continuous analysis to learn from their teaching experience. Therefore, teacher leaders who are NBCTs may have been imprinted with this skill and cognition about teaching and learning and subsequently transfer it to their work with other teachers.
Teaching Expertise

Coming up with a commonly accepted “operational definition of expert teaching” has been challenging for scholars and policymakers (Smith, Baker, Hattie & Bond 2008). Shulman (1986) proposed that expert teachers are knowledgeable about content and curriculum as well as pedagogical content knowledge – having an understanding of the typical preconceptions in a content area and ways to make the related conceptions “comprehensible.” He argues that this knowledge is acquired and refined through examining propositions related to teaching, together with case studies from their practice (Shulman, 1986). Professional teachers go beyond merely practicing their craft; they are able to “communicate the reasons for professional decisions and actions to others” (Shulman, 1986, p. 13, reference to Shulman, 1983). Cohen & Ball (1999) also emphasize this evolving instructional knowledge, situating it in the interaction among teacher, student and material. They suggest that increasing instructional capacity would entail more than “learning content or methods alone” and offer examples of how to assist teachers in deriving more information from student work and “intervening artfully” to encourage learning (Cohen & Ball, 1999, p 28). One requirement for National Board Certification portfolios is demonstrating specifically how a teacher has a direct impact on individual, group, and class student learning. If that element of the process is subsequently carried over to their work as teacher leaders, the participants in this study might describe how they assisted teachers with facilitating learning in the ways that they were required to do for National Board Certification.

Teaching Standards and Evaluation

Part of the persistent egg-crate organization of teaching involves the continued practice of principals evaluating teachers based on a checklist of instructional skills during
minimal classroom observations, typically once or twice a year (Donaldson, 2009). There is, however, a move toward establishing more uniform teaching standards and more thorough evaluation based on those standards as part of new regulations for teacher evaluation. Many states have now established professional teaching standards, which are accompanied by rubrics for evaluation and examples of executing the standards at different levels of proficiency. In theory, teachers, teacher leaders, and administrators could use teaching frameworks to orient teachers toward instructional improvement. In reality, these new teacher evaluation programs based on teaching standards are implemented with a great deal of variation (Kimball & Milanowski, 2009, Reinhorn & Johnson, 2015). There is evidence that when the standards and evaluation tools are used in combination with frequent classroom observations, specific feedback, and a growth orientation, students’ learning increases (Kane & Staiger, 2012; Sartain, Stoelinga, S, Brown, E. R. & Consortium on Chicago School Research, 2011; Taylor & Tyler, 2012). The experience of completing the detailed and thorough examination of their own teaching might have led NBCTs to encourage similar examination of their peers.

**National Board Certification**

For this study, I examined the research on National Board Certification from three angles: impact on students’ achievement, validity, and what NBCTs report that they learned from the process. I also reviewed literature on leadership among National Board Certified Teachers. This research suggests some of the particular capabilities and cognitions that might be part of the National Board Certification imprint.

NBPTS has accomplished an ambitious goal in designing and implementing an authentic, evidence-based performance assessment of expert teaching in twenty-five teaching fields. This aligns with the growing body of research that highlights the need for a complex
and inquiry-oriented understanding of the teaching process (Cuban, 2013; Darling-Hammond et al., 2014; Mehta, 2013). Further, evaluation through the National Board Certification process stands in contrast to evaluating teacher quality based on student achievement on standardized tests. The limitations of using standardized tests as the sole means to evaluate teaching effectiveness have been clearly articulated (Darling-Hammond, 2015; Johnson, 2015). And yet, a number of studies have examined whether or not National Board Certification has “an effect” on student achievement as measured by standardized test scores.

National Board Certification: Impact Studies

Studies on the impact on students’ achievement test scores when taught by an NBCT have shown positive effects in many, but not all cases studied. Modest effect sizes on standardized tests for students taught by elementary teachers who were NBCTs in North Carolina have been found by Goldhaber and Anthony (2005) and by Clotfelter, Ladd & Vigdor (2007), with some of the models showing statistical insignificance. Clotfelter, Ladd & Vigdor (2010) found statistically significant differences for high school NBCTs over their non-certified peers. Harris and Sass (2007) examined data across Florida and found NBCTs had no consistent effect on student assessment results, but found some statistically significant effects for teachers in particular years of certification on certain student assessments. In their quasi-experimental study of a sample of teachers from Los Angeles Unified School District, Cantrell, Fullerton, Kane and Staiger (2008) found no effects on student achievement for NBCTs compared with comparison teachers identified by principals. However, they found that NBCTs with higher composite certification scores showed statistically significant effects on student achievement scores (Cantrell et al., 2008). Studying teachers in Washington State, Cowen and Goldhaber (2015) found modest effect
sizes on student achievement in reading and mathematics. In a study of secondary end-of-course assessments in Charlotte-Mecklenberg Schools, Salvador and Baxter (2010) found students of NBCTs outperformed those of non-NBCTs in some subjects but not others. Researchers with the Strategic Data Project (2012, 2012a) found significant effects in student achievement in elementary mathematics and English/Language Arts in Los Angeles Unified Schools and Gwinnett County Schools for students taught by NBCTs compared with non-NBCTs. Chingos & Peterson (2011) found positive effect sizes on student achievement for NBCTs compared with non-NBCTs in their study of teachers across Florida. Collectively, the impact studies appear to indicate modest benefits for students of NBCTs on standardized test scores, with some exceptions. This provides additional confirmation that NBCTs are likely to be teachers capable of improving student achievement on standardized tests.

National Board Certification: Studies of Teaching Practices

Of more interest for this paper is how teachers who have achieved National Board Certification may exhibit qualities of expert teaching that have emerged in the literature. In developing its assessment of accomplished teaching, the National Board for Professional Teaching Standards undertook a number of internal validity and reliability studies (Moss, 2008). Hattie and Clinton (2008) tested a model for evaluating the validity of National Board Certification, comparing successful and unsuccessful candidates against several dimensions of expert teaching suggested by the literature. In a related study, using similar dimensions of teaching, Smith et al. (2008) observed and interviewed sixty-five teachers and their students. The identified sample included four groups based on their NBPTS score. Two groups had a score between one-fourth and three-fourths of a standard deviation above and below, respectively, the score required for certification. The additional two groups had a score one
and one-fourth of a standard deviation above and below the score required for certification (Smith, Baker, Hattie and Bond (2008). Across eleven of thirteen dimensions of expert teaching, the researchers could distinguish between those who had achieved National Board Certification and those who had completed the process, but failed to certify (Smith et al., 2008). Three of the dimensions – “Challenge, Deep Representation, and Monitoring and Giving Feedback” were sufficient to predict 91% of the NBCTs within a quarter above and below the required certification score (Smith et al., 2008, p. 369). This research suggests that NBCTs might report that they developed or demonstrated capabilities related to challenging instruction and providing feedback to students.

Another area of relevant research is NBCTs’ reports about what they learned through the certification process. In general, surveys have shown that NBCTs said the process improved their teaching, use of curriculum, and assessment (National Board for Professional Teaching Standards, 2001). Over half of those surveyed in Washington State indicated the National Board Certification process led them to employ a greater variety of strategies in their teaching (Loeb et al., 2006). Science teachers who had achieved certification indicated that the process had a strong impact on their teaching and their students’ learning (Lustick, 2011). Tracz, Daughtry, and Henderson-Sparks (2005) interviewed twenty-five teachers who had completed the certification process (twenty-two of whom had successfully certified). In certain practices, such as creating a classroom environment conducive to learning or having content knowledge, about half of the participants said they demonstrated capabilities they had prior to the certification (Tracz et al., 2005). In other areas, including reflecting on practice, assessing student learning, and engaging collaboratively with a professional community, the teachers indicated that their skills improved through the process (Tracz et al., 2005). Similarly, NBCTs interviewed by
Sato et al. (2014) said that they focused more on standards, student learning, and examining student work as a result of their experience with National Board Certification.

Three studies showed that the certification process had a particular impact on teachers’ use of assessments stemming from their experience with National Board Certification (Loeb et al., 2006; Lustick & Sykes, 2006; Sato, Wei, & Darling-Hammond, 2008). Loeb et al. (2006) surveyed close to four hundred NBCTs in Washington State and found that, since certifying, nearly two-thirds reported increasing use of assessment to identify student needs and guide their instruction. In a quasi-experimental study, Lustick and Sykes (2006) crafted an interview protocol to mimic a portfolio entry and then scored the teachers’ responses. The researchers found substantial improvement among the teachers in scientific inquiry and assessment. The process of preparing their entries forced the teachers to elicit student thinking in an inquiry and to use assessments to adjust their teaching to meet student needs. Sato et al. (2008) developed a framework for examining how teachers use formative assessment and then analyzed interviews, videotaped lessons, and other teaching artifacts to evaluate the teachers’ use of assessments. The researchers found that, when compared with non-candidates, that National Board Certification candidates were more apt to focus on conceptual understanding and to use assessments as formative tools (Sato et al., 2008). NBCTs’ increased use of assessment to obtain greater student-specific understanding was a common theme in these studies and might be an element of a National Board Certification career imprint.

National Board Certification: Teacher Leadership

As cited in Koppich et al. (2006), Lee Shulman, who worked on the development of the NBPTS assessment, noted that if the Board wanted to go beyond identifying and acknowledging expert teaching to influence broader school reform, it would have needed to
work toward formal differentiated roles for teachers in schools. Even though NBPTS has not focused on creating formal teacher leadership roles, several studies have, nonetheless, examined the indirect relationship between National Board Certification and teacher leadership generally through surveys, interviews, and case studies about NBCTs’ leadership involvement following certification (Aganostopoulos, Sykes, McCrory, Cannata, Frank, 2010; Cannata, McCrory, Sykes, Anagnostopoulous, and Frank, 2010; Frank et al, 2008; Koppich, Humphrey, Hough, 2007; Loeb et al., 2006; Loeb et al., 2010; Sato et al., 2014).

Overall, the literature indicates that NBCTs are involved in leadership activities prior to certification and that they sought out leadership opportunities following certification. In a survey of Washington State NBCTs, thirty percent of respondents stated that the potential for leadership opportunities figured into their decision to pursue certification (Loeb et al., 2006). Three quarters of the sample reported that they had been involved in leadership beyond their classrooms before certification, with half indicating an increase in such work following certification (Loeb et al., 2006). The NBCTs indicated that if there were a reduction in their teaching responsibilities, eighty-four percent would be interested in a leadership role in their school and seventy-nine percent would be interested in a district-level role (Loeb et al., 2006). Some of those who have increased their engagement in leadership did so in the area of mentoring and coaching (Loeb et al., 2006).

Cannata et al (2010) surveyed staff in forty-seven elementary schools and found that NBCTs were more involved in teacher leadership activities following certification, but that they did not think that they had greater influence on policy than their colleagues. Frank et al. (2008) found that NBCTs were more involved in assisting colleagues with instructional matters than were their non-NBCT peers. One study described the nature of the leadership NBCTs sought following certification (Sato, Hyler & Monte-Sano, 2014). After interviewing
fifteen NBCTs, the researchers concluded that they sought out leadership opportunities “grounded in student learning.” The researchers further suggested that this was linked to the “stewardship” of the profession (Sato et al., 2014). That is, certification spurred the NBCTs to find ways to positively influence the profession, an idea which they attributed to the work they did to successfully certify. This idea of stewardship may be part of the cognitive and connections aspect of the imprint from National Board Certification.

Teacher Leadership

There is a growing awareness that teachers benefit from professional learning development over the course of their career (Feiman-Nemser, 2001). In addition, researchers find that valuable professional development is site-based, intense, and closely tied to classroom practice (Darling-Hammond & McLaughlin, 1995, Darling-Hammond, Wei, Andree, Richardson & Orphanos, 2009). Utilizing teacher leaders is one way that schools provide ongoing site-based professional development. York-Barr & Duke (2004), in their review of the literature, define teacher leadership as how “teachers, individually or collectively influence colleagues, principals, and others members of their school communities to improve teaching and learning practices with the aim of increased student learning and achievement” (pp. 287-288). They delineate teacher leadership skills into two areas – teaching and leading – that can be roughly summarized as instructional expertise and the coaching to develop collaboration with individuals across the school organization (York-Barr & Duke, 2004). Substantial variation in the roles of teacher leaders is widely acknowledged (Greene, 2004; Neufeld & Roper, 2003; Snow, Ippolito & Schwartz, 2006). Despite this variation, the literature on teacher leadership suggests possible capabilities, cognition, confidence, and connections of skilled mentors and coaches.
Lieberman & Miller (2004) argue that teacher leaders are positioned to help teachers work collaboratively, focusing on student learning, and examining practice. However, it has been clearly documented that teachers typically enforce norms of autonomy and egalitarianism among themselves (Johnson, 1990; Little 1988, 1990; Lortie, 1975). When teacher leaders seek to break down these barriers, in an effort to make teaching more public, they often encounter resistance, particularly when the work centers on reforming instructional practice (Donaldson et al., 2008; Little 1990). In the face of this resistance, teacher leaders often shy away from giving teachers substantive, critical feedback (Donaldson et al. 2008, Lord, Cress & Miller, 2008; Stoelinga, 2008; Mangin, 2008).

There is some evidence that teachers welcome coaching more when the teacher leaders are known to have content and instructional expertise (Little, 1988; Snell & Swanson, 2000; Spillane, Hallett & Diamond; 2003, Supovitz, 2008). Teacher leaders can come to their work with a wide range of knowledge about curriculum and reform in schools as well as interpersonal skills – being “strong yet caring and compassionate” (Lieberman, Saxl & Miles, 1988). Manno & Firestone (2008) found that teacher leaders with content expertise were more able to adjust their use of this knowledge to meet the needs of teachers at different levels of experience and to build trust among their peers. By working alongside teachers to model instruction with feedback and supporting teachers’ self-reflection, Taylor (2008) theorizes that coaching can cultivate “the instructional capacity” of teachers (p. 25). As teacher leaders develop leadership skills on the job, they gain confidence, becoming leaders of changes in instructional improvement (Lieberman, Saxl & Miles, 1988). Social interactions are at the heart of distributed organizational leadership (Ogawa & Bossert, 1995; Spillane, Halverson & Diamond, 2001). Teacher leaders with collaborative capabilities can begin to build a culture of instructional inquiry and improvement (Talbert & McLaughlin, 1994).
which may be valued by their peers (Johnson & The Project on the Next Generation of Teachers, 2005). The teacher leaders in this study, having demonstrated teaching expertise, including collaboration with their fellow teachers, might report that they transfer these capabilities to encourage instructional improvement among teachers.

*Teacher Leadership for Specified Roles*

*Mentoring*

According to a survey conducted in three states, new teachers typically had a mentor, but more than half were never observed by their mentor (Kardos & Johnson, 2010). Close to half did not have even three conversations about classroom management, curriculum, or instruction (Kardos & Johnson, 2010). Novices in low-income schools report having been observed more than novices in higher-income schools, but having fewer conversations about teaching-related matters. Moreover, teachers of science, math, and technology were observed less and conversed less about teaching with their mentors (Kardos & Johnson, 2010).

Novice teachers have said that they feel supported when they are acknowledged to be new to the profession and given some time to adjust to a full load of responsibilities, work in a setting with an integrated professional culture centered on learning, and where they receive observations and feedback (Johnson & The Project on the Next Generation of Teachers, 2005). They benefit from observing others as well as being observed themselves in a context that encourages ongoing development among teachers (Johnson & The Project on the Next Generation of Teachers, 2005). Novices indicate that they want to become skilled practitioners; they also envision holding differentiated roles in the future (Johnson & The Project on the Next Generation of Teachers, 2005). The research on mentoring suggests that teacher leaders and the novices they support would benefit from acquiring skills in observation, providing feedback, and building collaborative culture among teachers. Mentors
in this study might report that these capabilities were developed through National Board Certification and subsequently exported to their work as mentors.

**Peer Assistance and Review (PAR)**

Peer Assistance and Review is a district-based program in which consulting teachers work with new and/or struggling tenured teachers throughout the year in a structured program of observations, feedback, and reports based on a developed set of teaching standards (Fiarman, Johnson, Munger, Papay & Qazilbush, 2009). In various studies of their work, consulting teachers (CTs), reflected positively on their experience even though they were responsible for providing evidence that was used to determine if a teacher’s contract would be renewed, which runs counter to the norm of egalitarianism (Fiarman, 2007, Fiarman et al., 2009; Koppich, 2004; Koppich, Asher & Kerchner, 2002). This differed from the resistance and resulting compromises many teacher leaders in non-evaluative roles reported (Donaldson et al, 2008; Lord et al., 2008; Mangin, 2005; Stoelinga, 2008). CTs pointed to clear and “widely accepted” instructional standards in their district on which they could base their feedback and evaluative comments. In reflecting on their own learning, CTs commented that their work engaged them in examining teaching standards and coaching adults. The research on PAR’s CTs suggests that organizational supports, such as clearly-defined teaching standards and supervision by a district’s PAR board, may support a teacher leader working with teachers to improve instructional capabilities they acquired for strengthened through the National Board certification process.

**Supports & Constraints for Teacher Leadership**

Theoretically, certifying master teachers through National Board Certification, and subsequently using those who succeed as teacher leaders, should fit and connect within a unified education system. Such a system would also provide support to develop NBCTs’
skills in teacher leadership and institute policies that are in alignment with NPBTS principles for accomplished teaching. With those supports in place, schools and districts would anticipate the spreading of their expertise with other teachers in schools, districts, and states. However, in reality, district, state, and federal education policies are not aligned. Therefore, when reforms such as National Board Certification are introduced, they encounter and compete with conflicting organizational visions and structures. Cohen and Moffitt (2009) examined what happened when Clinton and Bush introduced reforms to the Title 1 program with ambitious aims to close the achievement gap. They explained that there was not concurrent, sufficient investment in the supports and professional capital needed to accomplish their goals (Cohen & Moffitt, 2009).

National Board Certification, likewise, has ambitious aims to professionalize teaching. At the same time, the broader educational context may influence the realization of its goals. Since its inception, NBPTS has sought to grow leaders of the teaching profession by identifying accomplished teachers whose expertise could then be employed to lead the profession toward instructional improvement. National Board Certification has also entered this system of uneven supports and competing visions. First, there is variation across districts and states for candidates, as well as recognition and opportunity for those who successfully certification. Second, there are organizational policies that influence the extent to which schools and districts can capitalize on the expertise of NBCTs. Teaching standards and evaluation tools that are not used for teacher growth and scripted curricula conflict with the underlying principles of NBPTS aimed at human capital development of the teaching profession so that teachers can meet the complex demands of classroom instruction responsively (Cuban, 2013; Mehta, 2013). NBCTs may be imprinted with a particular set of capabilities, cognition, confidence, and connections that they could carry over as teacher
leaders and extend to the teachers with whom they work. However, they may find that aspects of their contexts, including the narrowly-defined testing and curriculum of the NCLB era or the perception of teachers as deliverers of information rather than facilitators of student learning, thwart the efforts at improving instruction in schools. Additionally, NBCTs who are used to augment the caliber of teaching received by traditionally underserved populations would likely encounter additional constraints, including the inequitable distribution of educational resources and frequent staff turnover. Awareness of this broader policy context informs my study of how NBCTs see the transference of skills from National Board Certification to teacher leadership and also alerts me to seek out any examples of NBCTs using their expertise to alter the context for the purpose of improved teaching and learning.

Supports for Teacher Leadership

Administrative support and professional development for teacher leaders influence the degree to which they experience efficacy in their roles. Researchers find that when administrators provide clarity and regular communication about the scope of teacher leaders’ work, support teacher leaders’ introduction to and authority with other teachers, and refrain from assigning teacher leaders to work on unrelated tasks, teacher leaders experience less resistance from their peers (Berg et al., 2005; Camburn, Kimball & Lowenhaupt, 2008; Donaldson, 2008; Johnson, 2014; Mangin, 2008; York-Barr, Sommerness & Hur, 2008). Organizational support and clear roles, such as those provided for CTs in Peer Assistance and Review programs, also seem to help teacher leaders’ having access to and success in helping teachers.

When teachers step into teacher leadership roles, they have additional skills to learn and, therefore, they benefit from training (Lambert, 2003; York-Barr Duke, 2004). In several
studies, teacher leaders expressed a need for professional development around the social skills for working with teachers (Lord, Cress & Miller, 2008; Mangin, 2008). In a study of a literacy coaching program in a large urban district, Camburn et al. (2008) found that teacher leaders struggled when their professional development shifted from supporting needs that they saw in their schools to conveying the content of district initiatives. Continuous, ongoing professional development and opportunities to reflect were also reported to be valuable for teacher leaders (Snell & Swanson, 2000; York-Barr, Sommerness & Hur, 2008).

Supports and Constraints for NBCTs as Teacher Leaders

Some studies found that, although NBCTs were interested in leadership, their expertise was rarely formally recognized or tapped for teacher leadership (Anagnostopoulos et al. 2010; Koppich et al., 2006). Koppich et al.’s (2006) large study in six states found that NBCTs rarely had expanded leadership roles. Persistent egalitarianism, a lack of leadership opportunities for NBCTs provided by principals, and principals concealing the NBCTs’ status were cited as factors that contributed to NBCTs feeling that they were constrained from leading in their schools (Koppich et al., 2006). In one exceptional case in the study, NBCTs appeared to be supported in and successful in exerting leadership within a school where nearly half of the teachers and administrators were NBCTs, National Board teaching standards permeated all teachers’ professional development. And, in one district, National Board Certification was considered a pathway for consideration in lead teacher positions (Koppich et al., 2006).

Anagnostopoulos et al. (2010) completed a mixed methods study in two states - Ohio and South Carolina. Only in one district in Ohio, did they see evidence of National Board Certification being recognized as a qualification for teacher leadership roles. Even so, only 29% of NBCTs and 19% of non-NBCTs viewed pursuit of certification as a means to
obtain a leadership role. Berg’s (2007) study of three sites showed NBCTs were more likely to lead if they felt their status as accomplished teachers was validated. With organizational supports and recognition, NBCTs could be tapped more fully in educational reform (Johnson, 2008, Sykes, 2008). The research on teacher leadership as an outgrowth of National Board Certification indicates that, while instructional leadership may be a part of the imprint, context factors may influence the degree to which NBCTs can export that imprint.

**A Career Imprint**

One way to examine how the experience of National Board Certification influenced teacher leaders’ work is through applying the framework of a career imprint. Stinchcombe (1965) applied the idea of imprinting from scientific studies of animals as a way of understanding the organizational factors that characterize employees’ experiences at the outset of a company’s founding. Higgins (2005) further developed the idea of “career imprinting.” She argues that is possible to view a particular set of “observable patterns” among leaders in an organization during a particular period of time. These patterns fall into four areas – the types of skills (capabilities) and ways of learning and working (cognition), as well as the types of connections formed and the type of confidence, all related to the completion of work. Subsequently, if they choose to leave their organization, they have the capacity to carry this imprint with them into the organizations they join and the leadership positions they subsequently hold. Higgins’s (2005) research focused on leaders from the medical products industry carrying their imprint to spawn an entire industry of biotechnology firms. However, with some minor adjustments, the model of career imprinting can explain how National Board Certification acts on successful candidates and
spawns, or transfers, to their work as teacher leaders and extends to the teachers with whom they work.

National Board Certification Imprint

Through the process of National Board Certification, teachers engage in an intensive examination and reflection on their instructional practice. The key structures provided by NBPTS, principally the *Architecture of Accomplished Teaching* (see Appendix A) and the questions that guide candidates’ written commentaries, could support the development of a cognitive stance and habits for improving instruction. Additionally, analyzing videotapes of their instruction in light of rigorous teaching standards offers candidates the opportunity to gain greater objectivity about their teaching practice. After having analyzed their instruction for each of the portfolio components, candidates are required to reflect specifically on how they might improve their instruction if they were to teach the unit to a similar group of students in the future. This process relates directly to the work of teacher leaders who are tasked with improving instruction among their peers. Therefore, it follows that teacher leaders would transfer what they learned or were recognized for with National Board Certification to their work with teachers, employing some of the same practices. A transfer of the National Board Certification imprint’s legacy through teacher leadership suggests a promising avenue for expanding the Board’s influence in schools and the profession. Below, I outline the types of capabilities, cognition, confidence, and connections that emerged from my interviews with NBCTs about their experience with National Board Certification and which aspects they said transferred to their subsequent work as teacher leaders.

Cognition

The NBCTs I interviewed said that through the process of certifying, they strengthened their *belief in understanding their students* – their ways of learning, needs, and
understanding of content – as the basis for instruction. They described how by developing an internal responsibility for student learning, they would ascertain how to teach each student so that his or her learning would progress. The responses of the participants revealed that they had an assumption that continuous reflection leads to improved teaching and learning. These aspects of the career imprint’s cognition, they reported, became habitual in their teaching practice.

Capabilities

In describing their experience with National Board Certification, most of the participants explained how they learned or strengthened their skills in knowing their students and engaging in constructivist and differentiated instruction. They said that the expectations for their portfolio entries required them to operate more as facilitators than directors of learning and to better anticipate and respond to independent student needs. The participants said that by closely examining their instructional practice, they developed skills in observing and describing instruction. They said that these observational skills led to a more objective view on their teaching, which made instruction decision-making and planning more intentional. Lastly, they said that they deepened their skills in reflecting continuously on instruction.

Confidence

Many of the participants said that the National Board experience gave them an internal confidence to name their instructional strengths and weaknesses and reinforced the habit of addressing their weaknesses. This confidence, while evident in the tone of their responses, did not appear to figure prominently in their descriptions of their certification experience. Following certification, however, they acknowledged that they had achieved greater internal confidence in their teaching capacity and to stretch themselves professionally. In many cases, this led them to pursue roles as teacher leaders.
Connections

The National Board Certification process did not appear to leave a clear pattern of professional connections for the participants. Some of this may have been due to the nature of the portfolio components for certification and the candidate cohorts for those who participated in them. The connections aspect of the career imprint seems to be minimal for many of the participants.

Transference of the National Board Certification imprint to teacher leadership

Following certification, the participants said that they experienced types of confidence that could be described as “professional awareness efficacy” and “stretch” confidence. Their confidence in their awareness of their instructional strengths and weaknesses and ability to address those weaknesses as well as their desire to stretch professionally led many of the participants to pursue teacher leadership opportunities.

The participants said that they transferred the cognitions and capabilities developed through the National Board Certification process to their work as teacher leaders, encouraging other teachers to develop those same habits of mind and practices. While all cognitive aspects of the imprint transferred, a commitment to assuming internal responsibility for their learning appeared to have transferred more fully than the other cognitive elements. Of the capabilities, it seemed that the teacher leaders worked with teachers to encourage instruction that was based on a firm knowledge of students and involved more constructivist and differentiated approaches. They said that they aimed to have teachers become more observant of their practice. Although, they said that they developed that skill most through the videotaping done for National Board Certification, only some of the teacher leaders subsequently used videotaping regularly with teachers. The
participants said that they asked teachers to reflect on their practice, but their descriptions of this practice seemed less deep than what they had done for certification.

Supports and constraints influencing the strength of the career imprint’s transference

The participants’ responses demonstrated that the National Board Certification process had imprinted them with a solid set of capabilities and cognition about teaching and learning. However, the strength of the imprint was insufficient, in itself, for the legacy of the imprint to fully transfer to other teachers. Participants emphasized the importance of training in working with adults, ongoing opportunities for collaboration, teaching standards used for growth, and curriculum that was consistent with their understanding of constructivist learning that was strengthened through the National Board Certification process. In contrast, when teaching standards were not used for improvement in instructional practice or when districts required a scripted curriculum, the teacher leaders said that it constrained their ability to transfer what they had learned from National Board Certification to teachers. In a set of nested cases in Washington, some NBCTs were able to alter the context of their district and state in order to more fully transfer the National Board Certification career imprint.

Key Differences in Applying Career Imprint Model

Higgins (2005) conceptualized her understanding of a career imprint on the case of industry executives who then branched out to lead much of the emerging biotechnology field. When applying the idea to an educational career, it is important to point out a few key differences. First, the National Board is not the employer of teachers who certify. The imprint that teachers take from their experience with certifying is intimately connected with their work in schools, but the organization that essentially oversees that experience is independent of their employer. Second, National Board Certification is an evaluation. The
primary goal is to certify accomplished teachers. This differs from many professional learning experiences in schools where teachers may work more collaboratively and on an ongoing basis. I contend that teachers are imprinted through the National Board Certification and acquire a set of capabilities, cognition, confidence about the practice of teaching and learning, which they then transfer to teacher leadership roles.
Chapter 3 – Research Design

RESEARCH DESIGN

In this study, I interviewed National Board Certified Teachers who work in teacher leadership positions focused on instructional improvement to understand their perspectives on the possible intersection between National Board Certification and their work as teacher leaders. Maxwell (2005) suggests that a researcher can draw on one’s own personal experience, thought experiments, and pilot research in designing a research study. In designing my study, I first drew on my own experience as a National Board Certified Teacher and my intersecting knowledge about instructional improvement and teacher leadership. I experienced the National Board Certification process as encouraging me to conduct a deep analysis of my teaching practice, including reflection and changes made in order to meet the needs of my students.

The National Board Certification process was designed to evaluate teaching that incorporates comprehensive, reflective analysis and a practice of continuous professional growth, which aligns with a body of research on transforming the teaching profession (Sykes, 2008). Therefore, as a researcher, I began to ponder whether NBCTs utilized the same processes of analysis and reflection with teachers when they worked as teacher leaders. I designed and conducted a pilot study modeled, in part, on a previous study of teacher leaders conducted by Donaldson et al. (2008). However, I selected a sample of participants who were all NBCTs and I focused my interviews on the intersection of National Board Certification and teacher leadership. After reviewing the findings from my pilot study with input from my Doctoral Committee members and writing partner, I revised my research questions, sample, and interview protocol.
The study addresses the following research questions:

• How, if at all, do teacher leaders who are National Board Certified Teachers perceive that National Board prepared them for their roles as teacher leaders?

• Do teacher leaders report that they use knowledge, skills, and/or dispositions demonstrated or developed through the certification process in their work with other teachers? If so, which knowledge, skills, and/or dispositions do they use?

• To what extent do teacher leaders who are NBCTs perceive that what is required by their district and/or administrators is compatible with what they learned or were recognized for with National Board?

I sought to understand the meaning NBCTs made of their experience with the process of certification and its potential relevance to their work as teacher leaders. Therefore, qualitative interviewing was a logical choice for gathering data for this study (Seidman, 2006). Interviewing also allowed me to collect rich descriptions of the participants’ experiences and the processes that they said they had used (Weiss, 1994).

Sites

Identifying several teacher leaders in purposefully chosen settings (four districts and in one case, a state), allowed for some degree of both confidence (within site) and comparison (between sites) (Maxwell, 2005). In order to obtain the sample, I first identified districts and, in one case, a state where there are substantial numbers of National Board Certified Teachers and established teacher leadership roles. Where possible, I utilized National Board regional networks to forward invitations to potential participants. In the cases of four districts (given the pseudonyms Lake, Prairie, Garden, and Mountain), central office staff either provided me with contact information for NBCTs holding teacher leadership roles or they forwarded an invitation to those individuals. I attempted to reach all
of the individuals who would meet the criteria. Because many of the participants worked
across several schools within a district, I cannot provide detailed information about the
demographic information of the student population in the schools where the teachers
worked. However, the majority of the participants indicated that they worked in schools with
a large percentage of students qualifying for free and reduced price lunch and coming from
diverse ethnic and linguistic backgrounds. District-level student body demographic
information is presented below.

Table 1

Demographic Information for Student Population of Sites

<table>
<thead>
<tr>
<th>Site &amp; Population of Students</th>
<th>% Latino</th>
<th>% African-American</th>
<th>% White</th>
<th>% Asian</th>
<th>% Native American/Pac Islander/2 or more</th>
<th>% FRPL</th>
<th>% ELL</th>
<th>% SPED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden 50,000</td>
<td>12</td>
<td>16</td>
<td>46</td>
<td>16</td>
<td>10</td>
<td>39</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Washington State 1.1 million</td>
<td>22</td>
<td>4</td>
<td>57</td>
<td>7</td>
<td>10</td>
<td>44</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Lake 150,000</td>
<td>29</td>
<td>21</td>
<td>30</td>
<td>14</td>
<td>6</td>
<td>35</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Prairie 150,000</td>
<td>22</td>
<td>40</td>
<td>29</td>
<td>6</td>
<td>3</td>
<td>47</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Mountain 50,000</td>
<td>56</td>
<td>14</td>
<td>23</td>
<td>3</td>
<td>4</td>
<td>69</td>
<td>37</td>
<td>11</td>
</tr>
</tbody>
</table>

Garden Public Schools

Garden Schools, a medium-sized urban district in Washington State, had recently
introduced an induction program that included thirty hours of mentoring by a mentor who
was released full-time from instruction. The district also had appointed in-school career-ladder teachers who provided coaching and professional development in addition to teaching full-time; one career ladder teacher was included in the sample. There were also district-level coaching positions focused on math instruction and math assessment. Fourteen percent of the district’s three thousand teachers were NBCTs. The district is in Washington, which has adopted the Common Core standards and curriculum is expected to align with these standards. Some of the participants indicated that curricular resources were not uniformly available.

Table 2

<table>
<thead>
<tr>
<th>Teacher leadership roles in Garden District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Mentor</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Career Ladder Teacher</td>
</tr>
<tr>
<td>Math Coach</td>
</tr>
<tr>
<td>Math Assess. Specialist</td>
</tr>
</tbody>
</table>

**Washington State**

In addition to the seven teacher leaders from Garden Schools, eighteen others from across the state served as instructional coaches or content specialists. I justify this choice of “site” because of the unique combination of resources to support teacher leaders beyond what was provided by individual districts. The office of the Superintendent of Public Instruction, the Washington Education Association, regional Educational Service Districts,
and the non-profit Center for Strengthening the Teaching Profession (CSTP), as well as several university-focused initiatives worked to support teacher leadership and National Board Certification. This coalition provided organized support for National Board Certification candidates prior to and during the certification process. Sixteen percent of the state’s sixty-two thousand teachers were NBCTs. Following certification (“within minutes” one participant reported), all new NBCTs were invited into the state’s network and asked to think about how they might increase their teacher leadership involvement following certification. Many attended a weekend retreat designed to assist each NBCT in planning next steps for their leadership.

The key focus of the Center for Strengthening the Teaching Profession was teacher leadership and they offered trainings in their teacher leadership framework – a set of standards describing qualities of skilled teacher leaders and self-assessment tools. Additionally, they provided small teacher leadership seed grants for individuals to use with groups of teachers in their schools. CSTP also sponsored research on teaching and teacher leadership throughout the state, provided principally by the education department at the University of Washington. A few post-secondary institutions offered training and coursework in teacher leadership. The Office of the State Superintendent of Public Instruction (OSPI) supported teacher induction, professional development, and National Board Certification. NBCTs received an annual bonus of $5,151, with an additional $5,000 if working in a high-needs school (defined as Free and Reduced Price Lunch levels of – 80% elementary, 70% middle, 60% high school). The state superintendent’s office also offered training for mentors in a program that was developed and refined locally to meet the needs of mentors in the state context. Additionally, OSPI provided non-competitive grant funds for districts to carry out new teacher induction and offered equity training to grantee
mentors and coaches. The regional Educational Service Districts held regular mentoring roundtables for mentors from different districts to interact and learn from each other and each ESD had a National Board network contact. Well over half of NBCTs (and more than their non-NBCT peers) in the state expressed an interest in leadership beyond their school and district, such as serving on state committees or policy teams (National Board for Professional Teaching Standards, 2010).

The state of Washington, arguably, grew its vision for the teaching profession as one grounded in reflective practice from initial clinical experience through professional certification. The Stanford Center for Assessment, Learning, and Equity created EdTPA, a performance-based portfolio assessment for use in conjunction with teacher education programs and initial certification. This program incorporates the principles of and was modeled on the National Board Certification process. Washington, in 2014, was the first state to officially require submission of this assessment through authorized teacher education programs as a requirement for certification. In order to receive a professional certificate, third-year teachers in Washington had to either complete ProCert, a portfolio assessment of their teaching practice, or pursue National Board Certification. The state’s ongoing teacher (and principal) evaluation program was designed by a number of stakeholders, intending to emphasize professional and student growth. Districts could select one of three instructional frameworks with descriptive rubrics: Charlotte Danielson’s Framework for Teaching, The Marzano Teacher Evaluation Model, or Center for Educational Leadership’s (CEL) Five Dimensions of Teaching and Learning. Fullan (2007) suggests that educational reform is more likely to succeed with alignment among the school, district, and state. The state’s model for pedagogical growth over the trajectory of a teacher’s career was intentionally tied
to the principles underlying National Board Certification, making it likely that the context would be conducive to transference of the career imprint to teacher leadership roles.

Washington State has adopted the Common Core standards and, for certain curricular areas, directs districts to a choice of curricular materials that align with these standards.

Table 3

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th># in sample</th>
<th>NBC Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor</td>
<td>Observe, plan, co-teach, provide district PD</td>
<td>1</td>
<td>AYA English/LA</td>
</tr>
<tr>
<td>Instructional Coach</td>
<td>PD &amp; one-on-one coaching</td>
<td>5</td>
<td>E/MC Lit (2) AYA English/LA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MC Generalist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EA Mathematics</td>
</tr>
<tr>
<td>Content Coach</td>
<td>Content-specific PD &amp; one-on-one coaching</td>
<td>8</td>
<td>AYA Science (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EA/YA ENL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MC Generalist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AYA Social Studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC Generalist (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E/MC Lit</td>
</tr>
<tr>
<td>Instructional Specialist</td>
<td>District-level professional development</td>
<td>4</td>
<td>MC Generalist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EA English/LA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AYA English/LA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EA Mathematics</td>
</tr>
</tbody>
</table>

Lake Public Schools

Lake County had a well-established professional growth program for teachers, which was based on National Board teaching standards. Seventeen percent of the district’s twelve thousand teachers were NBCTs. My sample of six teachers from this district included three PAR consulting teachers and three staff development teachers. Consulting teachers followed a structured schedule of meeting with their caseload of new or struggling teachers (in various
schools), recording, and eventually reporting to the PAR panel that made the final recommendation whether or not to continue a teacher's contract. Staff development teachers in Lake County worked in one school, attending to the school's improvement plan and providing in-school professional development. Both consulting teachers and staff development teachers received training for their roles, which included a course based on *The Skillful Teacher* (Saphier, Haley-Speca & Gower, 2007) sponsored by Research for Better Teaching, Inc. National Board Certification was strongly encouraged by the district and rewarded with a stipend that was matched by state funds.

Table 4

*Teacher leadership roles in Lake District*

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th># in sample</th>
<th>NBC Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR Consulting Teacher</td>
<td>Structured support for new &amp; struggling teachers, report to panel</td>
<td>3</td>
<td>AYA Mathematics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AYA Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exceptional Needs</td>
</tr>
<tr>
<td>Staff Development Teacher</td>
<td>In-building professional development &amp; planning</td>
<td>3</td>
<td>AYA Social Studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MC Generalist (2)</td>
</tr>
</tbody>
</table>

**Prairie Public Schools**

Prairie, a large county district, had school-level teacher leadership positions, focused on literacy and math as well as a position that was generally focused on instructional improvement based on student data. National Board Certification was highly esteemed and NBCTs receive a substantial bonus, based on a percentage of their salary. Twenty-one percent of the district’s nine thousand teachers were NBCTs. The district had an adopted program of balanced literacy and constructivist-oriented mathematics curriculum. However, the participants’ responses indicated there was substantial variation in implementation by school.
Table 5

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th># in sample</th>
<th>NBC Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Facilitator</td>
<td>School-level PD &amp; instructional support</td>
<td>4</td>
<td>E/MC Literacy (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MC Generalist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EA English/Language</td>
</tr>
<tr>
<td>Literacy Facilitator</td>
<td>School-level PD &amp; instructional support</td>
<td>2</td>
<td>MC Generalist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC Generalist</td>
</tr>
<tr>
<td>Math Facilitator</td>
<td>School-level PD &amp; instructional support</td>
<td>2</td>
<td>MC Generalist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EA Mathematics</td>
</tr>
</tbody>
</table>

Mountain Public Schools

Mountain, a large semi-urban district, had part-time school-based teacher leadership roles. Teacher leaders provided coaching based on district initiatives and conducted partial evaluations of teachers. National Board Certification was recognized as meeting the requirements for part of their teacher compensation program, but the participants interviewed reported having experienced little support for or recognition of the process. Only three percent of the district’s four thousand teachers are NBCTs. According to the participants, the district had recently adopted a scripted literacy curriculum.

Selection of Participants

I aimed to select a deliberate sample (Maxwell, 2005). The primary identifiers for my sample were 1) having successfully achieved National Board Certification and possessing a current certificate, 2) working in a formal teacher leadership position for which they are either released from their classroom teaching responsibilities or received additional compensation to work with their colleagues, and 3) being engaged in teacher leadership that is focused on instructional improvement. Donaldson et al. (2008) concluded that teacher leaders who work in reform roles tend to report experiencing greater resistance from their
peers than in roles such as cooperating teachers or department coordinators. I deliberately chose roles focused on instructional improvement because I wanted to see if the participants found that any aspects of the certification process assisted teacher leaders in overcoming this resistance.

Beyond my primary identifiers of NBCT status and reform-type formal teacher leadership role, I aimed to maximize the range within the sample along several variables (Weiss, 1994). The NBCT teacher leaders included in the sample hold the main types of teacher leadership roles: mentors, instructional coaches (including several content area coaches), and PAR consulting teachers. The teacher leaders’ experience in their work ranged from less than one year to thirteen years. Fourteen of the interviewees had worked in other leadership roles or districts prior to their current position. The teaching experience of the participants ranged from three to twenty-eight years; most had been teaching for at least a decade. The majority of the teacher leaders were in full-time release positions. A few taught part-time and one school-based coach continued to teach full-time while receiving a supplementary contract to work with teachers. About a third of the sample held National Board Certificates in secondary subjects – Language Arts, Mathematics, and Science. Another third held their certificates as Middle Childhood Generalists. A few were certified in Early Childhood, Early and Middle Childhood Literacy. The remaining participants were National Board Certified in either English as a Non-Native Language, Special Education, or Art (see Appendix B). Table 6, below, summarizes the sample by role and district. While districts had different titles, I simplified them into mentor, instructional coach, and PAR consulting teacher based on their similar responsibilities.
Table 6

Teacher leadership roles in sample

<table>
<thead>
<tr>
<th>Role</th>
<th>Number in Sample</th>
<th>Number by Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor</td>
<td>5 (+ 2 w/combined role)</td>
<td>Garden WA - 4 1</td>
</tr>
<tr>
<td>PAR Consulting Teacher</td>
<td>3</td>
<td>Lake - 3</td>
</tr>
<tr>
<td>Instructional Coach &amp; PD Provider (Mountain coaches have partial evaluative responsibilities)</td>
<td>21</td>
<td>Garden WA Lake Prairie Mountain - 1 9 3 4 4</td>
</tr>
<tr>
<td>Content Coach &amp; PD Provider</td>
<td>14</td>
<td>Garden WA Prairie - 2 8 4</td>
</tr>
</tbody>
</table>

Data collection

Semi-structured interviews served as the primary data for this study and were collected between 2013 and 2016. Interviews were conducted via Skype, FaceTime, telephone, or in-person. The duration of the interviews ranged between forty-five minutes to an hour. The interview protocol can be found in Appendix C. I supplemented the data with some background information, where available. For instance, I reviewed available documents on sites’ teaching standards and coaching frameworks. NBPTS published a report about the State of Washington’s work around National Board Certification (National Board for Professional Teaching Standards, 2015).

Data analysis

I transcribed the audiotape of each interview verbatim and sent a copy to the participant for review and/or revision. Then, I coded each interview using MAXQDA qualitative software. I developed a list of codes suggested by the literature. Initially, my
theoretical codes focused on aspects of National Board Certification and teacher leadership. I expected to find variation across both roles and district sites. However, I found very little variation in the responses from teacher leaders by role (mentor, instructional coach, consulting teacher). There was variation by site in the degree to which NBCTs found compatibility between what they said they learned through the National Board Certification process and what they were expected to do in their work, but little variation by site regarding the question of what capabilities and cognition they said they developed or demonstrated through the certification process and said that they transferred to their work as teacher leaders. The strength of the common responses suggested the possibility that the National Board Certification process could be a career imprint, as described by Higgins (2005).

Once I decided to examine the data from the perspective of a possible career imprint (Higgins, 2005), I added theoretical codes regarding career imprint dimensions prior to and during the National Board Certification process and in teacher leadership work. For example, I coded as a capability any descriptions of working on student discourse in relation to a participant’s experience with National Board Certification. As I completed coding several interviews, I prepared summaries of each interview, which allowed me to compare the coded data with the general sense of the interview. I then wrote thematic memos on emerging findings, repeating this process throughout the data collection period (Miles & Huberman, 1994). In addition to the pilot study described previously, I prepared a brief report on the data collected from Prairie Schools, which allowed me to explore potential themes in a more structured format. I analyzed the data by coded segments, but also returned to the interviews in their entirety as a means of checking my assertions.
Validity

Because I am a National Board Certified Teacher, I come to the research with my own perspectives on that experience and how it might relate to teacher leadership work. Therefore, to reduce threats to validity, I was careful about the design and delivery of my interview questions to avoid leading the respondents (Seidman, 2006). In examining the data, I sought out counter evidence and entertained rival hypotheses (Dey, 1993). Verbatim transcripts and sending completed transcripts to participants for review reduced threats to validity of the interview accounts (Maxwell, 2005).

Overall, my participants comprise a small sample of the NBCTs in formal teacher leadership roles in each of the sites selected. Additionally, participants volunteered to participate. Therefore, I do not claim that this is a representative sample of the teacher leaders who are NBCTs in the districts and state. Also, given the selection criteria and small sample size, it is not possible to generalize the findings to the larger population of teacher leaders who are NBCTs across the country.
Chapter 4 – National Board Certification and the 4Cs

National Board Certified Teachers have successfully demonstrated teaching expertise. This, arguably, indicates that they might have a skill set that is well-suited for use in working with their peers to develop instructional expertise. National Board Certification is designed to evaluate accomplished teaching, not teacher leadership. However, in interviewing those NBCTs holding compensated positions as mentors, instructional coaches, and PAR consulting teachers, nearly all said there were skills that they developed or demonstrated through the certification process that they subsequently used in their work as teacher leaders. By examining the participants’ responses about their experience with National Board Certification, themes continuously emerged about their having developed certain skills and cognitions about teaching and learning. These themes suggest that National Board Certification may serve as a career imprint that could transfer to teacher leadership work focused on instructional improvement.

In order to elaborate on how National Board Certification operates as a career imprint, I present my findings about how NBCTs described their experience with National Board Certification. First, I examine what participants said that they understood about National Board Certification prior to becoming candidates and why they pursued certification. They appeared to not fully understand what capabilities and cognitive habits they could have expected to gain from the experience. However, their professional connections primed them for believing in the value and challenge of the imprint. Then, I illustrate what capabilities and cognition the participants consistently said that they gained or thought were reinforced through the certification process, which, for most, were far greater than what they expected to gain from the process. Next, I describe how many of the participants view having been certified as fostering their professional confidence and interest.
in leadership and sparked administrators’ interest in their capabilities. Lastly, I explain how I found no discernable pattern in their responses regarding specific types of connections that arose from the National Board Certification experience.

**PRE-CANDIDACY FOR NATIONAL BOARD CERTIFICATION**

In Higgins’s (2005) review of relevant research, three organizational factors influence an organization’s career imprint: social reinforcements, opportunities for growth, and demonstrated success. These factors figured prominently in the responses of the participants as they reflected on their original decision to pursue National Board Certification. Additionally, Higgins (2005) maintains that a career imprint is stronger when there is a good match between an organization’s values and individuals’ openness to new learning and their educational and work experience. The participants appeared to be at a career stage where they would be ready for the challenge of National Board Certification. The participants said that they had a general sense that the experience would be a good fit with their expectations for valuable professional development. However, they did not seem to have a clear idea of the specific ways in which National Board Certification might have influenced their cognition and capabilities or relate to future teacher leadership roles.

*Career stage for National Board Certification candidacy*

Approximately two-thirds of the sample achieved National Board Certification during what is referred to as the second stage of their teaching careers, having 4-10 years of experience. The other one-third certified as veteran teachers with a wide range of experience (11-30 years). This variation holds across the settings, with the exception of Garden District, where only one of the seven participants was a veteran teacher when she certified. Three of the participants in the sample went through the process after they already held a teacher
leadership role. An additional three participants renewed their certificates while working as teacher leaders.

*How Pre-Candidates Learned of National Board Certification*

Nearly all of the participants learned of National Board Certification either through an informational meeting or a personal connection. Several knew other teachers who spoke highly of the process. Others talked about National Board Certification being promoted and part of the professional culture of their schools and districts in Washington State and in Lake and Prairie districts. Some of the participants were encouraged to pursue National Board Certification by an administrator or teacher leader. What emerged from their comments was the idea that they respected the opinion of those recommending the process. For most, the strength of the opinion of valued educators featured prominently in their decision to apply for National Board Certification. How the participants learned about National Board Certification prior to applying for candidacy underscored the importance of reputable opinion and personal recommendation; their professional connections primed the pre-candidates for the imprint to take hold.

*Reasons for pursuing National Board Certification*

The reasons participants gave for pursuing National Board Certification suggest that they were at a place in their career where they were open to an experience that would substantially deepen their instructional practice. Most pursued National Board Certification to become better teachers. The rigor of the process and a desire for challenge were frequently stated as reasons for deciding to apply for certification. A few of the participants said that, because National Board Certification was recognized in all states, its portability was an important reason to pursue certification. Participants were asked why they certified rather than being offered a menu of reasons to choose from. Therefore, the numbers cited below
reflect those who volunteered that answer. Also, most of the participants gave more than one answer. Below, I provide a description of the prominent views on National Board Certification candidacy.

Table 6

Reasons for pursuing National Board Certification

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deepen instructional practice</td>
<td></td>
</tr>
<tr>
<td>• professional challenge</td>
<td>20</td>
</tr>
<tr>
<td>• to become a more reflective practitioner/better teacher</td>
<td>7</td>
</tr>
<tr>
<td>• heard of/saw quality of process &amp; work of NBCTs</td>
<td>19</td>
</tr>
<tr>
<td>from trusted colleagues or mentors</td>
<td></td>
</tr>
<tr>
<td>• rigorous alternative to required professional certification</td>
<td>7</td>
</tr>
<tr>
<td>Career Benefits</td>
<td></td>
</tr>
<tr>
<td>• financial incentive</td>
<td>16</td>
</tr>
<tr>
<td>• credibility</td>
<td>7</td>
</tr>
</tbody>
</table>

Pre-candidates seeking challenge

Nearly half of the participants said that National Board Certification appealed to them for the challenge it presented. These included participants who certified as early-career, second-stage, and veteran teachers. Many of the participants framed their decision as one that aligned with their assertive approach to professional development throughout their career. Several talked about how they habitually looked for opportunities to stretch their practice. A few participants mentioned how evaluations in their schools failed to provide them with useful feedback. For instance, a common element of these comments was an internal, perpetual desire for a demanding developmental process. For example, Alex, an instructional coach in Washington, said:

I’ve always kind of set goals for myself and pushed myself after I’ve done something for a few years. I felt like I needed to keep pushing myself or I’d just kind of stagnate and I don’t want to do that. . . . I wanted to go through the process to see 1) could I do it and if I could, what was it that I needed to change because I wanted to get better at what I was doing. . . . I think you can always improve and I guess maybe that was the impetus for it.
Likewise, Mae, an instructional coach in Lake District, said that after nine years of teaching
“I felt like I was at this stand still . . . ‘Now what? What else can I do to continue to better
myself as a teacher?’” Higgins (2005) included “stretch” as a feature of the conditions that
enable the cultivation of a strong career imprint. The participants who sought challenge
through their application for National Board Certification confirmed their perception that
the experience would provide this stretch in deepening their instructional practice.

This interest in the challenge aspect of National Board Certification held true for
early pre-candidates (before their fifth year of teaching). In order to continue teaching
beyond the third year in one of the settings, Washington State, teachers were required either
to complete ProCert, a performance and evidence-based certification, which shares some
elements with National Board Certification or pursue National Board Certification.
Participants at this stage of their career considered the financial benefit of their choice. With
ProCert, teachers were licensed to continue teaching; with National Board Certification, they
were licensed to continue teaching and receive a $5000 annual bonus, which doubled if they
worked in a high-needs school. However, they did not solely consider the financial benefits
in their decision to pursue certification. As one early-career candidate, Taylor, said about
deciding between the two options, “ProCert seemed very much like a hoop that I was
jumping through, whereas Boards seemed more rigorous.” Celia, another early certifier said
she thought ProCert “felt redundant” and compared it to work she had done for her
master’s degree, whereas “National Boards felt like I’d heard good things from all the other
teachers who had done it, that it was a really valuable process.”

Pre-candidates seeking credibility

A few participants reported undertaking the National Board Certification process in
order to gain credibility with administrators and/or colleagues. While some noted that they
pursued certification to receive its mark of approval, they then realized during the certification process that they were gaining skills they had not anticipated. Melissa, who certified just prior to becoming a coach in a different school, commented:

I liked that the standards were something that really conveyed to me and to other people that you were a professional who really took your craft of teaching seriously. . . I really liked that National Board Certification was considered to be somewhat prestigious.

Only a few of the participants certified after they had already assumed their teacher leadership role, but two of them saw the process as adding to their credibility as leaders.

Janis, an instructional coach in Washington said:

I think as an instruction coach, I just felt like it gave me an extra step of credibility as well as the solid understanding of what good teaching looks like, so when I'm working with teachers, I know what I'm talking about.

Rita, also an instructional coach, reflected, “Actually, it was really powerful to be back in the classroom and walk my talk.” She then referred to skills that she attained through the process, which she subsequently applied in her work with other teachers. Alex, as we saw previously, focused more on his own growth than gaining credibility. However, when discussing his approach to working with peers, he said that the process helped him to re-establish himself as a teacher. Being able to look at practice through a teacher’s eyes made him more credible with teachers in his role as a coach.

*Vague understanding of what specific skills and benefits for future teacher leadership roles might accrue from National Board Certification*

Interestingly, most participants talked in general terms about what they had expected to gain from the process prior to becoming candidates for National Board Certification. They did not detail *what* skills and/or cognitive habits they expected to acquire through the process, although that could be, in part, due to my not pressing this issue.
Participants who reported a general understanding of the potential for National Board Certification to influence their practice tended to describe the quality of the process, either in what they heard from colleagues or what they saw in the work of NBCTs. In a setting with an established cadre of NBCTs, John, an instructional coach in Washington State, said:

The more I heard about it, the more I looked into it, the more it was the direction I wanted to head. And it was . . . I wouldn’t necessarily say it was, I was called to it, but I could see these people that were a part of it and saw the quality of work that they did and knew that it was something that I wanted to pursue.

Manuel, an instructional coach from a different district in Washington, said that National Board Certification “seemed intriguing.” He went on to say, “If I could go back in time and talk to myself when I was first mulling it over, I would say, ‘This is going to really help you increase your intentionality with your practice,’ which I wasn’t expecting.”

Very few of the participants discussed pursuing National Board Certification because it might open future opportunities in teacher leadership, and yet, as NBCTs, nearly all of them said that it either provided them with leadership opportunities or gave them the confidence to pursue leadership opportunities. When she was considering candidacy, Dorothy said, “I was not aware that it would open so many doors for me.” Nearly all of the participants indicated that National Board Certification was preferred, but not required, in the selection process for their role. And yet, only a few indicated that they had pursued the certificate for career advantages such as giving them an edge in hiring or as a qualification for a teacher leadership position.

Most of the participants, when they were considering National Board Certification, appeared to have been ripe for a new challenge or were seeking excellent professional development. Several who pursued certification early in their career did so primarily because they viewed it as a more worthwhile choice for meeting their state’s requirement for
professional licensure. Most of the participants said that the potential financial bonus influenced their decision, but was not the sole reason they applied for candidacy. The participants made the decision, in part, based on the testimony of trusted colleagues. It appears that few fully understood the skills and outlook the process would develop. Most made no mention of anticipating career opportunities arising from certification.

**4Cs During National Board Certification Candidacy**

In contrast to what the participants expected of the National Board Certification prior to applying, during and following certification they indicated that they had gained substantial benefits. Of Higgins’s (2005) 4Cs, capabilities and cognitions appear to be the most prominent components of a National Board Certification imprint. The capabilities aspects of the imprint that emerged were: understanding students; engaging in constructivist and differentiated pedagogy; observing and describing instructional practice; and reflecting continuously on instructional practice. The cognitive aspects they said they developed included a belief in knowing one’s students as central to instruction, a commitment to taking responsibility for student learning, and the assumption that reflecting continuously led to instructional improvement. Following certification, several of the participants did report that they experienced professional confidence best described as awareness of their instructional strengths and in their ability to address needed improvements. In many cases, this internal confidence led to their stretching professionally and seeking out their roles as teacher leaders. The participants’ responses did not suggest a particular pattern in the type of connections as part their National Board Certification experience during their candidacy, and was not emphasized in their description of their work as teacher leaders.
Table 7

*Components of the National Board Certification Career Imprint*

<table>
<thead>
<tr>
<th>Cognition:</th>
<th>Capabilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• belief that knowing one’s students is central to designing &amp; implementing instruction</td>
<td>• understanding students</td>
</tr>
<tr>
<td>• commitment to assuming internal responsibility for student learning</td>
<td>• engaging in constructivist and differentiated pedagogy</td>
</tr>
<tr>
<td>• assumption that reflection on instruction leads to improved teaching &amp; student learning</td>
<td>• observing and describing instructional practice</td>
</tr>
<tr>
<td></td>
<td>• reflecting continuously on instructional practice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confidence:</th>
<th>Connections:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• professional-awareness efficacy</td>
<td>• insufficient evidence of discernable pattern</td>
</tr>
<tr>
<td>• stretching-based efficacy</td>
<td></td>
</tr>
</tbody>
</table>

**Capabilities**

**Understanding students**

A common thread in the data was participants’ homing in on how a student was learning and what the student’s work showed about his or her understanding. Based on understanding a student, the teacher planned how to reach that student. In the certification process, there are two ways in which this capability is evaluated. For one entry on student work, candidates are directed to select two students who present particular “instructional challenges” and to then demonstrate their impact on these students’ learning. For two entries on small and whole group instruction, candidates are expected to describe their context, including the particular students in their class and then design, present, and analyze their instruction. The participants emphasized how the process of preparing these portfolio...
entries required them to understand and address their students’ needs more deeply than they had done previously. It appeared that for several of the participants, the process compelled them to look at instructional planning and differentiation from the perspective of the students, not just to augment curriculum with strategies of reteaching as might have been done with a data-driven type of approach. Emily, a mentor in Garden District, explained that the process involved thinking about a few different approaches she might try to help a student advance from where he or she was in a learning progression. Peter, another mentor from Garden District, described his thought process this way:

Who are the kids that I really need to focus on and how am I going to focus on them? Am I going to do it individually? Am I going to do it in a small group? What’s best for this student? Do I need to bring other people into the classroom? And really truly understanding my kids.

The participants found that closely examining the learning of a few students and their subsequent instruction was extremely valuable. Ray, an instructional coach in Washington, described his experience of analyzing one of his student’s writing samples:

I needed to consider all the possible reasons why Jessica wrote this way and really deeply diagnose, you know, “What was the need that this writing sample was showing me?” And being compelled to do that, starting with my portfolio work, now that’s how I approach looking at student work always.

It did appear that the NBCTs incorporated this capability of understanding students through close analysis into their instructional practice. However, there were a few who indicated that that particular level of understanding, demanded by the certification expectations, was difficult to maintain and extend to daily teaching.

Reflecting continuously on instructional practice

Nearly all of the participants discussed how the process of certification developed or reinforced their reflective practice. Throughout the portfolio process, candidates for National Board Certification were prompted to utilize the Architecture of Accomplished Teaching
(see Appendix A) along with the teaching standards to examine their instruction. Then, at the end of each portfolio commentary, candidates were required to write a summary of what they learned from their analysis of their teaching and student learning and to explain what they would do differently the next time (assuming the same material and students with similar characteristics). The participants communicated how this continuous practice of analyzing their work became a regular part of their teaching practice. For example, Sonya, an instructional coach said:

    The National Board process expects you to look at your practice so reflectively . . . I thought I would certify and there ya go. I made the mark and I don’t need to do anything else. But I really do understand this notion of constantly evolving and changing and evaluating.

In particular, they pointed to having developed their capacity to adjust instruction based on that reflection. Many of the participants spoke about the enduring quality of the process. Michelle commented:

    National Board made me think in a really deep way about the choices I was making . . . I think to do that deep dive at different points in your teaching career does make changes in practice that are sustainable over a career.

Sophia, who worked as a mentor in a diverse area of Garden District, said that the continuous reflective process that she developed through National Board Certification made her “a culturally-responsive, intentional teacher.” In addition to the in-depth, or comprehensive look at their instruction, several of the participants said that the process forced them to acknowledge and address weaknesses they saw in their practice. As Emily said, “Why isn’t this happening the way the standards tell me it can?”

**Constructivist and differentiated pedagogy**

    Two-thirds of the participants said they moved from conceptualizing teaching as delivering curriculum to an understanding of teaching as constructing curriculum around students in a cyclical process of analysis and reflection or they demonstrated this skill
through National Board Certification. Generally, many talked about the *Architecture of Accomplished Teaching* (see Appendix A). This approach, illustrated with a helix, starts by the teacher’s knowing his or her students and their needs, then planning appropriate goals and implementing instruction. Then, the teacher evaluates learning, reflects on learning and the instruction, and sets new appropriate goals for those students. Specifically, participants said they developed or strengthened skills in facilitating student learning through student discourse and providing individualized planning and feedback for improvement.

Dakota, a math coach in Prairie, said that through the National Board Certification process, she changed her pedagogy. She said she learned:

> it wasn’t just me getting up and telling kids, “This is how you’re supposed to do things.” It was more me finding ways that students could learn math. And I think that was the defining moment for me, because I learned math very traditionally.

She said National Board “pushed” her to take courses so that she would have the conceptual understanding of mathematics to teach in a more constructed way. She then shifted her teaching from providing examples of math problems for students to copy to designing activities where they had to demonstrate understanding of formulas. For example, instead of supplying them with the formula for slope and having them use it to solve several problems, she gave them examples such as showing different people walking and then “they would write their own definitions” of slope. She attributed this change in instruction to her experience with National Board Certification.

Maria, a mentor, said that before certification, discussions in her classroom tended to be “ping pong” – teacher-student-teacher-student. Through the process of meeting the requirements for certification, she learned that that wasn’t “really a class discussion.” Instead, Maria said, she learned to listen to several students talk with each other before interjecting a question to further the discussion.
Several participants talked about how looking closely at a progression of work by focal students – a requirement for one of the portfolio entries – helped them understand their students better and provide them with individualized feedback to further their learning. Tanya, a coach in Mountain district, talked about selecting one special education student and one honors student for her portfolio. She said, “You literally had to show the writing process and your feedback and their revisions.” She said the process of closely examining her teaching, such as she did in looking at student work, forced her to “slow down and break it [the content] apart” which, in turn, helped her do that for her specific students.

Dorothy, who oversees professional development in her Washington district, attributed National Board Certification with solidifying a “wealth of content knowledge and deep pedagogy about your subject area.” She explained how the “responsive teaching” required of National Board differed from more directed pedagogy:

That’s not really the dance that you do in a really responsive teaching situation and National Board, I think, smacks that into people. It’s the Architecture of Accomplished Teaching. What do these kids need? And what’s the best goal for each of them? And what tools or strategies can I use to hit all learners? And then I’m going to evaluate them. And then I’m going to reflect and make another goal. So . . . you don’t ever then go back to the workbook.

By saying “the best goal for each of them” she is indicating that the cognitive aspect of knowing one’s students leads directly into the “tools and strategies I can use to hit all learners.” Instruction, in her understanding from National Board Certification, is constructed around the learners. Her comment that “you don’t ever then go back to the workbook” suggests the lasting strength of this pedagogical skill aspect of the career imprint.

Observing and describing instructional practice

Many of the interviewees said that they learned to carefully observe and describe their instructional practice through the videotaping and analysis of their teaching required to
complete their portfolio entries. As Sarah, an instructional coach from Washington, explained:

> You really learn how to look at your teaching. . . . You can kind of picture how this lesson is going in a different way after you’ve filmed yourself so many times and analyzed your teaching over and over and over, given the thinking parameters that the National Board makes you use.

The “parameters” Sarah mentioned refer to the prompts NBPTS provided to candidates to guide their commentary on two unedited video segments of classroom instruction situated within a unit. Typically, in order to feel confident that one has met the requirements for certification, candidates analyze videotapes of their instruction repeatedly and carefully during the year of their candidacy. Sarah’s comment about how she could “picture” the lesson going indicates that the experience of National Board Certification left a strong imprint. Ray, an instructional coach, explained how he applied this observation to understanding a student’s writing in order to “deeply diagnose, what was the need that this writing sample was showing me. He named the acquired skill “observational disposition” because it had become such an ingrained habit.

As the participants developed their skill in observing their instructional practice, some said that this allowed them to become more objective about their teaching. For example, Austin, a mentor in a diverse, urban district reflected on how as a “white person in a high-poverty school,” he would agonize over teaching. He said that National Board Certification “gave me more of an objective view of myself in the class. And that was necessary for me as a teacher.” He said he thought that without that “non-personal” ability to identify what he was and was not doing well, he would not have had the confidence to continue teaching in a challenging school.

For most of the participants, the experience of certification developed a set of capabilities that collectively appeared to be more comprehensive and deeper than what they
had experienced through previous professional learning. For instance, reflecting on their practice, the portfolio entries required them to look at all aspects of instruction, even when looking at a small segment of a lesson. While the process seemed to strengthen these different skills, the participants tended to describe how the process required them to use the skills in tandem, not as isolated approaches to improving their instruction.

Cognition

At the time I collected the data, I was unaware of the career imprint framework (Higgins, 2005) I would later come to use in my analysis. Therefore, I did not specifically ask participants about beliefs and assumptions that may have come from their National Board Certification experience. Nonetheless, the National Board Certification imprint appeared to include a set of cognitions tied to the capabilities and related practices described above. The imprinting begins when candidates familiarize themselves with the Board’s Five Core Propositions (Appendix D):

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning
4. Teachers think systematically about their practice and learn from experience
5. Teachers are members of learning communities

These assumptions about teaching permeate the portfolio exercises. As they described how they evaluated their own practice for certification, it was apparent that the capabilities described previously included beliefs and assumptions about teaching that were deepened or demonstrated through the process. The patterns that emerged from analyzing their responses centered on the following cognitive aspects: belief that knowing one’s students as foundation of instruction; commitment to assuming internal responsibility for student learning; assumption that reflection on instruction leads to improved instruction & student learning.
Belief that knowing one’s students as foundation of instruction

In addition to describing practices and capabilities about knowing students, participants underscored their belief that knowing one’s students as central to teaching. They used words like “vision” and “mindset” to describe this assumption. With the Architecture of Accomplished Teaching (see Appendix A), the teachers began their instructional practice by describing their knowledge of students and their needs in related to the content being taught. While this was a capability, the responses of participants indicated that this was also a cognition, an assumption that this is how one ought to plan and carry out instruction.

Commitment to assuming internal responsibility for student learning

For their portfolios, candidates are required to document how their input influenced the learning of particular students in their class during a unit. Collecting evidence and writing about their impact on student learning appeared to have shifted the participants’ understanding of the work of teaching. For example, Jane, a consulting teacher in Lake District commented:

I think the whole National Board process really kind of reframed my thinking about teaching and learning. It puts greater accountability on me as a teacher to make sure that I’m doing everything that I can to make sure that my kids are learning, that they are succeeding.

Vera, an instructional coach also from Lake District, stated that she went from asking why a student didn’t get a particular concept to, “What else can I do so that he will?”

Assumption that reflection on instruction leads to improved instruction & student learning.

When describing the reflection they did for National Board Certification, several of the participants said that doing so shaped their assumption about instructional improvement. Austin explained how the process connected with this assumption:
National Board is all about, a set of standards that hopefully you believe in, which I do, demonstrating a level of proficiency about that and reflection. That’s what teaching is all about... moving toward proficiency or higher levels of that and being able to demonstrate that.

Similarly, Emily said that this assumption about reflection leading to improvement became “ingrained” in her as she shifted her understanding of teaching from one focused on “what way” she did it to “making changes” based on reflection.

Confidence

Higgins (2005) identified “expertise-based” and “learning-based” confidence as types of efficacy in a career imprint. In the case of National Board Certification, achieving certification appeared to give the participants a personal awareness efficacy and a stretch-based efficacy. The participants talked about how the process of National Board Certification developed their capacity to name and describe their strengths and weaknesses as teachers. When they became aware of a weakness in their instructional practice, they said they then sought to address that weakness. Raquel, an ELL coach, said that the National Board Certification process required her to examine her teaching and say, “what I did was effective because of this, this, and this. However, I noticed I didn’t come through on that part.” As a result of National Board Certification, she said she was “consciously competent.” They said that they had the confidence not only to tackle areas of weakness, to deepen or extend their knowledge and skills. The responses suggested that they were stretching themselves professionally and taking on challenges, not merely refining practices. For instance, Alex, an instructional coach in Washington, explained that the process of certification made him want to improve himself “to do the best possible job.” In particular, he said that he “pushed himself to develop my skills as a math coach and just as a math learner.” He had been working on this goal for three years. Prior to certification, he said he would have just relied on “math people” in the school. This confidence to stretch
professionally, as I will explain in the next chapter, also compelled many of the participants to pursue teacher leadership roles.

**Connections**

Professional connections also are important in a career imprint model (Higgins, 2005). However, when describing their experience with National Board Certification, most of the participants described professional connections that they had experienced in relation to certification as peripheral to their experience. Some were involved in candidate cohorts, although many described these as temporary and somewhat artificial connections. A few participants built professional expert-to-expert connections with colleagues in their school as they worked to meet the expectations for certification or participated with their candidate cohort. The lack of discernible patterns in the data about connections may indicate that particular types of connections were not a feature of the National Board Certification career imprint.

**SUMMARY**

The participants emphasized that they were ready for a challenging professional learning experience prior to applying for certification. In essence, this suggested that they were, therefore, open to a career imprint. The participants also pointed to the influence of respected colleagues attesting to the value of the process figuring in their decision to pursue candidacy. However, they appeared to have little specific knowledge of the extent of capabilities and the perspective on teaching that, after successfully completing the process, they recognized they had acquired. Nor did they say that they had a clear understanding that the process might subsequently lead to teacher leadership roles. The perceptions of the participants, provided in hindsight, indicate that the idea of National Board Certification was strong and the background experience of the participants made them susceptible to the
career imprint taking hold. Greater awareness of what might have been gained from the career imprint and subsequent teacher leadership roles might have further strengthened the career imprint.

During and following certification, the participants overwhelmingly said that the process had deepened their practice and how they understood teaching and learning. Three ideas stood out in the teacher leaders’ reports about the cognition they gained from the process as candidates: a belief that knowing one’s students is central to instructional planning and revision, a commitment to taking internal responsibility for student learning, and an assumption that continuous reflection on their instruction and student learning leads to instructional improvement. These cognitions were grounded in capabilities of understanding students, engaging in constructivist and differentiated instruction, and objectively observing, describing, and continuously reflecting on their own teaching. As Alex summed up the process, “It all became kind of an internalized professionalism.” This professional imprint of skills and ways of learning carried over to their work as teacher leaders, the topic of the following chapter.

National Board Certification also appeared to imprint the participants with a confidence in their ability to identify their strengths and address weaknesses in their instructional practice. The participants described how this confidence included an enduring desire to stretch their learning in order to improve in perceived areas of weakness. There was not a clear pattern suggesting a particular type of connections related to a National Board Certification career imprint. This may reflect how evidence of collaborative learning with peers is demonstrated for certification. It does not involve the same degree of scrutiny of what the participants described for their work on classroom instruction. Additionally, for many of those who were members of candidate cohorts, the experience was limited in scope
and temporary. National Board Certification is focused on instruction and learning. Therefore, the strength of the career imprint in this instance lies in the capabilities and cognition most closely tied to instruction and learning and related confidence. As I move to discuss which aspects of the career imprint transferred to the participants’ work as teacher leaders, I will limit my findings to these areas.
Chapter 5 – Employing National Board Certification Imprint in Teacher Leadership

A strong career imprint, theoretically, can be carried over to from one organization to another when leaders move to a new organization (Gompers, Lerner, & Scharfstein, 2005, Higgins, 2005). This means leaders transfer the capabilities, cognition, confidence, and connections associated with the imprint to the new organization (Gompers et al., 2005, Higgins, 2005). Most of the participants continued working in the same school district after achieving National Board Certification. Most also pursued their formal leadership position after having certified. Therefore, rather than exporting the National Board Certification imprint to a new district, they transferred the imprint in a new role, that of teacher leader. And, in turn, this influenced the teachers with whom they worked to adopt aspects of that imprint.

Higgins (2005) describes this transfer of a career imprint’s dimensions to other members of an organization as the “legacy” of a career imprint. In this chapter, I explore the aspects of the National Board Certification imprint that these teacher leaders said they applied in their work with their peers. I argue that NBCTs worked with teachers so that they would adopt skills in understanding students, constructivist and differentiated pedagogy, observation and reflection. Also, I argue they worked to develop the imprint’s related beliefs and assumptions about teaching. Although the following examples are limited by the fact that they rely on the report of the participants, they are illustrative of how the National Board Certification imprint could spread within schools and districts.

CONFIDENCE: PROFESSIONAL AWARENESS & STRETCHING-BASED EFFICACY

The NBCTs I interviewed appeared to carry over the confidence in their instructional strengths and to stretch themselves professionally. Several of the participants said that their awareness of their instructional skills made them feel prepared to assist other
teachers in becoming better teachers. Some of the participants cited specific capabilities that contributed to their feeling of efficacy. Sonya, an instructional coach in Washington, said, “I think until you elect to choose that level of reflection of your own practice . . . it’s hard to lead somebody else through that process.” Likewise, Emily said without having evaluated herself against NBPTS standards, she would not “have been as skilled” at “helping teachers see what level of proficiency they were demonstrating. The participants stressed that this confidence was primarily internal and successfully certifying provided an additional boost as a basis for feeling they could lead others.

Several of the participants said that successfully certifying gave them confidence to stretch professionally and take on a teacher leadership role, a step they said they likely would not have previously considered. Jeannette, a literacy coach in Prairie commented, “I began to realize that maybe I had some leadership to offer, something to collaborate with other teachers about” and she set about seeking out teacher leadership opportunities.” In retrospect, Austin, a mentor in Garden District, said that National Board Certification gave him confidence to grow as a teacher leader and collaborator. He saw the experience as a “stepping stone” to teacher leadership and collaboration. He said, “I really feel like it opened up a pathway rather than just learning through the process. It empowered me to be a teacher leader rather than just staying isolated in the classroom.” Some participants did not specifically seek out a leadership position, but their professional awareness efficacy was apparent to administrators, who invited them to take on a leadership role. Yvonne, a math coach, said, “I think, because of how I changed through the process, I probably presented myself differently that year in the classroom that made me maybe look like a good candidate” for the coaching position.
The participants reported that they encouraged other teachers to develop skills of constructivist and differentiated instructional strategies for student learning that they honed during National Board Certification. They said that their work in this area centered on thoughtful lesson planning and facilitating student discourse. Overall, there was an emphasis on looking more deeply at how to engage students in learning.

**Planning for constructed and differentiated instruction**

Deanna, a full-time Special Education teacher in Garden District, worked with teachers in her school during her planning time or before or after school. She said her experience with National Board Certification heightened her ability to anticipate students’ needs within a particular lesson and to recognize that various approaches might be needed for a lesson to be successful. In particular, she learned to differentiate instruction, tailoring lessons to meet the needs of students with different needs. Students may differ in where they are developmentally in relation to the learning progression of a concept and/or they may differ in their background in ways that can be supported with different pedagogical approaches. Deanna explained how she asked teachers questions to develop an anticipatory mindset in their lesson planning so that they prepared for the learning differences that were likely to arise during a lesson. She said that she deepened that skill through the National Board Certification process. She recounted the questions she asked while working with a teacher on math lessons:

I see that you’re going to be working on division. How are you going to teach that? Where’s the vocabulary that comes in along with that because you’re also doing ELL at the same time? Where in your lesson is the part that I need to see to make sure that you’re going to reach those guys [special ed students] Do they need manipulatives? I know for a fact that Gulad’s [a student] going to need a little bit of reteaching, so what are you going to do for your large group over here so that they can work independently while you pull Gulad and check in with him, reteach the parts that he didn’t get?
She saw her work with teachers on instructional planning and anticipating student needs to be very similar to what she had to do for her National Board Certification portfolio.

Ruth, who certified in Social Studies, worked with her mentee to have students “do history” as opposed to just learning historical facts. She worked with the new teacher on developing students’ research skills, including helping them “create questions” and “think critically” about a question for meaningful classroom discussions about history. For part of her work, Ruth provided professional development to social studies teachers in the district on how “to integrate lessons on Native history and culture into courses on state history. She helped them develop “inquiry” or “project based” learning based on primary and secondary sources. A substantial part of her work involved curriculum development, and so, when preparing materials for teachers, she also applied the constructivist approach of doing history that she acquired through National Board Certification. For example, she wanted students to have access to a high-quality document about an environmental issue related to a unit on Native Americans, but it was written at the college level. As a result, she planned how to scaffold it for middle school students, providing materials that would help them understand texts that they might find difficult.

Several of the participants said that the process of National Board Certification made them more aware of the role of communicating with families as a way to meet students’ individual learning needs. Rhonda said that she worked with teachers to do the same. For example, she worked with a teacher who was concerned about the reading progress of one of her first graders. After conferring with the teacher, Rhonda and the teacher held a conference with the parent. Based on what the parent said, they discovered that she tended to use only “directive” communications with her child, rarely engaging in two-way conversations. The parent did read to the child, but did not converse about what was in the
story. Rhonda and the coach worked with the parent to add conversation to the reading process at home. Through modeling some of what she learned about working with families as an NBCT, Rhonda helped the teacher intervene to successfully meet an individual student’s needs.

Facilitating student-to-student discourse

Facilitating student discourse was another skill that several participants said they developed through the National Board Certification process and then, as coaches, assisted other teachers to develop. Two of the entries for National Board Certification that included videotaped evidence focused on classroom discussion— one on small group facilitation and one on whole class discussion and instruction. For example, during the certification process, Sarah, an instructional coach, spent a lot of time figuring out how to get her “students to talk about their mathematical understanding and how they pushed each other, how to get small groups to push each other.” Having successfully certified, she worked on that instructional skill with teachers. For example, she recalled prompting a teacher, “OK. What if you listen to what they’re thinking and then offer a question to push their thinking?” She attributed National Board Certification with strengthening this skill.

Likewise, Emily, a mentor in Garden District, drew on her own experience to build teachers’ awareness of how to lead class discussion. She observed that before National Board Certification, she was “the hub inside of the wheel of conversation,” meaning all comments by students went through her and did not typically include student-to-student discourse. However, through the process of completing her portfolio entries, she learned to wait for several students to talk before inserting a question to advance the conversation and “to teach kids to pull the conversation back when it’s been derailed.” Emily used examples
from her own teaching to get new teachers to start to think about how they could better facilitate talk among students.

Some of the teacher leaders offered examples of assisting teachers in a more traditional model of teacher-led discussion, but deepening the types of questions they asked their students. For instance, Karina coached a teacher who tended to ask closed-ended questions of his students. Over time, she said, she helped him begin to acquire the practice of asking deeper questions, such as “Why do you think the character did this?” as opposed to questions he had previously asked such as “Who are the characters in the book?” Again, she emphasized this stemmed from a shift in focus to what students were learning, a cognitive perspective she said that she acquired through the National Board Certification process.

Coaching new teachers in more concrete and less constructivist skills

Mentors and consulting teachers also reported working with new teachers on aspects of instruction that were not, at least initially, focused on constructivist or differentiated pedagogy, but more on discrete instructional skills. As an example, Richard, a consulting teacher, said that he often worked with new teachers to check more frequently to see if students understood the material in the lesson. He said that sometimes he saw new teachers check for understanding, but when they did not get a “particularly good response,” they went on with the lesson without adjusting their instruction to address the misunderstanding. Therefore, he worked with teachers to plan appropriate checks for understanding and discussed with teachers how they used them during lessons. This would be considered a basic skill for an accomplished teacher who had National Board Certification. Nonetheless, the process of setting an instructional goal and then practicing and getting feedback on
progress made to achieve it appeared to prepare new teachers to tackle more complex aspects of instruction.

**CAPABILITY: OBSERVING AND DESCRIBING INSTRUCTIONAL PRACTICE**

For most of the participants, the process of National Board Certification developed their capability of observing and describing accomplished instructional practice. They said that they used this skill when observing the instruction of the teachers whom they mentored or coached. They also said that they worked with teachers to encourage them to learn how to observe and describe teaching. They used detailed observational notes, utilized video libraries of sample instructional practices, or had teachers observe other teachers. They likened these processes to the objective examination of their practice that they did for their National Board portfolios. As National Board Certification candidates, many of the participants said that they had frequently videotaped their classroom instruction and carefully reviewed their videotapes. As a result, they became much more proficient at observing and describing instruction. Yet, subsequently, as teacher leaders, few reported using the technique to develop stronger observational skills among their peers.

*Observing and describing instructional practice with teachers*

Sarah, an instructional coach in Washington, said her National Board Certification experience, particularly working with two other candidates, gave her the “valuable” experience of observing others’ teaching. Subsequently, she used that experience when observing other teachers to think about, “What is a good teacher doing? What are some possibilities for this person to be doing right now?”

Michelle, a literacy coach, provided an example of using this type of observation to help a teacher identify and describe pedagogical skills that could increase student engagement. The teacher was concerned that several students in an English class were
“struggling to engage on a daily basis” and therefore, close to failing. The teacher’s goal for the coaching observation was to have students “connect personally” to a piece of artwork that was the focus of the lesson during a small group discussion. The coaching model at this school involved prompts to the teacher through an earphone during the instruction.

Michelle recounted one exchange during the session:

I listened to their conversation, and during the conversation, the teacher came over and started to engage them a little bit more and through his questions, he was able to draw out one girl’s personal experience. The street art referenced Vietnam and she was from Vietnam. . . . she immediately went to her own experience with understanding the culture in Vietnam. And my coaching to him was, “This was a really great example of how you have given space to her and prompted her to connect to her culture and her values.”

Michelle used skills of observing and describing that she said she demonstrated during the National Board Certification process to assist the teacher in identifying and practicing culturally-relevant pedagogy that could increase the engagement of the students.

Using videotaping to develop teachers’ observation skills

Most of the participants said videotaping and reviewing their instruction for National Board Certification was instrumental in developing their capacity to observe and describe expert teaching. Therefore, the infrequent use of this tool with teachers in their roles as teacher leaders is an important finding. It is not entirely clear why the teacher leaders did not use video more extensively. Constraints mentioned by participants included teacher resistance, limited time, and access to technology. Several participants said that they offered it as an option, but it was not an integrated part of their work with teachers. For instance, Alicia, a literacy coach in Prairie, said that she always kept video equipment available and explained to teachers how “until you’re just the outsider seeing what the person who’s evaluating you sees, it’s hard to understand why they’re evaluating you the way they are.” However, very few teachers took advantage of the opportunity.
While most of the participants said that they video-recorded teachers to build their skills in observing, occasionally, if at all, one notable exception was the mentors in Garden District. The mentoring program incorporated videotaping into the yearlong plan for new teachers. About halfway through the year, the mentors introduced videotaping and completed at least one full classroom video of each of their mentees. Each teacher and mentor then reviewed the videotape while comparing the lesson to the teaching framework that their administrators would use for their formal evaluation. Sophia said she used the video as a “third data point” for reflecting on teaching practice. Peter videotaped his novices in the fall as well and said that, when the teachers reflected on the spring video, they could really see the growth that they had made. It appears that the mentors saw the videotaping as a useful tool in developing teachers’ observational skills and saw a strong connection between that and what they went through with National Board Certification.

**CAPABILITY: UNDERSTANDING STUDENTS**

The participants said that they built understanding of students among teachers by examining student data with them. Looking at student data is a common expectation for coaches, but as Gina said, the National Board Certification process enabled her “to be even more precise in looking at student work.” Also, the participants said that they worked with teachers to closely tie the knowledge that they acquired about student learning to directly guide the next instructional steps they would take for the different students in their classes. In other models of instructional reform, there is a common understanding of “reteaching” material or skills after a formative assessment and then proceeding with the next lesson in a provided curriculum. In these cases, based on what they learned through National Board Certification, it appears that the participants were training teachers to create their subsequent lesson plans based on what the student work showed.
Similarly, Rhonda, an instructional coach, facilitated looking at student work with professional learning communities in her school. She found that teachers often wanted to label or simply score students and move onto the next lesson in the textbook. Through National Board Certification, Rhonda had learned to analyze students’ responses to figure out why they were at a certain level in their learning relative to a content standard; she used this knowledge to plan subsequent instruction. She described a typical conversation she had with teachers in the professional learning community about two students who scored at the same level in reading, Rhonda said to the teachers, “This child is at an E and this child is at an E. It’s two different children at an E.” Instead of merely identifying that the two students were at the same level, she urged the teachers to go deeper, “What about the way this child thinks makes this child do this [answer this way]?” She said she then worked with the teachers to examine the students’ responses in order to uncover what reading skills contributed to each child’s placement level. She applied this same approach to teachers’ lesson planning, pushing them to think, “What about the students in your class says that that lesson needs to be taught next?” Not, “What’s the next lesson in the book?” This example illustrates how Rhonda guided teachers through the type of thinking process required of her for National Board Certification.

Gina, a literacy coach, worked in a district where teachers were required to complete a study of student writing samples over time, which was similar to an entry for National Board Certification. In coaching teachers through this process, Gina urged them to be “brutally honest” with themselves about what they saw in the students’ work so that they planned subsequent instruction accordingly. For instance, she said that some of the teachers needed to recognize that their students were far below grade level. Therefore, Gina worked with the teachers to plan what they needed to do next to further student learning. She said
she emphasized that, through analyzing student work, teachers learned to take responsibility for furthering student learning. This highlighted the connection to another cognitive aspect of the career imprint from National Board Certification.

Not all of the participants described working with teachers to look closely at student work in the way that they said was required for completion of their portfolios. These teacher leaders described having teachers sort student work into groups of low, medium, and high and then reteaching those who did not understand a concept and offering an extension to those who needed more challenge. This approach is different than what they did for one of their National Board Certification entries where they closely analyzed the work of a few students who presented particular challenges and showed their impact on those students’ learning.

**CAPABILITY: REFLECTING ON INSTRUCTIONAL PRACTICE**

When asked about their National Board Certification experience, nearly all of the participants said that they acquired or deepened their reflective practice. Most of the participating teacher leaders indicated that they subsequently incorporated reflection into their work as teacher leaders, most often through the use of reflective questioning and comparing instruction to teaching standards. Several of the participants explained how having become reflective practitioners at the level demanded by the National Board process prepared them to then assist other teachers in doing the same.

Michelle, a literacy coach in Washington explained that the reflective questioning she did with teachers might not have come “explicitly” from the National Board Certification process. However, as a coach, she said that she probed teachers to get at their “understanding of what’s happening and also understanding why they’re making the choices they’re making.” This process, she said, “reflects the nature of the type of reflection and
questioning one must do to be successful in a National Board application.” Therefore, in her coaching, she applied key techniques required by the certification process.

Raquel said that through the National Board Certification process, she learned how to become more comfortable with not being perfect when teaching a lesson. She commented:

You’re able to be in that reality that lessons don’t always go exactly as planned. And if you take the time to reflect on why they didn’t go that way, then you’re able to modify it [the lesson] and go do it differently the next time.

As an ELL coach, she incorporated a process of continuous reflection in her work with a professional learning community of teachers. Raquel said she applied the Architecture of Accomplished Teaching and the Danielson teaching framework to improve instruction for ELL students. She summarized the process for teachers this way:

Who are your ELLs? What language needs do they have? OK, let’s go plan and create a lesson specific to support them. Let’s implement it. Let’s collect data, let’s come back and reflect upon it, and then, let’s either adapt, change, or set new higher working goals.

Raquel said she did not expect teachers to be proficient at instruction for ELLs initially. Instead, teachers were expected to change their practice through repeated reflection. The responses suggest that involving teachers in reflection is a component of teacher leaders’ work with teachers and that the participants find this to be congruent with what they learned through their experience with National Board Certification. It is less clear whether that experience qualitatively changed their approach to developing that capability among teachers.

COGNITION: BELIEF THAT KNOWING ONE’S STUDENTS IS CENTRAL TO DESIGNING AND IMPLEMENTING INSTRUCTION

Through the certification process, the participants said that they learned or strengthened their belief that effective instruction was built on understanding of the specific
students in their classes. As teacher leaders, they reported that they worked with their peers to develop this cognition. For example, Manuel said that he transferred the idea of “being focused on student learning as opposed to my teaching or the teacher’s teaching” from his experience with National Board Certification to his work as a math coach. The participants’ responses focused more on the capability of knowing students than the cognition of belief in knowing students as central to instruction. However, as they described the practices in which they used with teachers to develop knowledge of students, several did reference the Board’s first core proposition, “Teachers are committed to students and their learning.” Also, their reported insistence that teachers work from this perspective suggests they were attempting to transfer that cognition.

Cognition: Commitment to Assuming Internal Responsibility for Student Learning

Several of the responses from participants suggested that designing assessments, teachers could build commitment to assuming internal responsibility for student learning. In particular, they wanted teachers to use assessments that provided clear evidence of whether and how students understood the material. For example, Ray, an instructional coach, thought that the portfolio process of National Board Certification compelled him to closely examine the cycle of assessment and feedback, particularly the entry on student work samples. For that entry, he said he had to ensure that the students had learned what he had intended as a result of his instruction and feedback to them. As a teacher leader, he applied this by providing school-wide professional development on assessment design for his district’s high school staff. Before the session, he carefully created interdisciplinary groups of teachers and developed a protocol for examining the quality of an assessment as well questions to guide table discussions. Each teacher was expected to revise an assessment he or she were using in their classroom at the time and then discuss that assessment with the other teachers in their
group. Ray said that there were “some uncomfortable conversations,” such as this one about a science teacher’s assessment:

Are you really assessing and if you say, for example, in a biology class, create a poster that shows the diagram of a cell, are they really creating or are they just replicating something from the textbook in a bigger form that’s pretty?

He said that he received “tremendous feedback” on the session. Ray was apparently able to guide teachers toward creating assessments that were more illustrative of student understanding than what teachers had been using previously. He did that by applying the cognitive aspect of what he understood about student learning from his experience with National Board Certification.

All eight of the coaches in Prairie District were involved in developing common formative assessments with teacher teams. While this is often a part of coaching roles, the coaches’ responses suggest they aimed to encourage teachers to take greater responsibility for deeper learning among their students, a cognition they say stemmed from their experience with National Board Certification. Although the coaches did not all describe the same aspects of formative assessments, collectively the data suggests that they led teachers through designing, implementing, and revising formative assessments that would enable teachers to gather substantive understanding of student learning. Some coaches helped teachers carefully write prompts so that they focused on the skills the teachers were aiming to assess. Others encouraged teachers to move away from multiple-choice assessments to “written responses” that would be more likely to yield descriptive information about a student’s understanding. Alicia, a literacy coach, said that she worked with teachers to discuss and establish standards for what they would accept for written responses on the common formative assessments, a process she thought benefitted the teachers. Lena, a math coach, realized that students were failing to comprehend assessment prompts and so she
devised a strategy for students to use in reading the assessment questions before answering them. Dakota worked with teachers to incorporate opportunities for students, themselves, to correct their mathematics work and to reflect on their learning. The coaches’ responses suggest that their experience with National Board Certification prompted them to encourage teachers to take greater responsibility for using assessments to insure students were learning what the particular students needed to learn and thoroughly demonstrating that learning.

**Cognition: Assumption that Reflection on Instruction Leads to Improved Instruction & Student Learning**

When the participants described their work with teachers, they said that they engaged teachers in reflecting on their instruction. We can, therefore, assume that they were working to establish among their peers the related assumption that reflection leads to improved instruction and student learning. Sarah, an instructional coach in Washington said that teachers she worked with told her they were asking themselves reflective questions even when she was not there to prompt them to do so. She explained that this was similar to what happened with her through the National Board Certification process. While technically a practice, the implication is that the teachers, according to her report, are committing to the value or assumption that this will improve their subsequent teaching.

**Putting It All Together: Applying the National Board Certification Imprint Capabilities & Cognition to Professional Development with Teachers**

Katherine, who coordinated professional learning at the district level, transferred her understanding of the capabilities and cognition acquired from her National Board Certification experience to her work with a group of teachers in a professional development course. First, she utilized the aspect of the career imprint related to understanding students and then worked with teachers to implement a constructivist instructional strategy to address students’ learning needs. She read Zweirs’s *Academic Conversations* (2014) and saw that ELL
students in her district needed more opportunities to talk about academic content in order to build content language in English. She said that prior to the professional development, the tendency among teachers was to involve only a few students in whole class discussion. She said one example of this was the activity think-pair-share, where a teacher asks a question, pairs of students share their answers with each other, and then the teacher calls on a pair to share their answer with the class. Katherine observed that often one student dominated, depriving the other of the chance to practice language as well as demonstrate understanding of the subject matter. As a result, she designed a professional development course where teachers learned strategies to increase academic conversation. In one session, the teachers learned and practiced a strategy. Then, they filmed their classroom as they implemented the strategy and returned the following week to analyze it.

Katherine provided the successful example of a first grade class in which students were working on the mathematical concept of “putting together numbers to ten.” Each student drew an example of objects adding up to ten. Then, the students would circulate the room for conversations with other students. Each time a pair of students talked with another, they each had to present their example and explain how they got it. The student whose turn it was to listen would ask questions if he or she didn’t think the drawing or explanation made sense. Katherine said, “The amount of academic language in mathematics immediately skyrocketed. And the amount of kids having to process what they just did and articulate it was truly amazing.” She also recounted the teachers’ resultant learning, saying that they learned how much the students actually knew about the mathematical content once they were given “a way to express it.” Based on Katherine’s account, this suggests that the teachers were acquiring capabilities in constructivist pedagogy and observing and reflecting
on instructional practice. They also may have started to develop the belief that instruction centers on understanding students.

Katherine had the teachers in the professional development group fully apply the National Board Certification cognitions and capabilities to further their learning and that of their students. The professional development focused first on knowledge of students and the need to address academic needs of ELLs. Then, teachers were involved in setting goals specific to the needs of the students in their classroom, accounting for differentiation. Following that, they collected video evidence of classroom instruction to analyze the pedagogical approach and student learning, leading to revision based on their observations. Katherine commented that the teacher in this example went through a few iterations before she and her students mastered the technique, demonstrating a commitment to student learning. As a result of the training, Katherine indicated that teachers were impressed with what their students knew and were capable of knowing. With this awareness of what their students understood, they could then set new, higher goals for mathematics. For Katherine, the teachers she worked with were developing cognitive aspects that she had learned through National Board Certification and transferred to them, including a belief that knowing students is central to instruction and the assumption that reflecting continuously leads to instructional improvement.

SUMMARY

The participants in this study reported that they transferred much of what they learned or were recognized for with National Board Certification to their work as teacher leaders, thereby extending the legacy of the certification imprint to their peers. Confidence in their professional skills and capacity to stretch professionally led many of the participants to become teacher leaders. The capabilities that appeared to transfer most frequently and fully
were constructivist and differentiated instruction and understanding one’s students. The capabilities of observing and describing instruction and continuously reflecting were evident in their accounts of their work, but did not appear to have quite the same depth as when they described their experience with National Board Certification.

Most of the teacher leaders said that they encouraged teachers to use constructivist and differentiated pedagogical skills that they acquired or honed during the National Board Certification process. The participants described coaching teachers through the use of more student-centered and constructivist approaches to instruction, particularly student-to-student discussion, a feature of their National Board Certification portfolio. They assisted teachers in developing understanding of students by considering students’ individual learning needs prior to, during, and following instruction, such as when seeing where students needed to go next or if there were ways in which a family could assist a student. The exception to the transfer of this instructional capability was when mentors or consulting teachers worked with new teachers. In those instances, they said that they worked with teachers on more basic elements of instruction until the teachers became comfortable with daily instruction.

Nearly all of the participants said that they carried over the capability of observing and describing instruction to their work as teacher leaders. Many of them conducted observations and said that being able to describe instructional practices of teachers and connect them to standards or goals for instructional improvement, as they did for National Board Certification, was useful in their work with teachers. Many participants also aimed to foster these observational skills among their peers. In their responses, the teacher leaders suggested there was a direct connection between having videotaped themselves and having learned to observe and analyze their pedagogy. Aside from the few cases that I highlighted, however, there was an absence of this strategy in the participants’ descriptions of their work.
as teacher leaders. This can be explained in a number of ways. First, reviewing a videotape of a class lesson requires a substantial investment of time beyond having a conversation with a teacher. When the time was built in for such work, as is the case for teachers in Michelle’s school, this barrier was removed. Another explanation could be the persistent resistance among teachers to sharing their practice. Some of the teacher leaders indicated that they thought this was the case. In response to some of the barriers to videotaping, some of the participants used either a library of video clips of themselves teaching or professionally prepared teaching videos. They reported teachers gained observational skills from using these. However, this is not the same as analyzing one’s own practice as the participants did for National Board Certification.

The participants identified reflecting on instruction as an aspect of their National Board Certification experience that they encouraged among teachers. Most frequently, the teacher leaders reported doing this by asking teachers questions to probe their thinking about their instruction. Some of the participants described the types of questions they asked teachers to be similar to what they had to answer in preparing their National Board Certification portfolios. A number of the responses, however, revealed that some of the teacher leaders engaged teachers in what appeared to be more perfunctory reflection when compared with their descriptions of what they did for certification.

Of the cognitive aspects of the career imprint from National Board Certification, commitment to taking internal responsibility for student learning appeared to transfer most frequently for the participants. The cognitions of a belief that knowing one’s students should be at the center of instruction and that continuous reflection would lead to improved instruction and student learning were less explicit in their descriptions of their work, likely as a result of the focus of the interview. Nonetheless, across the different settings and roles that
they held, the teacher leaders worked to encourage teachers to commit to better understand their students, specifically, what their learning needs were and how they were learning the content of their instruction. They mostly cited examples of working with teachers in examining student work and designing assessments to develop these cognitions. What stood out in their responses – and what appears to be different from other approaches – was their reported aim of leading teachers toward designing instruction around the students, rather than trying to fit the students to a provided curriculum. Additionally, they said that they challenged teachers to uncover how individual students understood academic concepts and to then ascertain what steps they, as teachers, needed to take to ensure learning for their particular students. A few participants described strategies around knowledge of students and responsibility for student learning that did not display the same degree of depth when it came to formative assessments; they had teachers sort student work into rough categories of achievement and reteach a concept to those who had not met standard.

In one example, the participant described how she worked with teachers to implement an overall National Board-style approach, so that teachers had a professional learning experience that fully encompassed the imprint. She reported that the teachers implemented constructivist pedagogy and observed their practice through videotaped lessons. The capabilities of understanding one’s students and engaging in reflection were embedded in the process and appeared to build the related cognitive aspects of the imprint among teachers.

Most aspects of the career imprint appear to be carried over by NBCTs to their work as teacher leaders, thereby extending the imprint’s legacy to other teachers. However, certain elements appeared to transfer with less strength than others. I propose two theories as to why this might have been. First, National Board Certification is viewed, for many of the...
participants, as separate from teacher leadership work. As Theo, a consulting teacher in Lake

District commented:

I didn’t necessarily correlate that process [National Board Certification] with what I’m doing, but, clearly, that’s what we do as consulting teachers. We get teachers to a point where they’re doing that on their own, where they’re looking at their practices on their own, determining how it’s impacting students.

Lake District has teaching standards and professional growth expectations that are designed after those of NBPTS and they offer substantial support for candidates going through the certification process. National Board Certification has not been promoted as a process or set of principles and practices that might guide instructional improvement. Therefore, this apparent disconnect between the individual process of certification for NBCTs and subsequent work with teachers may explain why the entire imprint did not transfer. The other plausible explanation is that, like the examples by Cohen and Moffitt (2009), National Board Certification was laid over an existing system that has not invested in professional capital and support while requiring a high degree of external accountability for student achievement, which, in many ways, is at odds with the values and methodologies that make up the National Board Certification imprint.

Nonetheless, the apparent transference of aspects of the National Board Certification imprint suggest that, 1) NBCTs who hold teacher leadership positions are able to exert some agency despite limitations of the structures of schooling, and impart aspects of the career imprint to their colleagues and 2) if the external environment around schooling were to move toward a system embracing professional capacity-building, NBCTs could likely extend the imprint more fully. The presence of organizational supports appears to have facilitated a fuller extension of the imprint’s legacy by teacher leaders, a topic I will explore in the next chapter.
Chapter 6 – Policy Supports and Constraints on NBCT Capital in Teacher Leadership Roles

Higgins (2005) argues that, when leaders move to a new organization, they can “export” the career imprint as a legacy and that organizational factors can influence the degree to which an imprint’s legacy transfers. That proved to be true for NBCTs as well. I found that certain policies strengthened the teacher leaders’ ability to continuously draw on their experience and understanding of being an NBCT. These contextual factors included training and ongoing collaborative practice in teacher leadership skills; clearly-defined teaching standards that aligned with NBPTS standards and evaluation used for teacher development; and curriculum that involved students in deep learning of content. In the absence of these supports, the participants reported that they were less able to fully transfer what they understood from National Board Certification. Lastly, I describe how, in one case, a state network of supporting organizations built the professional confidence and connections of NBCTs as well as a system of policies that, I argue, contributed to NBCTs’ ability to extend the career imprint. I explain the benefits that the participants said accrued to their work as teacher leaders from this context. The table below summarizes how participants viewed district-level policies influencing the extent to which they could transfer the capabilities and cognitions from National Board Certification.
Table 8  

*Participants’ perceptions of influence of district-level policies on transference of National Board Certification capabilities and cognitions*

<table>
<thead>
<tr>
<th>Policy constraints</th>
<th>Policy supports</th>
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<tr>
<td><strong>Policy choice</strong></td>
<td><strong>Policy choice</strong></td>
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<tr>
<td>Perceived influence on transference of NB capabilities and cognitions</td>
<td>Perceived influence on transference of NB capabilities and cognitions</td>
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<tr>
<th>Training</th>
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<tr>
<td>Training focused on imparting district initiatives</td>
</tr>
<tr>
<td>Impeded ability to effectively work with adults on instruction</td>
</tr>
<tr>
<td>Provided skill neither evaluated nor developed through the National Board process, yet necessary for working effectively with adult learners</td>
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<tr>
<td>Ongoing collaboration among teacher leaders</td>
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<table>
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<tr>
<th>Teaching standards</th>
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<tbody>
<tr>
<td>Teacher evaluation used perfunctorily or without attention to teacher growth</td>
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<tr>
<td>Impeded NBCTs’ attempts to encourage a cognition and practice of continuous reflection for improvement among teachers</td>
</tr>
<tr>
<td>Facilitated exporting of capability and cognition related to continuous reflection on instruction and use of <em>Architecture of Accomplished Teaching</em> as approach to instructional improvement</td>
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<thead>
<tr>
<th>Curriculum</th>
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<tbody>
<tr>
<td>Scripted curriculum</td>
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<tr>
<td>Interfered with teacher leaders’ ability to train teachers in how to construct curriculum based on their particular students</td>
</tr>
<tr>
<td>Supported ability of teacher leaders to encourage constructivist and differentiated pedagogy among teachers</td>
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Support: Training in and Practicing Teacher Leadership Skills

National Board Certification is designed to identify accomplished teaching, including the capacity to collaborate with colleagues. However, the process does not specifically aim to evaluate or develop teachers’ leadership skills. For example, NBPTS standards include collaborating with peers, but not how to coach other teachers on instruction. I anticipated, therefore, that the teacher leaders in my study would point to the need for training in how to work with adult learners.

When asked about the skills, knowledge, and dispositions needed to do their work well, the teacher leaders frequently commented on a set of skills for building relationships and communicating with adult learners. They indicated that their experience with National Board Certification did not specifically address these skills. Yet these were capabilities that they reported they needed, in addition to the instructional expertise and understanding from being an NBCT. When they had such training, they said it enhanced their ability to apply what they learned from National Board Certification. Teacher leaders who were not supported with such training, namely those in Prairie and Mountain Districts, said that they thought such training would have benefitted them in working effectively with teachers.

Working with Adults on Instruction & Mentoring

Twenty-two of the twenty-five participants in Washington were trained in coaching adults, most through the support of their district. This included an emphasis on how to engage teachers in conversations about instructional practice, centered on skills such as listening and paraphrasing. They said that they gained an understanding of different stances, such as the difference between coaching and consulting. As Austin explained, coaching “is not necessarily coming and giving your opinion and not always giving suggestions on next steps.” Whereas with consulting or collaborating “you can share some of those ideas.” The
teacher leaders reported that they employed these skills when working with teachers one-on-one.

Many of the teacher leaders in Washington State were trained through the Mentor Academy, which had been a feature of the educational culture in Washington for decades. The three-day training drew teacher leaders from all over the state and was administered by the Office of the Superintendent of Public Instruction (OSPI). In addition to practicing how to have conversations about instruction with adults, mentors learned “strategies for conducting observations, gathering data, and providing feedback; effective classroom management; using instructional frameworks to promote growth; and confidentiality.” A second training helped mentors refine their skills and learn about “equitable classroom practices” (Office of the Superintendent of Public Instruction, 2017.) Several of those interviewed attested to the value of this training in their transition from teaching to coaching teachers. “You can be an amazing teacher and you aren’t necessarily the best mentor” said Taylor. She explained how, through the training, she learned to coach teachers to develop their capacity to make their own instructional decisions. Even when she made suggestions to new teachers, she provided a few different possible actions they could take and then asked them, “What one do you think will work best for your class and why?” Sophia, a mentor, explained how Mentor Academy showed her how to “be an active listener, and paraphrase and ask questions so that we’re helping grow teachers through their own reflection as opposed to just kind of putting out fires for them and telling them what to do.” This approach aligned nicely with the reflective practice most of the teacher leaders said that they developed through National Board Certification and continued to encourage among teachers.
As described in Chapter 5, Lake District trained all of its consulting teachers in *The Skillful Teacher* (Saphier, Haley-Speca & Gower, 2007) and a course designed by the county, “Analyzing and Observing Teaching.” The first training focused on skills that make up instructional practice and how to build those skills through experimentation and reflection. In the county’s training, teacher leaders learned to identify strong instructional practices and guide others through the process of developing them. The latter course trained leaders in how to clearly document and describe instruction when they were observing teachers. Theo, a consulting teacher, described the purpose of these courses as “basically creating a language, a common language to talk about teaching practice.” Also, consulting teachers (CTs) rotated back into the classroom after three-years; before they did so, they trained new CTs. Richard, another consulting teacher, explained that the training he received from exiting CTs was “the most important” because it took him “through every aspect of the job and let you know what it was going to look like and how to do certain things.” Instructional coaches in the district received monthly training as a cohort in the first two years as a coach. Topics covered in this training that Melissa found valuable included “establishing trust with the staff,” “how to do a root cause analysis to identify what student needs are,” and “what strategies can be implemented in our building to help staff really unpack and understand more deeply issues of race and equity around closing the achievement gap.” In both consulting teacher and coaching roles, the participants indicated the importance of having practical training on how to work with adults on instructional practice. This training complemented what they had learned or were recognized for with National Board Certification.
Ongoing Collaboration with other Teacher Leaders

While teacher leaders emphasized the value of initial training for their roles, most of the participants also indicated how important it was to practice and reflect on the skills they learned. Specifically, they appreciated the chance to discuss with other teacher leaders challenges that they experienced in their practice. Some teacher leaders, particularly those in Prairie and Mountain Districts, were not given time to collaborate with other teacher leaders on improving their skills in working with adult learners. As a result, they said that they tried to seek each other out for such conversations when they were together for training in other areas.

Teacher leaders in Washington State reported that they often had ongoing professional development with other coaches, whether within their district or at one of the regional Educational Service Districts, which hosted Mentoring Roundtables. These were meetings, typically held monthly, where mentors could exchange ideas and practice coaching skills. Sophia indicated that sometimes they discussed a case study of a mentoring situation. Other times, they worked in triads in mock coaching scenarios where one played the role of teacher, one the coach, and a third took notes for a follow-up reflection and discussion. She concluded that this allowed the mentors to “home in on our skills through practice.” Several of the coaches said they used this time to problem-solve around “difficult conversations that we sometimes have to have with teachers.” Alex said that coaches in his district divided their meeting time between practicing coaching skills and receiving updated information related to district content initiatives. In Garden District, the mentors said that they received ongoing professional development about how to use the Danielson framework, which guided teacher evaluation in the district, and other responsibilities the teacher leaders had, such as collecting
evidence of whether and how a teacher was meeting standards, which the mentors were responsible for sharing with new teachers in periodic professional development sessions.

In Lake District, consulting teachers and instructional coaches spoke of the importance of ongoing collaboration with colleagues in the same role. Richard said that the consulting teachers met formally on a monthly basis, but that informally they often contacted one another to solicit suggestions for helping a teacher who was struggling with a particular area of instruction, such as checking for understanding. He also said that consulting with colleagues was valuable because “they may have [had] a similar situation to mine [and, therefore, could] give me some feedback.” Mae, an instructional coach, said that she found connecting with other coaches in her “cluster” useful. By this, she meant she could collaborate with coaches who were in similar situations, serving schools with similar demographics, to gather suggestions for her work. She explained that the student body in her school had recently changed from having twenty-five percent students of color to sixty percent students of color (mostly Asian and Latino). In addition, twenty-five percent of the students were English Language Learners. Therefore, connecting with other teacher leaders for ideas in addressing new student needs was beneficial.

It appears that the teacher leaders who participated in ongoing professional development and collaboration were able to improve their coaching practice, a skill that they said they did not specifically develop or demonstrate through the National Board Certification process. They said that their training helped them guide teachers through giving a thoughtful rationale for their instructional decisions and to assess their teaching based on standards. Their description of the skills they practiced in their training as teacher leaders was consistent with what they said they developed through the National Board Certification process.
Most of the participants found that the teaching standards used to assess teachers they worked with were compatible with what they understood from the NBPTS standards. All of the sites where I collected data had established teaching frameworks and evaluation tools to assess teacher’s instructional practice. These systems went beyond the checklist evaluation tools once very common in many districts (Donaldson, 2009; Reinhorn &). Although only a few of the teacher leaders in this study directly evaluated teachers, many worked with teachers to understand the district’s standards and examine their practice in light of those standards. The participants said that, when their district’s teaching standards were clearly articulated and used by administrators as a tool for encouraging professional growth, they were able to more fully transfer the capabilities and cognition from their experience with National Board Certification to other teachers. When teaching frameworks were used solely to evaluate teachers or when competency levels were not understood or assessed consistently by administrators, the participants said it constrained their ability to transfer what they had learned through the National Board Certification process to other teachers.

Support Example: Growth-oriented use of teaching framework and evaluation

The teacher leaders in a district in Washington explained how their district and administrators used the teaching framework and evaluation tools to encourage professional growth. Rita, an instructional coach in Washington said:

So people were really pushing [us] as a district to get our learning targets and success criteria. That we’re not just doing it as a dog and pony show, but we’re really using it to drive student engagement and focus on what kids should be learning.

She said that, as a result of this focus on growth, teachers sought her out to work on areas of their instruction that they felt they needed to improve. Alex, another instructional coach in
the same Washington district, confirmed this understanding and connected it to his National Board Certification experience:

Rather than thinking of it as evaluation, we’re thinking of it more of, “How does this help us become better teachers?” And CEL [instructional framework] really lays out what good instruction is and what a good classroom environment is and to me, that’s really what National Board is all about.

This example suggests that a district’s growth-oriented perspective and implementation of teaching standards and evaluation support teacher leaders.

An additional way this Washington district appears to assist teacher leaders in transferring what they learned from National Board Certification to other teachers is the method for collecting and analyzing student data. Gina, a literacy coach in the same Washington district, said that teachers were expected to collect writing samples from a few focus students over time during the school year. This approach, which closely mirrors what she did for National Board certification, allowed Gina to work with teachers in identifying and attending to the needs of particular students in the teachers’ classes and to develop the cognition of continuous reflection developed through the National Board Certification process.

*Constraint Example: Culture of not using teaching framework and evaluation for teacher development*

The teacher leaders in Mountain District reported that evaluation of teachers was inconsistent and carried high-stakes and, as a result, limited their ability to work effectively with teachers on professional growth, using the skills and cognition they brought to their roles as NBCTs. One expectation for their role was to evaluate teachers using a teaching framework. Elena thought the teaching framework used by the district “captures the most important elements of teaching” but that “there’s no norming or calibration across the district.” She felt that this defeated the usefulness of the framework. One of the teacher leaders said that her principal and the teachers worked to find parts of the evaluation where
a teacher could make small changes in order to more easily move to a higher overall evaluation score, as opposed to focusing on the areas that a teacher may have most needed to improve. Three of the four teacher leaders expressed discomfort with evaluating teachers, especially because it was used to determine a part of a teacher’s compensation. The other teacher leader said that she refused to evaluate teachers and only worked on supporting teachers as a coach.

In Mountain District, teacher leaders were also expected to assist teachers with setting Student Learning Objectives and then to evaluate the teachers based on the SLO results. The score became part of the teacher’s record and was used to determine a part of the teacher’s salary. One teacher leader, Aubrey, taught in a magnet school where teachers had the same students for several years. She and the teachers in her department chose to set their SLO goals for the newest grade of students because they were more likely to show growth over the course of the year. This stood in contrast to selecting and monitoring a goal pertinent to an evident instructional challenge, as NBCTs were required to address through their National Board Certification portfolio.

Through the National Board Certification process, these participants said that they strengthened their ability to refine their practice through close analysis of their teaching practice and student learning, which they aimed to do as teacher leaders with their peers. The system of high-stakes evaluation and inconsistent understanding of levels of proficiency conflicted with what the teacher leaders believed based on National Board Certification and constrained their success in transferring the legacy of the National Board Certification imprint.
SUPPORTS AND CONSTRAINTS FOR CURRICULUM

NBPTS is very clear that it does not endorse any particular curriculum and that it is possible to certify using a variety of teaching methods. However, to meet the rigorous standards, teachers are required to engage students in learning that includes deep understanding of the content and learning processes associated with that content. Teachers also have to demonstrate that they have had an impact on student learning through designing and implementing lessons and units specific to the needs of the students in their classroom. Curriculum that is scripted makes that more difficult, if not impossible, to achieve. Scripted curriculum, often used for reading instruction, directs what teachers say during each lesson and provides structured timeframes for each activity in the lesson. In contrast, curriculum that centers on uncovering student understanding and the skillful adaptation of curriculum by teachers to advance student thinking facilitates the process of deep learning.

The participants described how curricular decisions by their districts influenced their capacity to transfer the instructional skills and cognition they developed or demonstrated through the National Board Certification process to the teachers with whom they work. Some of the participants stressed how requiring teachers to use a scripted curriculum contradicted the professionalism they had acquired through National Board Certification. There was evidence from Prairie District that some of the teacher leaders thought the students in their schools needed more skill-based curriculum than the district’s reading workshop model provided. They pointed to the Board’s proposition on “knowledge of students” to convince their administrators that curriculum needed to be adjusted to meet the needs of the students in their particular schools.
Support Example: Ambitious Science Program

One example of curricular support for transferring the constructivist and differentiated instruction aspects of the National Board Certification imprint was the Ambitious Science program provided by the University of Washington. The program administrators worked with science educators in several districts to acquire techniques for deeper learning of science. Two areas of focus brought up by participants in this study were encouraging equitable participation in class discussions and uncovering student’s conceptual understanding. The two science coaches interviewed said that they found this program aligned closely with what they learned through their National Board experience. Diane said that the program helped her in working with teachers on goals for more equitable participation by students in science classes. Celia said the Ambitious Science program developed teachers’ instructional skills for “deep, conceptual change learning of science.” She remembered that, during the National Board Certification process, she “was having a hard time with facilitating student discourse, structuring those tasks in a way that really forced students to engage with those big ideas.” Celia thought the Ambitious Science program helped her to develop those skills further and coach other teachers to use them.

While the sample of participants is small, the responses of these teacher leaders suggest pedagogical content initiatives that aim at deeper student thinking, communicating, and learning align well with what they learned or demonstrated through National Board. Curricular supports in the area of content pedagogy deepened their knowledge and skills in the areas that were the most challenging for them during the National Board Certification process.
Karina, a coach in Mountain District, said that through the National Board Certification process, she learned how to integrate subject matter at the elementary level. For instance, she said she learned how to use social studies for students to gain literacy skills. She explained that the students in her school often did not have the experiential background to make meaning of the literature they were reading, so she pulled in resources to build that knowledge. As a result, she said her students had a deeper understanding of the material and demonstrated competency on state assessments. Her work as a teacher leader involved assisting other teachers in learning how to do that.

However, the district had recently adopted a scripted curriculum for elementary reading. Karina said that she was told to no longer teach science and social studies and to focus solely on reading and, as a teacher leader, to work with teachers only on reading. This decision was at odds with her understanding of National Board standards. She said that she was thinking through how she might use and share some of her strategies while complying with the curriculum. However, she said she was thinking about deciding to “close her door” in order to teach according to her professional knowledge. This, of course, would be in violation of the core proposition regarding professional collaboration. And she did go on to explain how she would use “the little wiggle room in guided reading” to help teachers learn teaching strategies she gained through National Board Certification. But her comment underscores the level of frustration she apparently experienced over the curriculum decision. The example suggests how certain types of curriculum can become substantial, if not insurmountable, barriers to some teacher leaders’ enacting what they understand about teaching and learning from being NBCTs.
Elena, who worked in the same district, said, “Don’t keep buying new curriculum; instead spend that money teaching teachers how to teach reading.” Inherent in the National Board Certification, she thought, was the idea that, “You’re an expert practitioner and that’s not the same as someone who can pick up a curriculum.” By this she meant that teaching requires more skillful planning and instructing than simply presenting lessons out of an adopted textbook. Elena, a second-stage teacher, had seen teachers with far less experience and without National Board Certification leading literacy instruction in the district. She saw in their teaching a lack of “deep content knowledge and strong instructional practices.” The conflict between scripted literacy curriculum and the confidence from National Board Certification in designing curriculum appropriate for student influenced the degree to which teacher leaders said they could transfer skills from the National Board Certification imprint.

**CHANGING THE CONTEXT**

Some of the NBCTs who held roles as teacher leaders said that they were able to exert or contribute their leadership in order to successfully change policy context in order to make it more conducive to extending the National Board Certification career imprint’s legacy. In one example, an NBCT said that he influenced policy decisions at the district or state level to improve the understanding and implementation of content-related decisions. In two other cases, NBCTs created district-level roles for themselves, which enabled them to construct and implement district-wide professional development programs for teachers in their first five years of teaching. They modeled the professional development after the National Board Certification approach, having teachers meet in cohorts and emphasizing the Board’s *Five Core Propositions* (see Appendix D) and the *Architecture of Accomplished* framework for improving instruction (see Appendix A). And, in the case of Washington State, a coalition of organizations and NBCTs took the seed of the Board’s vision that NBCTs lead
the profession and developed a statewide teacher leadership network. The network both supported and extended the leadership of NBCTs, and thereby, the career imprint’s legacy. The cases were nested; the example of an individual exerting influence on district science policy occurred in one of the districts with a comprehensive National Board-style professional development program. The districts with those professional development programs were located within Washington State and the teacher leaders reported that they were extensively involved with the teacher leadership network.

*Changing district or state policy regarding academic content*

John, who provided professional development in math and science in a Washington district, said that he successfully advocated for changes in district policy to support science. He identified three needs: recognition that science should be taught K-5, greater financial support for professional development in science, and a revision of the seventeen year-old science curriculum. He found himself in a “quandary” because he was a teacher leader, not an administrator. And yet the professional understanding that he said that he developed through National Board Certification led him to recognize what was needed to meet the needs of students. And yet he needed endorsement and support from administration at the district level to address those needs. He worked to “educate” his supervisor and other central office administrators on these two issues. He said that his efforts, together with those of colleagues, resulted in the hiring of a science director and a move toward greater attention to science education by central office administrators. John used his professional knowledge to influence policy. This example suggests how a teacher leader can use his or her expertise, affirmed by the National Board, to alter a context. In this case, John achieved the content-related supports needed in order to fully enact what he learned through certification with other teachers.
Designing professional development programs

A few of the participants had the opportunity to create professional learning programs in their districts. These teacher leaders not only worked as coaches and professional developers, but also orchestrated the professional development offerings and trained staff to lead them. In particular, two participants from different districts in Washington each sought to create a five-year continuum of professional growth for the teachers in their district. As the teacher leaders described the process, first- and second-year teachers received mentoring support, third- and fourth-year teachers received support as they went through ProCert, a state required portfolio-based process that was similar to, but less rigorous than National Board Certification. In their fifth year, those who chose to pursue National Board Certification were provided support by the teacher leader and her staff. Some teachers elected to go through National Board Certification earlier than their fifth year of teaching, in lieu of the state’s professional certification, and they received cohort support if they did.

In the two cases where the teacher leaders established a comprehensive system of professional development geared to different stages in teachers’ careers, the teacher leaders were quite involved in the state National Board Certification network, which I will describe in more detail below. Based on their experience with the network, they thought about what professional development teachers in their districts needed and then worked with district administrators to bring those plans to fruition. The Architecture of Accomplished Teaching (see Appendix A) and skills these teacher leaders had acquired through working within the state NBCT and educational network were infused into the work they did across the district with teachers at different levels of experience. For example, John explained how, in his district, professional learning was organized using cohorts of teachers similar to those used in the
state for National Board Certification, and emphasized evidence-based discussion and reflection. He had viewed veteran teachers in his district as being competent in using the conventional instructional approach of delivery and testing, and thought that his work should guide veterans through the change from “I’ve always done it this way” to “How do we know it’s working for students?” He said that professional learning focused on how to incorporate what and how students were learning so that teachers could adjust their instruction to ensure that students were learning. He said that this was a mindset he learned during the National Board Certification process, which was highly consistent with the way he facilitated professional development for teachers. Dorothy, who designed and oversaw professional learning for teachers in her district, said that her superintendent supported the program of professional learning that centered on continuously reflecting and revising instruction. She said that one way the superintendent supported this work was by emphasizing to teachers that it was a professional expectation that they would work with a coach. Dorothy said that she saw reflection-based teaching increasingly taking hold as newer teachers entered and some veterans retired.

Creating and growing a statewide teacher leadership network

Newly certified NBTCs in Washington were welcomed into a statewide network. An NBCT leadership conference, regular email communication and regional NBCT networking groups served as mechanisms for informing NBCTs about educational policies and opportunities for training and participation in leadership activities. Opportunities include advocating for improved educational policies at the local or state level and becoming an NBCT cohort facilitator. The statewide NBCT network also connected NBCTs with trainings and other supports presented in the section on training offered by the primary partners – the Office of the Superintendent of Public Instruction, the Washington
Education Association, and the non-profit Center for Strengthening the Teaching Profession. Some of the participants from Washington had little or no involvement in the network at the time of the interviews, citing reasons ranging from a lack of time to being “not much of a joiner.” Of these, some planned to participate in the future. No negative comments regarding the network emerged in the data.

Envisioning teacher leadership following National Board Certification

Washington State’s NBCT leadership conference served as a formative experience for the participants with substantial involvement in the network. Ray recounted how he learned of the network following certification: “It seemed like seconds later getting an email from Terese Emry at CSTP to talk about a teacher leadership conference in Leavenworth at Sleeping Lady.” At the weekend conference, new NBCTs were recognized for their accomplishment and introduced to what CSTP’s founder Jeanne Harmon called, “the sixth core proposition,” that NBCTs will lead and influence educational policy. At the conference, NBCTs were asked to explore opportunities and choose a leadership path commensurate with their skills and interests. Dorothy explained what she perceived as the benefits of the leadership conference, “I do think it allows teachers who are at that conference to see themselves, whether they’re in a defined role in the classroom or not, as a leader.” For her, the experience “just cracked the door [to leadership] wide open.”

Networking to strengthen programs

The teacher leaders in Washington found the ability to network with others across the state valuable because they reported that they could draw on the expertise of their fellow NBCTs. For example, when Taylor needed to identify expert teachers for her mentees to observe, she contacted members of her NBCT candidate cohort. The instructional coaches in the sample who had responsibility for designing district-wide professional development
programs said that their connections through the National Board Certification network enhanced their teacher leadership work. For example, Ray said that he used other NBCTs in similar roles as a sounding board for his ideas before implementing them in his district. Dorothy wanted to expand cohort-type professional development for teachers going through ProCert (the state’s portfolio-based, second-tier certification). She contacted Katherine, an NBCT who had created a ProCert cohort program in another district. She used Katherine’s knowledgeable advice and experience to help her design a similar program for her own district. These teacher leaders had built professional relationships with other NBCTs that they then used to strengthen their own teacher leadership work.

**Skill-building through facilitation**

Several of the teacher leaders in this study worked as facilitators for National Board Certification or Jump Start and Home Stretch. Through facilitating National Board Certification cohorts, teacher leaders gained experience in leading and encouraging collaboration among adult learners. They also had the opportunity to observe additional examples of teachers demonstrating their own understanding of accomplished teaching. Subsequently, they brought this experience to their district leadership role. For example, by facilitating National Board Certification cohorts for fifteen years, Katherine said she became much more familiar with the expectations and processes for the portfolio entries. She drew on this experience to create a similar cohort-style professional development opportunities for teachers in her district. Previously, I described how she worked with teachers on developing ELL students’ content language and in designing a continuum of professional development for teachers in their first five years of teaching.

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3 Jump Start and Home Stretch were workshops offered by the Washington Education Association to assist National Board Certification candidates organize their portfolio work at the beginning and just prior to the submission deadline.
Regional and state level advocacy

A few of the participants in the network said that their involvement had resulted in changes to the educational context at the state level. For instance, through National Board Certification, Raquel learned that English Language Learning has a fifth domain – visual literacy, which was not evident in the state certification endorsement for ELL teachers. As a member of a committee reviewing the endorsement, she was able to successfully advocate for its inclusion. Likewise, John, an instructional specialist in math and science, was recruited to help develop the new state science assessment to be used with the Common Core, which he said he drew upon his knowledge as an NBCT.

Summary

The participants in this study said that what they learned or were recognized for through National Board Certification was important in their work with teachers. However, it was insufficient for them to fully export the career imprint of National Board Certification to teachers with whom they worked as coaches, mentors, or consulting teachers. Organizational supports that the participants said strengthened transference of the National Board Certification legacy to other teachers included: training and ongoing collaboration for teacher leaders that focused on working with adult learners; teaching standards that aligned with NBPTS standards and were used to encourage growth; and curricula that facilitates deep learning by students. When district and state policies were coherent with the underlying NBPTS principles for teaching and learning, participants appeared better able to extend the imprint more completely to other teachers.

Teacher leaders who were NBCTs reported that when their district used scripted curricula or teacher evaluations without attention to teacher learning, this contradicted what they learned through National Board Certification. This, in turn, impeded their capacity to
transfer professional knowledge and cognition developed through the certification process to their colleagues. In particular, they questioned why a district would invest in a scripted curriculum rather than investing in the professional skills of teachers. They said teachers’ instructional capacity could be better served with professional development and use of teaching standards to encourage instructional improvement. Also, when teaching standards were used perfunctorily or merely to retain or dismiss teachers, NBCTs said this hindered their ability to export aspects of the National Board Certification imprint. In particular, they found it more difficult to convince other teachers to reflect on and refine the areas of their instruction and student learning in most need of improvement.

In a few instances, NBCTs were able, according to their reports, to substantially influence the contexts in which they worked and thus, more fully export the National Board Certification imprint to other teachers. They were able to successfully advocate for policy changes in curriculum and design of district-wide professional development. In the case of Washington, a statewide network strengthened teacher leadership and policy advocacy by NBCTs at the district, regional, and statewide levels. In Washington, a number of educational organizations and policymakers have come together to work on creating a comprehensive approach to teacher development and teacher leadership. Although in the cases presented, these teacher leaders were able to exert their agency to successfully change policy, one participant raised the concern that the approach appears to be more of one that “bubbles up” rather than one where NBCTs are systematically placed in district and state-level leadership roles that oversee policies related to teaching and learning. He thought that districts should purposefully seek out and “tap into what exists within the district and honor that knowledge that our teachers have.” His comments suggested that this would be an even
more cohesive, strategic approach to teacher development as well as providing opportunities for teachers to gain some career fulfillment.

Overall, the findings suggest that organizational policy choices at the district, regional, and state level can empower teacher leaders to more fully transfer what they learned or were recognized for with National Board Certification as they work with colleagues and extend the legacy of the career imprint. The evidence of personal and collective agency to change the contexts within which these teacher leaders worked further suggests how other districts and states, as well as the Board itself, could better implement its goal of promoting teacher leadership of the profession.
Chapter 7 – Summary & Implications

SUMMARY

In interviewing NBCTs who worked in formal positions as mentors, instructional coaches, or consulting teachers, I found that the process of National Board Certification “imprinted” (Higgins, 2005) the participants with a set of capabilities and cognitions, which they appeared to transfer to others in their work as teacher leaders. According to their reports, the imprint began when they considered whether to apply to become a candidate for National Board Certification. They chose to pursue certification because of its professional challenge, and, in some cases, for the recognition it brought. For nearly all of the participants, their decision to pursue certification was spurred by the testimony of trusted colleagues or administrators, underscoring the importance of professional connections in introducing potential candidates to the process. This suggests that they were responding to the imprint of those who had certified before them. By applying, the participants had shown their confidence that they would be able to demonstrate accomplished teaching. Surprisingly, the responses from the participants revealed that they seemed to have had little direct knowledge of the specific skills and cognitions they might have expected to develop through the certification process.

During their candidacy, the participants reported that they developed a set of capabilities and cognitions related to instructional practice. The capabilities the participants described were skills in understanding their students, engaging in constructivist and differentiated instruction, observing and describing, and reflecting continuously on instructional practice. Many said their understanding of teaching shifted from a practice of delivering knowledge to a practice of facilitating student learning through such methods as class discussion and feedback on student work. The participants said that by examining their instruction intensely and
thoroughly for their portfolio entries, they gained objectivity about their teaching, which enabled them to subsequently make changes to improve student learning. This differed from other approaches in that they said they developed the habit of understanding their students as the starting point from which they designed instruction and reflected on its impact on student learning. By completing their portfolio entries, they said that they acquired or deepened their reflective stance, continuously planning, teaching, collecting and examining evidence of student learning, and refining their instruction. The related cognitive imprint from their National Board Certification included a *belief in knowing their students as the foundation of instruction, a commitment to developing an internal responsibility for student learning, and the assumption that reflecting continuously on their instructional practice would lead to improvement.* It appeared that the principles and practices integrated into the process of certification led several of the participants to integrate these assumptions into their work on instruction as teachers and as teacher leaders.

Professional confidence did not figure prominently in their reports of their experience during candidacy for National Board Certification. However, after successfully certifying, the participants said that they had confidence in their strengths as well as the ability to acknowledge and address weaknesses in their instruction. Part of their professional efficacy included stretching themselves professionally, which led many of the participants to seek out roles as teacher leaders. There was insufficient evidence to ascertain a pattern in connections for the participants. They did not refer to connections naturally as a part of their experience, but it may be an area worthy of further investigation.

As teacher leaders, the participants reported that they transferred parts of the imprint from National Board Certification to teachers they coached or mentored. In particular, they worked with teachers to develop constructivist pedagogy and differentiated instruction. For
instance, they described working with teachers to facilitate rather than direct classroom
discussion and to anticipate individual student needs in their lesson planning. Most of the
participants said that they used skills in observation that they acquired or refined through the
National Board Certification process to subsequently describe the instruction of teachers
with whom they worked and to encourage those teachers to be more observant of their
instruction. It was surprising, however, to find that only a few of the participants regularly
used videotaping with teachers, the activity during National Board Certification that they
said strongly helped them develop those observational skills.

The participants reported that they worked to develop teachers’ skills in
understanding their students, often by encouraging teachers to examine a student’s work to
see how he or she understood a concept not just if the student understood a concept. This
indirectly suggested that they were also working to instill the cognition of a belief in knowing
one’s students as central to instruction. Then, they said they probed teachers to identify what
step would be next for each student’s learning and then to build their instructional plan
around that. Many also said that working with teachers on the quality of the assessments
they used was one way they encouraged teachers to take greater responsibility for student
learning. Nearly all of the participants said that they asked teachers to reflect on their
instruction. However, the descriptions of their work with teachers on reflection appeared to
be less thorough than the habit of reflection they said they had acquired through National
Board Certification.

The extent to which a career imprint’s legacy is “exported” to an organization
depends on a number of organizational factors (Higgins, 2005). In this study, the career
imprint from National Board Certification did not appear to be sufficient in itself for
NBCTs to feel they could fully export what they learned through the process to their peers.
Certification solidified their ways of understanding and executing instruction for effective student learning, but the process did not provide them with skills in communicating and working with adult learners. The participants reported that training and ongoing collaboration in working with adult learners on instruction, particularly how to converse reflectively with teachers about instruction strengthened their ability to transfer aspects of the imprint to teachers. Well-defined teaching standards that align with those of NBPTS and are used to foster professional growth were also cited as being important in transferring what they knew as NBCTs. In addition, participants said that they could more fully expand the legacy of the National Board Certification imprint when the curricula adopted by their school or district were consistent with the constructivist instructional approaches that they honed through certification.

In contrast, participants said that certain district policies severely hindered their ability to export the imprint to their peers. When a district required use of a scripted curriculum, this reportedly impeded NBCTs’ ability to fully export the skills and cognition they had developed through National Board Certification. This was illustrated in the example of Karina, who learned to bring in supplementary materials and thought that her district’s scripted curriculum was preventing the teachers from developing a learning progression based on their professional knowledge of their students. The respondents also said that when teacher evaluations were used perfunctorily, inconsistently, or to dismiss teachers without ongoing support for improvement, this contradicted the skills and values about instructional improvement developed through National Board Certification. They said this made their work with teachers on instructional improvement much harder to accomplish.

My analysis provided unique cases in which NBCTs were able to alter the context in which they worked in order to more fully infuse the career imprint into their work with
teachers. From reporting that they successfully changed a district’s curriculum and support for a content area to describing how they developed a systematic approach to teachers’ professional development in the teachers’ first five years of teaching based on a National Board Certification model, these participants appeared to use their skills and cognitions to advocate for change that would expose more teachers to aspects of the imprint. In the case of Washington State, a coalition of organizations and NBCTs cultivated the professional confidence and connections post-certification, and provided teacher leadership training. NBCTs who elected to participate in the networks activities were able to receive training in how to work with adults, guidance in selecting and implementing a personal plan for teacher leadership, access to supports such as leadership grants to initiate teacher leadership work in their districts, and collaboration with other experienced teacher leaders as they carried out their work.

Overall, National Board Certification appeared to imprint candidates with a particular set of capabilities and cognitions closely tied to instruction, which they subsequently transferred to their work as teacher leaders. This imprint appeared to transfer more completely when organizational supports for professional growth and training for teacher leaders were in place. The findings suggest possible implications for policy and practice as well as areas for further study.

**IMPLICATIONS FOR POLICY & PRACTICE**

*National Board for Professional Teaching Standards*

National Board Certification, as it is commonly used across the country, serves as a method for certifying accomplished teachers and, in some cases, rewarding them monetarily. Typically, less attention has been give to how their demonstrated capabilities might be employed to boost the instructional capacity of their peers in schools and districts. The
Board’s efforts appear to be primarily focused on increasing the number of certified teachers. Based on my analysis of interviews with a sample of teacher leaders who were also NBCTs, I propose the following recommendations. The Board could thereby build on the imprint through leadership and advocacy for teacher leadership roles and the conditions that would further the Board’s instructional principles.

Part of the vision laid out for the Board in *A Nation Prepared* (Carnegie Forum on Education and the Economy, 1986), was the expectation that NBCTs would become lead teachers and, thereby, extend their expertise to improve teaching and learning in schools beyond their own classrooms. However, there is little evidence that the Board has developed or promoted this vision. NBPTS could extend its influence by first recognizing the potential of promoting the human capital of NBCTs in furthering instructional improvement beyond their own classrooms. Also, the Board’s standards, principles, and practices of accomplished teaching ought to be used throughout the profession to guide teachers toward ultimately meeting those standards. Additionally, this study suggests that by advancing teachers’ reliance on NBPTS standards, principles, and practices, the Board could foster an environment in which NBCTs, whether working as classroom teachers or teacher leaders, could better implement what they learned or demonstrated through the certification process.

In order to accomplish these goals, the Board should increase its collaboration with state education agencies and national education organizations representing policy decision-makers such as school boards and superintendents, including the National School Boards Association and the Association for Supervision and Curriculum Development.

**Advocacy for National Board Certification principles**

As Cohen and Moffitt (2009) explain, for wide-scale educational reforms to succeed, the professionals have to become advocates for the environmental factors and supports that
are necessary for change to occur. As demonstrated in the case of Washington State, a coalition of key stakeholder organizations and NBCTs did just that. NBCTs informed and advocated for district and statewide policies, which appeared to move the educational system toward becoming an environment conducive to the types of instructional capabilities and cognition in the National Board Certification imprint. One of the participants said that he would like to see this go further, with NBCTs selected for leadership roles at all levels of the system. The National Board has publicized this case (National Board for Professional Teaching Standards, 2010). They might consider what specific policies are necessary to support the further diffusion of NBPTS principles and practices. They could then advocate for these principles and practices, above and beyond advocating for certification itself, working together with other state and national organizations to achieve these aims.

Promotion of NBCTs as teacher leaders

First, NBPTS could identify the types of roles NBCTs are well-qualified to fill and why. The findings from this study suggest there are particular capabilities, cognitions, and confidence that NBCTs could bring to the roles of mentors, instructional coaches, and PAR consulting teachers as well as district and state-level providers of professional development. Then, based on studies such as this one, they might detail how NBCTs in leadership roles might apply the standards, principles, and practices they demonstrated through certification. The Board should work collaboratively with other professional organizations, networks, and policymakers to explicitly communicate to districts the advantages of using both NBPTS principles and practices and hiring NBCTs into leadership roles.

Training and ongoing collaboration in leading adults

The career imprint from National Board Certification was, in itself, insufficient for teacher leaders to export to other teachers. The NBCTs said that they needed training in
how to effectively guide teachers' learning through reflective questioning. Not all models for training coaches emphasize this approach. The Board should consider developing its own training model or providing guidelines for training coaches that align with the cognition and capabilities of the career imprint. My understanding is that the ATLAS program of teaching videos developed by the Board is a tool that could be used in this way. Detailing a comprehensive model of coaching training and maintaining ongoing collaboration among teacher leaders that builds on National Board principles could facilitate extension of the imprint and vision for the teaching profession.

Teacher Leadership Certification

A Nation Prepared (Carnegie Forum on Education and the Economy, 1986) envisioned that NBCTs would work as lead teachers. Most of the participants in this study said that National Board Certification was a preferred qualification in selecting teacher leaders. However, they identified necessary skills in leading adults that were not required or demonstrated for certification. NBPTS could create an additional certificate specifically for NBCTs who are teacher leaders, which would highlight the importance of demonstrating skills of leadership and collaboration beyond what was required for their original National Board Certification. This should include one or more portfolio components for which teacher leaders need to demonstrate their work with colleagues, for instance, showing in a video how they collaborated with a teacher or guided a teacher with open-ended questions to encourage self-reflection. Just as the development of National Board Certification, arguably, has contributed to the move toward portfolio-based teacher evaluation, a certificate for the role of teacher leader could lead the way toward legitimizing teacher leadership roles and establishing criteria for defining and recognizing accomplished teacher leadership. Some of the participants suggested this and would welcome its introduction. NBPTS might want to
consider an introductory certificate for teachers seeking to become teacher leaders as well as a one for accomplished teacher leaders.

**Pre-candidacy for National Board Certification**

NBPTS could more purposefully represent the imprint up front to potential candidates. Many of the participants said that going through the process had changed their understanding and approach to teaching and learning. NBPTS could describe how the process can contribute to this shift in instructional skills and cognition. The Board could also highlight NBCTs who have moved into teacher leadership roles and how the capabilities and mindsets they developed through certification transfer to that work. Making the career imprint of National Board Certification more explicit to potential candidates could strengthen the environment for attracting more potential leaders.

**School Districts & State Departments of Education**

This study suggests that National Board Certification can develop or strengthen a particular set of capabilities and cognitive habits that enable NBCTs to design, carry out, and refine their instruction based on the individual students in their classrooms and to assume internal responsibility for students’ substantive learning. The imprint appears to empower NBCTs to understand and meet the learning needs of an increasingly diverse group of students. The career imprint appears to include many of the elements recommended by researchers to increase professional capital and thereby transform teaching such as professional knowledge, judgment, and continuous, inquiry-based professional development (Cuban, 2013; Darling-Hammond et al., 2014; Hargreaves & Fullan, 2012; Mehta, 2013). Therefore, districts that are intent on improving student learning should consider how to consistently support policies that foster development and extension of the principles and practices underlying the National Board Certification imprint. Such policies could foster
accomplished teaching, the ability of teacher leaders who have demonstrated accomplished teaching to instill similar practices and commitments among their peers, and influence student learning.

First, districts and states should look closely at the nature of their teaching standards and how they are used. Do the standards align with those of the NBPTS? Do teachers and principals across districts and states share a consistent understanding of different levels of proficiency for the standards? Do teachers and principals receive sufficient professional development so that they understand the standards and how to use them for meaningful growth over the course of a year or years? A few of the teacher leaders I interviewed designed district-wide professional development to encompass teachers’ growth during the first several years of their teaching. They utilized an approach modeled after National Board Certification, which could be replicated by other districts. Are the teaching standards, professional development, and evaluation coordinated in a supportive environment? Do teachers and principals focus on those areas in which they personally need to improve?

Attention to the implementation of teaching standards would increase the likelihood that aspects of the National Board Certification imprint, especially learning to observe instruction objectively and continuously reflect on instructional practice could take hold. This could lead to substantive and sustained improvement in teaching and learning.

Districts and states should also examine their choices in curriculum. Teacher leaders in this study said they were severely constrained in their ability to extend the National Board Certification imprint when teachers were required to use a scripted curriculum. Those who were supported with constructivist curriculum and professional development, such as the Ambitious Science program, said they were able to more fully extend to other teachers the skills and cognition they developed through Nation Board Certification. Districts and states
should consider the following questions. Do adopted curricula foster deep learning among students? By using the materials, do the students have to construct their understanding of concepts or are they merely regurgitating facts or algorithms? Do the materials allow for teachers to construct learning progressions centered on the needs and interests of their students? Do teachers receive professional development in how to facilitate student discourse and learning progressions based on how students understand concepts? Careful selection of curricular materials and supports could contribute to an environment that encourages accomplished teaching.

In an environment that espouses the principles of accomplished teaching, districts would be wise to recognize NBCTs as an asset and capitalize on the imprint they bring to their districts. To do so, they could systematically 1) support candidates through the certification process, 2) select NBCTs for teacher leadership roles, 3) train teacher leaders in how to lead adults and 4) expand the number and types of leadership roles. Most of the participants in this study said that their status as NBCTs enhanced their applications for teacher leadership positions, although not always overtly. In districts such as Lake District, National Board Certification is clearly identified as a preference in teacher leader job announcements. The participants I interviewed said that training and ongoing collaboration among teacher leaders to practice skills in mentoring and coaching teachers on instructional matters were essential additions to the instructional skills and cognition from their experience with National Board Certification. Not all coaching models are consistent with a student-centered approach to instruction, so districts wanting to build on the capacity of teacher leaders, including those who are NBCTs, should select training carefully. Finally, the participants in this study said that through videotaping for certification, they gained objectivity about their instruction. Therefore, in order to support teacher leaders, districts
should consider making videotaping of instruction a piece of the work that happens between teachers and teacher leaders and provide technical support.

Districts that seek to capitalize on the skills and knowledge of NBCTs should consider expanding district-level leadership roles for them. Developing cohort-based professional development for the teachers in their districts, as Katherine did, is an approach districts could replicate in order to comprehensively integrate National Board processes and cognitions into teachers’ practice. Additionally, districts should consider making NBCT status a preferred qualification for central office positions centered on curriculum and instruction. This could further extend the National Board Certification imprint and contribute to a cohesive system of professional growth. Through the leadership of NBCTs, this could have the additional benefit of aligning district-adopted curricular materials with high-caliber instructional practices.

Similarly, states seeking to improve student learning based on the principles underlying the National Board’s understanding of teaching should consider promoting to state-level leadership roles NBCTs who are guided by that imprint. One participant commented that leadership opportunities tended to “bubble up” from the pool of NBCTs in his state of Washington. States should consider formally inviting and stating their preference for NBCTs in such leadership roles as assessment designers, curriculum developers, professional development providers (at the state level), and entities overseeing professional standards and certification. In this way, more accomplished teachers can become gatekeepers and cultivators of their profession. Washington State recently appointed an NBCT as Deputy Superintendent in Educational Policy and Professional Standards. She had experience teaching in a school with diverse needs and work on National Board Certification and teacher evaluation for the state. Other states could benefit from following this example.
Through accounts of their practice as teacher leaders, participants in this study described how they transferred the legacy of the National Board Certification imprint to other teachers, supporting them to develop similar expert practices. In the state of Washington, NBCTs are encouraged to take on leadership work following certification in order to further the legacy of what they learned, but there is not yet a formal designation of the role in the state’s career ladder. Other states and districts, including those with a substantial percentage of NBCTs should consider legitimizing the work of teacher leadership by adding a career ladder step on the salary schedule for teachers who work in formal teacher leadership roles as mentors, coaches, or PAR consulting teachers. They could make NBCT status a qualification for such a step.

*Teachers & NBCTs*

Teachers who are considering future work as teacher leaders might consider how they could benefit from understanding that National Board Certification does, according to these participants, provide essential understanding and capabilities that enhanced their work with teachers. This set of skills and cognitions about how to improve teaching and learning could be valuable for other teacher leaders. Although only a few of the participants in this study certified after becoming a teacher leader, they attested to the value of the process for their work.

The NBCTs in this study stressed the importance of organizational supports, including training, ongoing collaboration with fellow teacher leaders, clearly-defined teaching standards used as a tool for professional growth and curriculum that facilitates rather than dictates teaching practice and student learning. Therefore, it follows that NBCTs seeking teacher leadership roles may want to consider negotiating for these supports or working in districts that offer these supports to their teacher leaders.
I found that NBCTs varied in the ways they implemented the imprint from National Board Certification. NBCTs already in formal teacher leadership roles may want to look for ways to introduce aspects of the National Board Certification more directly to the teachers with whom they work. The participants in this study indicated that by going through the National Board Certification process, they gained or improved their capacity to examine and overcome challenges in their teaching practice. And, by sharing that experience, several participants felt that they were able to build rapport with teachers. Teacher leaders who are NBCTs might consider the ways in which they could articulate for their peers how they learned to examine their practice more objectively and then take steps to instill these habits among their peers to improve instruction.

Teacher leaders should use videotaping in their coaching more frequently and consistently. Several participants said that videotaping for National Board Certification was instrumental in developing, as one participant described it, an objective “observational disposition” toward their instruction and they found it valuable when they did use it with teachers. Participants gave many examples of working with teachers who were working to better meet the diverse needs of learners. Teacher leaders who are NBCTs might consider how using National Board approaches, such as videotaping, as a way for teachers to gain instructional competence for working with the growing diversity of students in schools. Katherine’s account of engaging teachers in building ELL students’ content language through teachers’ analysis of strategies offers a useful example of how other teacher leaders could introduce and explain the benefits of this tool to teachers in a less threatening way. Initially focusing with a small group of teachers on a strategy could ease the introduction of video-recording into teachers’ practice. Another possibility for a reluctant teacher would be
to have him or her record and then review his or her own teaching practice and then pose an issue of practice to work on with the coach.

**Implications for Research**

This exploratory study relied on the self-reports of NBCTs. In order to confirm the actual transference of the imprint to other teachers, it would be important to interview those teachers who have been coached or mentored by NBCTs. This study primarily showed what capabilities and cognitions the participants said transferred from their National Board Certification experience to their peers. Additional qualitative interview and observational studies could explore more thoroughly how that process occurs. Observational studies of coaching sessions between NBCTs and teachers could reveal how aspects of the National Board Certification imprint legacy transfer to the teachers. Researchers could examine what practices NBCT teacher leaders employ to assist teachers in developing student-centered instruction and an observational disposition and then compare those practices to ones typically used for National Board Certification. Researchers could also follow a teacher leader working with a teacher in the transition from a teacher-oriented instructional style to one centered on student discourse. Both the teacher and teacher leader could be interviewed, with the teacher leader explaining if and how the work related to his or her National Board Certification experience.

While my findings indicated that National Board Certification left a strong imprint of instructional practices and values about teaching and learning on NBCTs, those who worked in districts with policies that were inconsistent with those practices and values said that they had a difficult time exporting the imprint to other teachers. Future comparative case studies could investigate this finding in greater depth. Researchers could use interviews, document analysis, and observations of coaching sessions to compare districts that provide very
different policy contexts vis-à-vis the National Board Certification imprint and principles. For instance, they could compare districts with tightly controlled, scripted curricula, and standardized tests with ones that use Common Core standards, more constructivist-oriented pedagogy, and that place little emphasis on standardized tests.

Participants said that training and ongoing collaboration in how to work with adults using reflective questioning was cited by the participants as critical to building their capacity to transfer the NBPTS imprint to teachers. Researchers could conduct studies comparing different training and professional development models for teacher leaders in light of NBPTS values about teaching and learning. In particular, they might investigate if and how different programs approaches to training coaches encourage teachers’ continuous reflective practice or deep examination of student understanding of concepts.

Since its inception, NBPTS has maintained a goal of promoting NBCTs as leaders of the teaching profession. However, promotion of NBCTs as lead teachers has not been systematically achieved. The findings from this study suggest that achieving this aim is indeed possible. The recommendations for advancing the National Board Certification imprint and building policies and practices to support its expansion can be part of a larger strategy to achieve the original vision.
Appendix A

The Architecture of Accomplished Teaching

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### Appendix B

**Information on 43 study participants**

<table>
<thead>
<tr>
<th>Name</th>
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<td>+ other TL experience</td>
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EC = Early Childhood  
MC = Middle Childhood  
EA = Early Adolescence  
AYA = Adolescence/Young Adult
Appendix C

NBCT Teacher Leader Interview Protocol

Introduction

Thanks
Purpose
Signed consent to interview & record interview

Background
First, I’d like to confirm that you work as a ______________________, is that correct?
And you’ve been in this role for ____ years?
Before this, you worked as a teacher for ____ years? Was that in the same school(s)?
You certified in __________ (area) through National Board in ______ (year), is that correct?
How did you come to have this position?
Were you recruited?
Did the position require a formal application process?
Was National Board Certification considered a qualification for this job?

TL Practice
Could you describe what your role involves? (one-on-one, group)
Does your role involve working with teachers on setting or meeting goals related to new teacher evaluation system?
Could you briefly describe the evaluation process and your role?
What knowledge, skills, and dispositions do you need to do this job well?
Have you had any training that has helped you develop those skills? (How?)
Is there a common definition of great teaching in your district? (Source?)
Is there any guidance for working with teachers?

National Board
Why did you pursue National Board Certification?
Did you pursue NBC for acknowledgment of quality teaching, to create career options, to improve your teaching and/or for other reasons?
Has your view changed at all since certifying?
Were any of the knowledge, skills, and dispositions needed for your current position developed or demonstrated through the National Board process? (Example?)
Do you draw on any of your National Board experience in your current work? (Example?)
Are there any areas that you coach that are related to what you learned or were recognized for with National Board?

Do you use any of the National Board processes in your work as a teacher leader?

(videotaping, looking at student work, facilitating student thinking, reflection)

How, if at all, did National Board prepare you for your work as a teacher leader? (Example?)

Were you a member of a cohort when you certified? Do you draw on any of that experience in your work as a teacher leader?

How much of what is required by your district is compatible with what you learned or were recognized for with National Board? (Example?)

In what ways is what is expected of you compatible with what you learned or demonstrated through National Board?

– common definition of great teaching?

– teacher evaluation system?

Career

What are some of the challenges and rewards of this position?

What are your plans for your career?

How has your experience with National Board had an impact on these plans, if at all?

Wrapping Up

Is there anything I haven’t asked about that you’d like to add?

Would it be ok to contact you for clarification or follow-up questions should something arise in the course of the research?
Appendix D

National Board for Professional Teaching Standards – Five Core Propositions

1. Teachers are committed to students and their learning.

2. Teachers know the subjects they teach and how to teach those subjects to students.

3. Teachers are responsible for managing and monitoring student learning.

4. Teachers think systematically about their practice and learn from experience.

5. Teachers are members of learning communities.

REFERENCES


Strategic Data Project (2012a) SDP Human capital diagnostic for Gwinnett County Public Schools.


