Indiana University of Pennsylvania Knowledge Repository @ IUP

Theses and Dissertations (All)

4-29-2014

Exploring the Relationship Between Accomplished Teaching Through National Board Certification for Teachers and Teacher Leadership in New York State

Kathleen M. Sottile Indiana University of Pennsylvania

Follow this and additional works at: http://knowledge.library.iup.edu/etd

Recommended Citation

Sottile, Kathleen M., "Exploring the Relationship Between Accomplished Teaching Through National Board Certification for Teachers and Teacher Leadership in New York State" (2014). *Theses and Dissertations (All)*. 363. http://knowledge.library.iup.edu/etd/363

This Dissertation is brought to you for free and open access by Knowledge Repository @ IUP. It has been accepted for inclusion in Theses and Dissertations (All) by an authorized administrator of Knowledge Repository @ IUP. For more information, please contact cclouser@iup.edu, sara.parme@iup.edu.

EXPLORING THE RELATIONSHIP BETWEEN ACCOMPLISHED TEACHING THROUGH NATIONAL BOARD CERTIFICATION FOR TEACHERS AND TEACHER LEADERSHIP IN NEW YORK STATE

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

Kathleen M. Sottile

Indiana University of Pennsylvania

May 2014

Indiana University of Pennsylvania School of Graduate Studies and Research Department of Professional Studies in Education

We hereby approve the dissertation of

Kathleen M. Sottile

Candidate for the degree of Doctor of Education

Candidate for the C	degree of Doctor of Education
	Kelli Paquette, Ph.D.
	Professor of Professional Studies in Education,
	Co-chair
	Indiana University of Pennsylvania
	, , , , , , , , , , , , , , , , , , ,
	Alison Rutter, Ed.D.
	Associate Professor of Early Childhood &
	Elementary Education, Co-chair
	East Stroudsburg University
	Douglas Lare, Ed.D.
	Professor of Professional and Secondary Education
	East Stroudsburg University
	Lust buoddsourg Oniversity
ACCEPTED	
Timothy P. Mack, Ph.D.	
Dean	
School of Graduate Studies and Research	

Title: Exploring the Relationship Between Accomplished Teaching Through National Board Certification for Teachers and Teacher Leadership in New York State

Author: Kathleen M. Sottile

Dissertation Chair: Dr. Alison Rutter

Dissertation Committee Members: Dr. Kelli Paquette

Dr. Douglas Lare

New York State is in the midst of vast education reform. This Education reform has produced an environment in which the traditional roles of school personnel have been restructured and standards of accountability have been increased. Teacher leadership has become a vital force in the success of many organizations. Additionally, the rigorous teaching standards of National Board of Professional Teaching Standards denote accomplished teaching, a prerequisite to teacher leadership. The purpose of this mixed method study was to explore the relationship between accomplished teaching through National Board Certification for teachers and teacher leadership in New York State. This study measured the extent to which the achievement of National Board Certification for Teachers promotes teacher leadership in the hope that substantive change, resulting in increased student learning and achievement, will be promoted and supported in the future.

The methods employed by this study were both quantitative and qualitative in nature. The population consisted of middle and secondary teachers in New York State. A sample of 426 National Board Certified teachers and a control group of 511 non-NBC teachers were electronically surveyed. In addition, a random sample of 15 NBCTs were chosen to further elaborate on their perceptions and roles of teacher leadership. Five principals from districts with a high concentration of NBCTs were also interviewed. This study may provide useful information to school and district administrators, as well as aspiring teacher leaders, NBCTs, and

National Board Certification candidates as they work to enhance the professional practices within their organization in an effort to meet the constantly changing demands of the current educational reforms and simultaneously ensure that student achievement continuously grows. Teacher preparation programs may also find this information useful as they prepare future teachers for the evolving profession of teaching.

ACKNOWLEDGEMENTS

Many people, in fact a whole village of people, are responsible for the completion of this dissertation. First and foremost, Alice Bowman, the inspiration for this research topic, who lived and breathed this study alongside of me, I cannot thank you enough for your words of wisdom, written and spoken, and the time you spent in collaboration on this project.

Dr. Rutter, who motivated me to persist, and encouraged me along the way, I will be forever grateful for your support. You believed in me when even I doubted myself. You kept my eyes on the prize and provided direction when it was needed. I could not have done this without you. Ever!

Dr. Lare, who I promised I would never let down, thank you for the work that you do for the Doctoral Program and the National Board for Professional Teaching Standards. Your input along the way, and the direction you sent this project, have been instrumental in its completion and success. Thank you.

I would also like to thank Dr. Kelli Paquette; your participation on my dissertation committee has been extremely helpful. Your attention to detail and insight into this study have certainly made all the difference.

Jill Bamberger, you are a masterful writer, editor, and friend. Your support, editing skills, and brilliant sense of humor made this study possible. Thank you for laughing with me, and not at me, throughout the process. You are a gem.

Without the help of my friends and family, this study would never have come to fruition.

Dr. Kathleen Gulbin and George (the Rock) Gulbin, my Long Beach family and greatest friends, thank you from the bottom of my heart. The many hours of rehearsal and the encouragement

that you provided were not surprising, that is who you are, but made it possible for this project to be completed. Thank you.

I am blessed to have a family who stick by me no matter what. My husband, Lou, and children, Luigi and Mia, you have always believed in me. Thank you. I love you. Dad, you are my biggest fan. You taught me to see the sky as the limit, and have always been there beside me, no matter what. Melissa, "Sister Sledge", my role model, and brothers Ralph and Patrick – growing up in our family has made all the difference. You all taught me how to see something through to the end, and in that way you have played a major role in this study. I would not be who I am today, would not have had the courage to begin a doctoral program, let along complete a dissertation, if it weren't for my girls, mom and Katie. You have always provided me with love and hope, and I know that you are smiling down on me now. I love and miss you both.

To my colleagues at Floral Park Memorial High School, Dr. Ralph Ferrie, Superintendent of Schools, Stan Johnsen, Brian Sharkey, Dr. Stephanie Scolieri, Samine Charles-Pierre, and Barbara Cercone, thank you for putting up with me and picking up the slack when I needed you to. You are the best group of professionals a person could ask for in a school!

Finally, this dissertation is dedicated to the memory of Dr. John R. Williams, a master teacher, master leader, and master friend. Thank you.

TABLE OF CONTENTS

Chapter		Dog
I	THE PROBLEM	Pago 1
_	Introduction.	
	Statement of the Problem	
	Purpose of the Study	
	Research Questions	
	Definition of Terms.	
	Limitations of the Study	
	Significance of the Study	
	Summary	
II	REVIEW OF THE LITERATURE	22
	Introduction.	
	Review of the Literature	
	Related Studies	
	Distributive Leadership	
	York-Barr and Duke Framework	
	Definitions of Teacher Leadership	
	National Board Certification for Teachers	
	What Do Teacher Leaders Do?	
	Conditions Influencing Teacher Leadership	
	Teacher Leader Preparation	
	The Effects of Teacher Leadership	
	Development of the York-Barr and Duke Framework for Teacher Leadership	
	Conceptual Framework	
III	METHODOLOGY	. 60
111	Background of the Problem	
	Research Problem	
	Research Purpose	
	Research Questions	
	Research Design	
	Population	
	Data Collection	
	The Survey Instrument	
	Teacher Semi-structured Interview.	
	Principal Semi-structured Interview	
	Data Analysis	
	Quantitative Data Analysis	
	Qualitative Data Collection	
	Qualitative Data Analysis	
	Overall Analysis	
	Ethics and Confidentiality	
	Assumptions, Limitations, and Delimitations	

	Summary	76
[V	FINDINGS	78
	Introduction	78
	Research Questions	79
	Data Collection	80
	Analysis of Demographics	81
	Analysis of Themes	83
	Participation in Leadership Activities Beyond the Classroom	84
	Teacher interviews	87
	Formal Teacher Leadership	87
	Informal Teacher Leadership	88
	Principal Interviews	91
	Sense of Leadership Responsibility to the Profession	93
	Teacher Interviews	94
	Principal Interviews	96
	Perception of Influence On School-wide Policy Development	97
	Teacher Interviews	99
	Principal Interviews	100
	Reports of Career Satisfaction Due to School Leadership Roles	101
	Teacher Interviews	103
	Principal Interviews	103
	Perceptions of Administrator Support for Teacher Leadership	105
	Teacher Interviews	106
	Principal Interviews	108
	Summary	110
	·	
V	CONCLUSIONS AND RECOMMENDATIONS	112
	Introduction	112
	Summary of Results	115
	Discussion of Findings	116
	Demographics	116
	Participation in Leadership Activities Beyond the Classroom	117
	Sense of Leadership Responsibility to the Profession	118
	Perception of Influence on School-wide Policy	119
	Career Satisfaction	120
	Administrative Support for Teacher Leadership	121
	Limitations	122
	Implications for Practice	124
	Lack of Time	124
	New York State Certification Requirements vs NBCT	125
	Principal Awareness	127
	Support	129

	The Power of the Teacher	129
	Recommendations for Further Study	130
	Conclusion	132
REFERENCES		135
APPENDICES		150
	Appendix A - School Leadership Survey	150
	Appendix B - Email permission to use the survey	157
	Appendix C - Email to teachers	159
	Appendix D - Consent to participate in research	160
	Appendix E - Email to principals - School Leadership Survey	162
	Appendix F - Teacher interview question form - NBCTs	163
	Appendix G - Interview question form - principals	164

LIST OF TABLES

Table		Page
1	What Do Teacher Leaders Do?	45
2	Frequency Distribution for Demographic Survey Items	82
3	ANOVAs for NBCT/Non-NBCT Group Comparison for SLS Factors	86

LIST OF FIGURES

Figure		Page
1	Five core propositions diagram.	7
2	Five core propositions.	16
3	Teacher leadership for student learning: Conceptual framework	53

CHAPTER I

THE PROBLEM

Introduction

"The concept of teacher leadership recognizes the daunting challenges confronting schools of the 21st century and the need for schools, as organizations, to meet those challenges through innovative structures. Clearly, the strict bureaucratic hierarchy is not sufficient, nor are other approaches that place teachers in the role of receiver of accepted wisdom. Rather, to bring the best to bear on the challenges of education, the engagement of teacher leaders in the enterprise is an important component of any improvement strategy" (Danielson, 2006, p. 27).

Examining the relationship between accomplished teaching through National Board Certification for Teachers and teacher leadership in New York State is timely and relevant. In its successful application for a Race To The Top funding grant, New York detailed three prongs of a Regents' reform agenda already underway that met the grant requirements, namely: (a) a new teacher and principal evaluation and support system largely based on student growth and achievement entitled the Annual Professional Performance Review (APPR); (b) participation in a consortia of states to develop and adopt internationally-benchmarked standards and assessments to assure that graduates of high schools in New York State are college and career ready; and (c) creation of longitudinal (P-20) data systems that would measure student success and help teachers and principals to improve their professional practices (usny.nysed.gov/rttt/application/narrativessummary.pdf). The prongs, including the teacher accountability requirements, were jointly developed by state officials and the powerful teacher unions that serve New York State teachers. As a high school principal in New York State, my experiences with this Regents Reform agenda, and as a facilitator of a cohort of National Board candidates, I have been led to believe that exploring the relationship between National Board

Certification and teacher leadership may reveal an alignment of the three ideas, namely, National Board for Professional Teaching Standards, New York State Regents, and teacher leadership.

Specifically, the Regents reform agenda has created a scenario in which fewer professionals will be called upon to complete a greater number of administrative tasks to comply with APPR mandates, while simultaneously improving instructional outcomes with fewer instructional periods. To that end, principals and teachers must redefine their roles to ensure that the above-described scenario is implemented successfully.

This venture required a paradigm shift in instruction on the building and district level as well as in every classroom. Traditionally, roles of principals and teachers were clearly assigned. Principals served as instructional leaders and building managers, while teachers implemented the curriculum and managed their individual classrooms. Current reforms in education require that a more distributed view of leadership be adopted, in which a collaborative community of professionals work together, thus calling for teacher leadership to be fully developed and supported. The rationale behind the use of distributed leadership as an answer to the current educational landscape included the concept that "The distributed leadership perspective considers expertise rather than authority as the primary source of leadership. Importantly, in the distributed leadership framework, leadership is not located in the individual, but rather found between and among the teachers and administrators of the school" (Severns, 2007, p. 84). It is imperative that principals support teachers as they work to improve their knowledge about teaching (Shulman, 1987, as cited in Severns, 2007) and teacher leadership. By adopting and supporting distributed leadership, principals and teachers may improve the professional capacity of all stakeholders, thereby strengthening their ability to answer the mandates of the Regents reform agenda and continuing to provide students with optimal educational opportunities.

As responsibilities are both increasing and being redistributed due to smaller budgets and thus very often fewer professionals on staff, the concept of distributed leadership, and by extension, teacher leadership, has gained recent attention. The value of professional development is at a premium when financial constraints limit the quantity of professional development available. Similarly, shrinking budgets have created a scenario in which a redefinition of roles has become increasingly important. To that end, the role of teachers has expanded in order to maintain high quality instruction and educational experiences to students, despite current economic woes. Teacher leadership is poised as a potential caveat through which the demands of the current economic times can be met without compromising students' academic achievement. To date, no studies have been conducted relating teacher leadership in New York State to National Board Certification. While many of the basic tenets of teacher leadership are inherent in the National Board for Professional Teaching Standards, how and to what extent the skills associated with teacher leadership are utilized by schools has not yet been studied in New York State. This study explored the relationship between accomplished teaching, as it is defined by National Board for Professional Teaching Standards (NBPTS), and teacher leadership in New York State.

As a result of effective teacher leadership, "schools benefit from the involvement of talented teachers in accomplishing the vision for change in their schools" (Katzenmeyer & Moller, 2001, p. 31). As change agents, "teachers can influence school reform efforts. Waking this sleeping giant of teacher leadership has unlimited potential in making a real difference in the pace and depth of school change" (Katzenmeyer & Moller, 2001, p. 102). Leadership within education must focus on building a collaborative culture that promotes and develops leadership capacity at many levels within the organization in order to meet the demands of the current

reform era. This practice, commonly referred to as distributed leadership, builds a collaborative culture in schools. "For leaders to be successful in guiding schools toward achievement and growth, the goals of public education, leadership must be of a collaborative nature in this era of school reform" (Jaimes, 2009, p. 9). In a report of the National Commission on Teaching & America's Future, Linda Darling-Hammond (2000) stated "when teachers can work together to build a coherent learning experience for students...they are able to engender greater student achievement" (p. 16). Further, according to Gronn, "contemporary factors (are) driving interest in distributed leadership" (Bennett, et al., 2003, p. 17). Ever increasing standards coupled with decreasing timeframes are taking a toll on school leaders (Hargreaves & Fink, 2004). Gronn also posited, "distributed leadership has especial relevance and applicability in contemporary, information-rich society" (Bennett, et al., 2003, p. 17).

To that end, teacher leadership may be a key component in the success of schools as they strive to meet the current educational challenges and stay abreast of developments that impact education. Educators, faced with the new reforms in education, are feeling the effects, most recently noted by Eric D. Randall in the February 25, 2013 edition of *On Board*, a publication of the New York State School Boards Association (NYSSBA). Mr. Randall referenced Douglas Reeves' term, initiative fatigue, "when the number of initiatives increases while time, resources, and emotional energy are constant, then each new initiative – no matter how well-conceived or well-intentioned – will receive fewer minutes, dollars, and ounces of emotional energy than its predecessors" (p.1). According to Rutledge (2009), in her multiple case studies that examined the perceptions and unique experiences of teachers and principals as they share leadership roles while implementing and supporting school improvement initiatives, "teacher leaders thrive in learning communities and are instrumental in facilitating and sustaining school reform efforts"

(p. 26). As reported in "Teacher Leadership in High Schools: How Principals Encourage It – How Teachers Practice It" (IEL, 2008), "principals benefit from teacher leadership because they have a committed group of stakeholders working for improved student success in their schools. As all of the principals reported in the interviews, they view their teacher leaders as vital members of their administrative teams" (p.9).

Definitions of teacher leadership vary within the literature. In this study, York-Barr and Duke's definition of teacher leadership, "teachers' expertise about teaching and learning to improve the culture and instruction in schools such that student learning is enhanced... leading among colleagues with a focus on instructional practice, as well as working at the organizational level to align personnel, fiscal, and material resources to improve teaching and learning" (2004, p. 261) was the focus. Similarly, Katzenmeyer and Moller identified teacher leaders as those teachers who "lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice" (2001, p. 5). Furthermore, Charlotte Danielson's definition of teacher leadership, "skills demonstrated by teachers who continue to teach but also have an influence that extends beyond their own classrooms to others within their own school and elsewhere" (2006, p. 12) reflected back on the York-Barr and Duke definition with regard to the extension beyond the classroom. Furthering this idea, the National Board for Professional Teaching Standards indicated that, "teacher leaders ... are instructional and organizational change agents who have a critical impact on school, teacher and student success" (2012, www.nbpts.org/products_and_services). Finally, according to Rutledge (2009), "in an environment where teacher leadership is distributed across the faculty, Gordon (2004, p. 98)

found 'it fosters teacher efficacy, helps retain effective teachers, and reduces resistance to

change" (p. 24), many of which are stated goals of the New York State reform agenda and, correspondingly, the National Board for Professional Teaching Standards. NBPTS emphasizes collaboration and leadership as means of preparing and identifying high quality teachers, thus potentially connecting distributed leadership and teacher leadership.

Teachers who earn National Board Certification demonstrate "their excellence in the classroom, by reflecting thoughtfully on their practice, and by demonstrating deep knowledge of their subjects, their students, and the principles of instructional design" (Danielson, 2006, p. 25). Teachers who achieve National Board Certification understand that their effectiveness as teachers requires them to "to look at their practices... and articulate all the choices they make as a teacher" (Berg, 2010, p. 196). National Board Certified Teachers are master teachers, a prerequisite for effective teacher leadership (Danielson, 2006, p. 25). These teachers are accomplished in their field, according to the Standards set forth by the National Board for Professional Teaching Standards. Additionally, the Standards outlined by NBPTS have served as a guide for teacher leaders (Koppich, Humphrey, & Hough, 2006; Sato, Hyler & Monte-Sano, 2002). Because the Standards address multiple facets of accomplished teaching, taken collectively, the Standards of NBPTS serve as a potential bridge between accomplished teaching and teacher leadership. The five core propositions of the National Board for Professional Teaching Standards (Figure 1, p.14) outline "the foundation and frame the rich amalgam of knowledge, skills, dispositions and beliefs that characterize National Board Certified Teachers (NBCTs)" (www.nbpts.org/the standards/the five core propositio). Effective teachers hold high expectations of their students' learning and possess "various strategies for helping students to achieve realizing that every student starts at a different place and may require a different path to accomplish the same goals" (Dilworth, Aguerrebere, & Keller-Allen, 2006, p. 3). The high

standard of performance requisite of National Board Certified Teachers indicates that NBCTs possess extensive expertise in teaching. Correspondingly, teacher leaders must be master teachers as well.

Determining the relationship that earning National Board Certification for Teachers has with teacher leadership in New York State middle and high schools at this critical point in the latest reform era may be significant as districts and schools seek to develop the skills of their teachers in order to meet the daunting tasks that lie ahead. According to research conducted by the Yankelovich Group in 2001, there was "an increase in participation in some leadership activities after teachers achieve certification" (p.3). Furthering this claim, the Yankelovich survey "revealed 99.6% of NBC teachers were involved in leadership activities, with most being involved in multiple leadership roles. Moreover, these teachers used their NBC credential to leverage their influence on decision making processes" (Severns, 2007, p. 80).

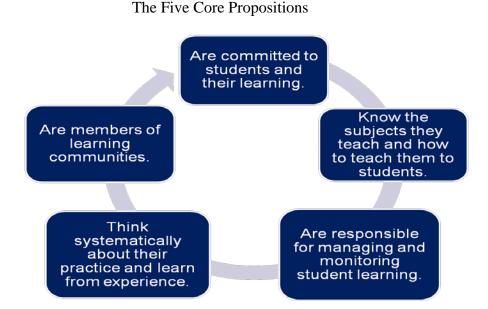


Figure 1. National Board Five Core Propositions. Adapted from http://secure.nbpts.org/toolkitweb/index.html

Of the myriad advantages that effective teacher leadership provides, the National Board Certification process similarly "encourages reflection among all participants," thus "teachers who complete the National Board Certification process report significant learning through reflection on their teaching practice" (Katzenmeyer & Moller, 2001, p. 33). This was evidenced in the Propositions by indicating that accomplished teachers "think systematically about their practice and learn from experience" (Figure 1). According to Cochran's discussion of the work of Lee Shulman, "the first recommendation that can be made for teachers is for them to more often reflect on or think about why they teach specific ideas the way they do. Teachers know much more about teaching subject matter concepts to students than they are aware" (1997, p. 2). Similarly, teacher leaders are those teachers who have the ability to successfully reflect on their own practice and on the practices within their schools (National Comprehensive Center for Teacher Quality, 2007, p. 47). To that end, "teachers who achieve accomplished levels of practice are well-suited to assume formal or informal leadership roles from which they can support the professional practice of their peers and lend their voices to school-wide decisions that will strengthen teaching and learning" (Berg, 2010, p. 196). Thus, it is strong reflective skills that seem to play a significant role in distinguishing accomplished teachers and teacher leaders from their peers.

Statement of the Problem

Increased accountability, most recently under Race to the Top and APPR, coupled with decreasing financial resources further the veracity of Leithwood's claim that "the careful classroom supervision required of instructional leaders" is "all but impossible for a principal to implement and sustain (alone)" (Leithwood, Jantzi, & Steinbach, 1999, p. 8). Beyond the

classroom, school administrators are called on to account for the myriad ways in which they support the academic, social, emotional, and physical growth of each student in their charge.

Widening the scope of leadership decision-making by stretching and distributing... functions among various members of the organization provides autonomy, collegiality, collaboration, communication, empowerment, involvement, problem solving, and the creation of opportunities for professional growth. (Leithwood, Jantzi, & Steinbach, 1999, p. 8)

Developing teacher leadership may provide one solution for principals as they work to meet higher demands in this era of accountability. As stated by Fullan in his most recent book *Motion Leadership In Action*, he referred to New York's reforms under Chancellor Joel Klein and Mayor Bloomberg, "what's missing is capacity building for all teachers and school leaders and ownership of the reform strategy" (Fullan, 2013, p. 2).

As a result, it has become increasingly important for administrators, the formal leaders in a school, to draw from a cadre of teachers who possess leadership skills related to teaching and learning and who can create positive change within a school. According to York-Barr, Sommers, Ghere, and Montie, teachers and principals are "mutually engaged in building and sustaining knowledge-generating capacities" and teachers assume "primary responsibility for 'pedagogical leadership' functions" including "curricular, instructional, and other classroom-level dimensions of instructional practice" (2006, p. 215). Further, formal leaders of schools, Hargreaves indicated, bear the responsibility to "empower teachers to display leadership qualities" (Ppt. 14). From a distributed leadership perspective, administrators, the formal leaders, recognize leadership skills and work to develop and support the actions of those within their organizations. As such, administrators need a reliable method for identifying and

supporting those with leadership skills, as well as the ability to foster the development of teacher leadership skills in accomplished teachers. Spillane et al (2001) explained that "school leadership involves multiple leaders, both administrators and teacher leaders" (p. 3) and that it is this "aspect of distributed leadership that has garnered most attention" (p. 3). To that end, determining whether a link exists between the achievement of National Board Certification for Teachers and teacher leadership in middle school and high school teachers in New York State at present will provide a potential avenue for the development of teacher leadership as administrators face the reforms and mandates that are being levied upon them.

Since 2005, the growth rate of National Board Certification achievement in New York has outperformed the nation 83.4% to 75.6%. In 2012, New York boasted an 11.91% increase in the number of teachers achieving National Board Certification, whereas the national increase was 5.12%. National Board Certification for Teachers may be taking hold to a greater extent than it has in prior years in New York State. While the reasons for this are unknown and may include the Regents reform agenda, the adoption of the New York State Common Core Learning Standards (CCLS), or even an increase in awareness about National Board Certification throughout New York State, as such, exploring whether NBCTs are more likely to become teacher leaders and determining which types of leadership roles NBCTs take on may be helpful for administrators looking to increase local capacity in the face of the great changes of the current reform agenda.

According to the 2001 NBPTS NBCT Leadership Survey, conducted by the Yankelovich Group in conjunction with the National Board for Professional Teaching Standards, "many NBCT's are developing district-wide curriculum; facilitating candidates for National Board Certification; mentoring new and struggling teachers; and influencing local, state, and federal

education policy" (p. 1). "At a time when schools are faced with so many challenges, we are encouraged to find that leadership is coming from the classroom as National Board Certified Teachers take on leadership roles," says Betty Castor, president of the National Board for Professional Teaching Standards (NBPTS). "The challenge now is to further integrate them into the decision-making process, ensuring that their growing leadership capabilities do not go untapped" (p. 1).

This study had its roots in a 2001 national study conducted by the Yankelovich Group in conjunction with the National Board for Professional Teaching Standards. It was later modified by Sykes (2006) who conducted his study in Ohio and South Carolina and was further modified by Severns (2007) for her study in Louisiana. This researcher slightly modified the Severns (2007) *School Leadership Survey* (SLS) in order to explore the current status of NBCTs and teacher leadership in New York State middle and high schools (Appendix A).

Purpose of the Study

With New York State's stated goal of "ensur(ing) that every student has world-class educators in the classroom, and that every teacher has world-class principals to support them and help them grow professionally" (engageny.org), all parties to a child's education must work in unison. The means through which New York State's goal of providing all students with effective teachers and principals requires that efficient and effective means of developing teacher leadership be sought and supported by school and district administrators. It is important; therefore, to examine accomplished teaching and teacher leadership in middle and secondary schools in New York State by measuring the extent to which National Board Certification for Teachers promotes teacher leadership development.

The purpose of this study, therefore, was to determine whether a relationship exists between accomplished teaching and the development of teacher leadership in middle and secondary schools in New York State. This would provide formal leaders in schools with a potential strategy for developing and supporting teacher leaders, thereby increasing the capacity of schools to provide students with optimal educational experiences. By measuring whether National Board Certified Teachers were likely to take on leadership roles served to provide useful information to school and district leaders. Because "expanded teacher leadership roles range from assisting with the management of schools to evaluating educational initiatives and facilitating professional learning communities," (York-Barr & Duke, 2004, p. 255) teacher leadership through National Board Certification for Teachers may play a critical role in the success of New York State schools.

Research Questions

In 2001, the National Board for Professional Teaching Standards, through the Yankelovich Group, administered a survey, the NBPTS NBCT Leadership Survey, to all NBCTs in the United States at that time. Data collected from this survey indicated that achieving National Board Certification was a positive factor in the assumption of teacher leadership roles. Later studies, conducted by Sykes (2006) and Severns (2007) chose selected items from the Yankelovich Group survey in order to explore teacher leadership and National Board Certification in Ohio, South Carolina, and Louisiana. This study was built on their earlier work in order to ascertain whether the correlation indicated by the Yankelovich Group currently existed in New York State for middle and high school NBCTs. Both Sykes and Severns' findings were consistent with those of the Yankelovich Group's 2001 findings that "NBC teachers were significantly more likely to participate in leadership activities in the school,

district, state, and national arenas" (Severns, 2007, p. 135).

The population for this study was all middle and high school teachers in New York State. A survey was electronically administered to 426 middle and high school NBCTs and a control group of 511 non-NBCTs in New York State. Responses to the modified *School Leadership Survey* examined how National Board Certification influenced teacher leadership as defined in this study. This study replication sought to ascertain data that would help New York State middle and high school principals as they strive to develop and support teacher leadership within their organizations.

The following research questions that guided this study were:

How do self-perceptions of NBCTs, non-NBCTs, and principals in middle and high schools in

New York State compare regarding teacher leadership in the area of:

- 1. Participation in leadership activities beyond the classroom?
- 2. Sense of leadership responsibility to the profession?
- 3. Perceptions of influence in school-wide policy development?
- 4. Reports of career satisfaction due to school leadership roles?
- 5. Perceptions of administrator support for teacher leadership?

Qualitative methods were used as a second form of obtaining additional information and more in-depth explanations of the quantitative data collected from the modified *School Leadership Survey*. Trends in the qualitative data were compared to the quantitative data collected from the online surveys.

Definition of Terms

Accomplished Teaching: The concept of Accomplished Teaching is driven by the National Board for Professional Teaching Standards, which arose from a desire to professionalize the practice of

k-12 teachers. *Accomplished Teaching* is directly defined through the process of earning National Board Certification through the National Board for Professional Teaching Standards. *Capacity Building*: "Concerns the knowledge, skills, and dispositions of people individually but collectively" (Fullan, 2010, p. 45).

Distributed Leadership: Decision making and influential practices performed by personnel at multiple levels in an organization instead of individual leaders at the top of an organizational hierarchy (Leithwood et al., 2006).

Our distributed perspective focuses on how leadership practice is distributed among positional and informal leaders as well as their followers. Understanding how school leaders work together, as well as separately, to execute leadership functions and tasks is an important aspect of the social distribution of leadership practice. (Such a) distributed view of leadership incorporates the activities of multiple individuals in a school who work at mobilizing and guiding school staff in the instructional change process. (Spillane, Halverson, & Diamond, 2001, p. 24)

Formal Teacher Leadership: In addition to the traditional roles of administrators and teachers, "many schools have instituted structures...such as master teacher, department chair, team leader, helping teacher, or mentor" (Danielson, 2006, p. 18). This type of leadership is role-based and derives some of its influence from position power.

Informal Teacher Leadership: Activities and roles that promote the learning of students beyond those for whom a teacher is directly accountable such as:

(a) engage in organizational citizenship behaviors (OCBs) (Oplatka, 2006), or extra-role behavior (Organ, 1988), by willingly volunteering to extend themselves beyond their classrooms or per the terms of their contractual

agreements, and (b) do not receive compensation in the form of money or time for extending themselves beyond their classrooms or contracts. Additionally, informal teacher leaders are categorized as those who: (a) build trust and rapport among colleagues without exercising power, (b) maintain a clear sense of purpose, (c) accept and attempt to enact change; (d) model professional growth; and (e) demonstrate self-motivation, enthusiasm, and creativity. (Palmer, 2011, p. 7)

Official informal teacher leadership activities: active involvement in various professional organizations, as well as committee membership at the school, district, local, state, and national levels.

Unofficial informal teacher leadership activities: activities in which interviewees participated that were self-directed such as working with less experienced colleagues on lesson planning and voluntarily attending school-wide events.

National Board Certification for Teachers: For purposes of this study, the National Board for Professional Teaching Standards' definition of National Board Certification for Teachers, "National Board Certification is an advanced teaching credential" that is "achieved upon successful completion of a voluntary assessment program" was used. It recognizes "high standards" of teaching expertise "based on what teachers should know and be able to do".

National Board "candidates complete 10 assessments" comprised of "four portfolio entries that feature teaching practice and six constructed response exercises" (NBPTS.org, 2011). Each of the components of both the portfolio and constructed response exercises measures teachers' knowledge and skills with regard to content and pedagogy, as well as commitment to the field of education.

NBPTS Standards: The Standards used by the National Board for Professional Teaching Standards "are based on the Five Core Propositions that form the foundation for what all accomplished teachers should know and be able to do and provide a reference that helps educators link teaching standards to teaching practice" (NBPTS.org 2011).

Five Core Propositions:

Proposition 1: Teachers are Committed to Students and Their Learning

- NBCTs are dedicated to making knowledge accessible to all students. They believe all students can learn.
- They treat students equitably. They recognize the individual differences that distinguish their students from one another and they take account for these differences in their practice.
- NBCTs understand how students develop and learn.
- They respect the cultural and family differences students bring to their classroom.
- They are concerned with their students' self-concept, their motivation and the effects of learning on peer relationships.
- NBCTs are also concerned with the development of character and civic responsibility.

Proposition 2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students.

- NBCTs have mastery over the subject(s) they teach. They have a deep understanding of the history, structure, and real-world applications of the subject.
- They have skill and experience in teaching it, and they are very familiar with the skills gaps and preconceptions students may bring to the subject.
- They are able to use diverse instructional strategies to teach for understanding.

Proposition 3: Teachers are Responsible for Managing and Monitoring Student Learning.

- NBCTs deliver effective instruction. They move fluently through a range of instructional techniques, keeping students motivated, engaged and focused.
- They know how to engage students to ensure a disciplined learning environment, and how to organize instruction to meet instructional goals.
- NBCTs know how to assess the progress of individual students as well as the class as a whole.
- They use multiple methods for measuring student growth and understanding, and they can clearly explain student performance to parents.

Proposition 4: Teachers Think Systematically about Their Practice and Learn from Experience.

- NBCTs model what it means to be an educated person they read, they question, they create, and they are willing to try new things.
- They are familiar with learning theories and instructional strategies and stay abreast of current issues in American education.

• They critically examine their practice on a regular basis to deepen knowledge, expand their repertoire of skills, and incorporate new findings into their practice.

Proposition 5: Teachers are Members of Learning Communities.

- NBCTs collaborate with others to improve student learning.
- They are leaders and actively know how to seek and build partnerships with community groups and businesses.
- They work with other professionals on instructional policy, curriculum development, and staff development.
- They can evaluate school progress and the allocation of resources in order to meet state and local education objectives.
- They know how to work collaboratively with parents to engage them productively in the work of the school. © 2012 National Board for Professional Teaching Standards

Figure 2. Five Core Propositions. Adapted from http://www.nbpts.org/the_standards/the_five_core_propositions

National Board for Professional Teaching Standards: "an independent, nonprofit, nonpartisan and nongovernmental organization," National Board for Professional Teaching Standards "provides advanced standards, assessments and professional development resources to support educators at all stages of their professional growth; links subject-matter knowledge and effective teaching practices to student learning and achievement; and helps build and support school-based professional learning communities" (NBPTS.org., 2011).

Reflective Practice: "a process by which teachers regularly analyze, evaluate, and strengthen the quality and effectiveness of their work" (Areglado, 1999 in Sykes, 2006, p. 18).

Teacher Leadership: As stated by York-Barr and Duke, teacher leadership is defined as "teachers' expertise about teaching and learning to improve culture and instruction in schools such that student learning is enhanced. This involves leading among colleagues with a focus on instructional practice, as well as working at the organizational level to align personnel, fiscal, and material resources to improve teaching and learning" (2004, p. 261).

Limitations of the Study

The presence and development of teacher leaders can only be measured inasmuch as the environment and/or school culture support them. Among the ways in which a school's culture can be a barrier to the success of teacher leadership is that, "a lack of support from their principal" (Rutledge, 2009, p. 30) stands to stifle the development of leadership skills for even the most masterful teachers. Further, as reported in Rutledge (p. 30), Little (1990), when discussing the collaboration of teachers, found that teachers "did not support assertive behavior" of teacher leaders, thereby demonstrating another barrier to the success of teacher leadership. Therefore, determining the connection between accomplished teaching and the development of teacher leadership was limited to the extent that it relies on school culture and environment.

The structure of schools introduces a constraint when measuring teacher leadership.

Some schools employ formal teacher leaders whose position as department chairperson, lead teacher, or the like, potentially isolates them because they are viewed as "breaking ranks with the solidarity of teachers, as no longer being true colleagues" (Danielson, 2006). For example, in the district where this researcher currently works, each discipline is comprised of its teachers and a chairperson. The role of the chairperson, depending upon the culture of the building in which they work, can be characterized as either a leadership or a managerial position. In that way, those chairs who are supported as teacher leaders and who develop their leadership skills more readily succeed in their roles than those whose conditions vary from that paradigm.

External forces cause a shift in dynamic within any organization. To that end, this study was limited by the effects that these mitigating factors have on teachers' opportunities to develop teacher leadership skills:

- Shifts in school demographics
- Changes in organizational structure (redistricting, job consolidation)
- Administrative turnover
- Programming changes

Significance of the Study

As established, "teachers who formally or informally acquire leadership positions can help make change happen" (Lieberman & Miller, 2005, p. 19). As also established, the newest era of education reform has created a scenario in which schools and districts are, by necessity, revolutionizing the traditional view of teachers as separate from leaders within a school. This study may provide useful information to those school and district administrators as well as aspiring teacher leaders, NBCTs, and National Board Certification candidates as they work to enhance the professional practices within their organization in an effort to meet the constantly changing demands of the current educational reforms and simultaneously ensure that student achievement continuously grows.

This study will also provide data for further study regarding the connection between the preponderance of teacher leadership and student achievement in this newest accountability system. Teacher preparation programs will also find this information useful as they prepare future teachers for the evolving profession of teaching. Most recently, a project that included faculty from Stanford University, American Association of Colleges for Teacher Education (AACTE), and Pearson worked closely together to develop edTPA, which is a subject area performance-based assessment tool for pre-service candidates designed to "help determine if student teachers are ready for the classroom" (National Board for Professional Teaching Standards (2012, p. 2). EdTPA, which is based on the standards developed by the National

Board, will use the National Board online repository of classroom videos and accompanying written materials that "illuminate how master teachers go about the job of challenging and stimulating students to learn" (p. 2). As the landscape of the teaching profession changes and the roles and responsibilities of teachers change, it is important for preparation programs to stay abreast and also to adjust to the current trends faced by educators. As stated by Darling Hammond, "the integration of the National Board's repository of master teacher certifications into teacher preparatory programs will be extraordinarily beneficial" (2000, p. 3).

Summary

The Federal Race to the Top initiative, fueling the implementation of the Common Core Learning Standards and APPR legislation for teachers and principals, set in motion an era of reform that stands to substantively alter the configuration of responsibilities in public education. Teachers and principals are being held accountable for student achievement to a greater extent than has ever been the case and in ways that are unprecedented. However, "change in schools cannot be mandated, change is the result of person-by-person change" (Fullan, 1993, p. 16). As a result, "tapping the resource of teacher leadership has great potential for positive future results with school reform efforts" (Katzenmeyer & Moller, 2001, p. 16).

It has been well established that teachers who earn National Board Certification demonstrate accomplished teaching skills (National Board for Professional Teaching Standards, 2007). Further, it is well-established that accomplished teaching is a prerequisite for consideration as a teacher leader (Danielson, 2006). York-Barr and Duke (2004) developed a model of teacher leadership that defined the concept of teacher leadership in order to provide "an overarching conceptual framework and common or complementary theoretical underpinnings" (York-Barr & Duke, 2004, p. 287). Katzenmeyer and Moller furthered the position that

accomplished teachers possess the foundation for teacher leadership. This study sought to measure the extent to which the achievement of National Board Certification for Teachers promoted teacher leadership in the hope that substantive change, resulting in increased student learning and achievement, will be promoted and supported in the future.

CHAPTER II

Introduction

The New York State Board of Regents adopted amendments to Education Law 3012-c (New York State Adopted Regulations for Teacher and Principal Annual Professional Performance Review) in May, 2012. The second prong of this reform agenda—holding teachers and their principals accountable for student achievement—is underway. The new Annual Professional Performance Review (APPR) regulations "include multiple measures of educator effectiveness" (New York State Education Department, 2011). Districts must negotiate with both their teacher and principal associations the details of an evaluation plan under which sixty percent of each educator's annual rating derives from multiple evidenced-based observations by a trained observer using a state-approved rubric. Another twenty percent (becoming fifteen percent after state adoption of a value-added model) will be based on an approved locally developed assessment of student achievement. The final twenty percent (which will increase to twenty-five after the value-added model is adopted) is not negotiable with bargaining units. Depending upon the grade and discipline taught, that number will be either assigned by the state based on growth of each student on the state assessment over one to three years or growth on a valid and reliable assessment approved by the state, such as New York State assessments in English and math for third through eighth grade students or by the Superintendent of the district in a process named Student Learning Objective (SLO). SLOs "assess the learning growth of students in classrooms where there is no State assessment" using a template that is provided by the State and completed by school district personnel as one means of evaluating teacher performance (http://engageny.org/resource/student-learrning-objectives/). Principals' scores are tied to the growth of their respective schools. In no case can an educator receive a rating higher

than Ineffective if no student growth has occurred (Education Law 3012-c) during the school year.

In the midst of all of this change, New York State has imposed on districts a cap on annual budget increases. Districts can raise taxes no more than two percent or the rate of inflation; whichever is lower, when they offer their annual budgets to the public for a vote. This cap seriously erodes funding for public education at a time when employee benefits including health care and retirement contributions already outstrip two percent. This burdens districts by decreasing funds for available professional development and decreasing staff sizes. Money for professional development or any other school reform initiatives have all but disappeared.

Furthering this point, the building level effects of APPR, namely the development, administration, and scoring of exams required for the collection of student data stand to have significant effects on student achievement. Firstly, student time on-task with regard to hours of instruction diminishes when APPR pre- and post- tests are administered during class. Further, teacher time for planning and reflecting is significantly diminished when faced with the tasks of creating and scoring the above-mentioned exams, as well as the formulation of SLOs on both the local and, in some cases, State level. This decline in teacher planning, reflecting, and collaborating time, coupled with the decrease of instructional time, increases the importance of quality instruction for the time that remains in the classroom. This need, in turn, potentially increases the need for quality professional development and increased creativity in the provision of on-site professional development provided by teacher leaders.

The current era of accountability in New York State provides an appropriate context for accomplished teaching through National Board Certification and its relationship to teacher leadership to be examined. In essence, New York educators are being asked to do more with less

and support for NBPTS may provide educators with an avenue to meet these more rigorous demands through accomplished teachers and teacher leadership.

Review of the Literature

"Change is the only constant." – Eskimo proverb

"Life is change. Growth is optional. Choose wisely." – William Somerset Maugham

Education in New York State is currently undergoing monumental changes, many due to
the adoption and implementation of the newest Annual Professional Performance Review

(APPR) guidelines. Concurrently, fiscal constraints have seriously impacted the management
and operations of schools throughout the state. The changes in teacher and principal evaluation
currently taking hold in New York State coupled with the increase in accountability for student
achievement give rise to the need for educators to find effective means of developing teacher
leaders and improve teaching in their organization. Exploring the potential link between
accomplished teaching and teacher leadership may provide useful information to principals
looking to increase local capacity through National Board Certification.

The Institute for Educational Leadership (IEL, 2008) in a recent analysis of school leadership concluded that teacher leadership is emerging as a critical component of high school reform. Further, teacher leadership standards have been developed by the Teacher Leadership Exploratory Consortium, and are intended to "codify, promote, and support teacher leadership as a vehicle for transforming schools to meet the needs of 21st-century learners" (Teacher Leader Standards, 2012). Traditionally, "at the school level, the principal's actions determine whether or not effective change happens" (IEL, 2005 as cited in IEL, 2008). While the role of the principal is still tantamount to the success of a school, "the empowerment of educators" is "needed to transform traditional, comprehensive high schools that foster high academic

achievement, close the achievement gap, and promote civic and personal growth in all high school age youth" (p. 5).

As teachers' roles and responsibilities change, "it is important and necessary... to obtain a clear and comprehensive grasp of aspects affecting this change, especially as it relates to how teacher leadership develops" (Jaimes, 2009, p. 45). Effective teacher leadership is one potential method of increasing local capacity on an organizational level in order to affect positive change.

Currently, there is limited research connecting accomplished teaching, as defined by earning National Board Certification for Teachers, with teacher leadership. Although a 2001 study conducted by Yankelovich partners indicated that "a high percentage of NBCTs report interest in devoting their time to teacher leadership activities," (p. 4) there is no current research in New York State with regard to NBCTs and teacher leadership activities, specifically with regard to middle and high school teachers. Crowther, Ferguson, and Hann (2009) stated, "teacher leadership is essentially an ethical stance that is based on views of both a better world and the power of teachers to shape meaning in systems. It manifests in new forms of understanding and practice that contribute to school success and to the quality of life of the community in the long term" (p. 28). In a growing community of international scholars, their shared view of teacher leadership is that "it now possesses identifiable conceptual qualities as well as an established role in practical processes of sustained school improvement" (p. 28). Data identifying the connection between accomplished teaching and teacher leadership may be useful to New York State middle and high school principals in this new reform era, as principals would potentially be provided with a reliable method of promoting highly effective teaching practices and establishing a culture that supports the growth and development of teacher leadership, both formally and informally. Firmly established is the link between accomplished teaching and

student achievement. Furthermore, as Danielson stated, accomplished teaching is requisite to effective teacher leadership (2006). Therefore, determining whether there is a correlation between accomplished teaching and teacher leadership may prove valuable as a professional development tool whose purpose is not only to recognize and inspire accomplished teaching but also to develop teacher leadership, with the ultimate goals being to build local capacity and improve student achievement.

Related Studies

In 2006, Lustick and Sykes published a study, "National Board Certification as Professional Development: What Are Teachers Learning?" In their research, Lustick and Sykes studied 120 Adolescent and Young Adult Science (AYA Science) candidates for National Board Certification over the course of two years in order to determine the learning that occurred through the process of National Board Certification. In their study, Lustick and Sykes determined that "teachers are undertaking worthwhile learning," (p. 29) advancing the "position of the advocates for professionalism as a policy choice" (p. 29). Lustick and Sykes found that teacher learning occurred through the process of NBCT candidacy in that "teachers learn to be more reflective practitioners as a result of the process" (p. 3). However, this study also found that teacher learning occurred through a mix of "dynamic", "technical", and "deferred" learning where "dynamic" learning is characterized as immediate, meaningful and substantial learning that affects teachers in their classrooms; "technical" learning refers to learning that is required to earn certification but might not substantively alter a teacher's practice in the classroom; and, "deferred" learning which is characterized by learning that is internalized upon reflection at a time after the certification process. Lustick and Sykes concluded that, although further research

is necessary, candidacy for National Board Certification for Teachers provides professional development that is substantive and worthwhile for the professionalization of teaching.

Similarly, in a study conducted by Severns (2007), the leadership activities of National Board Certified Teachers in Louisiana were analyzed, as well. The purpose of the Severns dissertation study was to "investigate whether a specific model of professional development, National Board Certification, can create sustained change aimed at improved school leadership" (2007, p. 135). Central to the study were leadership activities and teachers' perceptions of leadership. The research also considered "the current conditions of the NBC teachers, exploring the NBC teachers' perceptions of school and district level support of the NBC process and leadership opportunities extended to the teachers who are successful in achieving National Board Certification" (p. 135).

The study's findings supported all of the research hypotheses. The first hypothesis suggested that National Board Certified Teachers participated in teacher leadership activities more than their non-NBCT colleagues. The data from the study revealed that in school, district, state, and national arenas, NBC teachers participated more than their non-NBC colleagues in leadership activities.

In Severn's second hypothesis, sense of responsibility to the teaching profession, the findings indicated that 98.5% of the NBCTs who participated in the study indicated that they were willing to devote the extra time and effort required to be leaders in the profession. The third research hypothesis, "NBC teachers were more likely to report a sense of influence in school-wide policy," was also predicted (Severns, 2007, p. 133.). All of these findings were consistent with the previous related study done by Lustick and Sykes (2006).

The fourth hypothesis, career satisfaction, was also investigated. Results indicated, "more than 90% of the NBC teachers reported that participation in leadership activities results in career satisfaction and makes them feel more significant in the teaching profession" (Severns, 2007, p. 136). This finding may bear significance when considering the link between teacher performance and job satisfaction.

According to York-Barr and Duke (2004), interest in the concept of teacher leadership was borne of the "education reform initiatives of the 1980s" (p. 255). At that time, many discussions revolved around the professionalization of teaching. It was recognized that effective teaching was essential to providing students with high-quality education. As such, "initiatives sought to increase the status and rewards of teaching so as to attract and retain intellectually talented individuals, to promote teaching excellence through continuous improvement, to validate teacher knowledge about effective educational practices, and to increase teacher participation in decision making about classroom and organizational issues" (p. 256). Among the initiatives, various forms of merit pay incentives, site-based decision-making programs, and professional development schools were developed, each having "at their core the need for more active participation of teachers in the leadership and development of the educational enterprise" (p. 256). Although similar in intention, missing from each initiative was a common vision for the professionalization of teaching and agreement about both the specific qualities that teacher leaders possess and the role of teacher leadership in an educational organization.

The mid-1990s focused on standards-based reforms and accountability, quieting some of the attention that teacher leadership had enjoyed during the reform era of the 1980s. However, the most recent school reforms, coupled with the most current research on effective leadership, have given educators cause to revisit teacher leadership in earnest. "Without adequate resources,

it seems unlikely that teachers will be able to consistently meet the ever-increasing expectations for improved instructional performance. What professional supports are available to help teachers meet the demands of the current educational context?" (Mangin & Stoelinga, 2008, p. 1). In answer to that question, teacher leadership has resurfaced as a logical, pragmatic, and visionary construct that can affect change and catalyze instructional improvement and student achievement. "Schools and school districts are looking again to teacher leadership as a vehicle for teacher professional development and improvement in school organization and classroom instruction" (Smylie, in Mangin & Stoelinga, 2008, p. ix).

The world in which teachers prepare their students to participate is changing at unprecedented rates. Globalization is standard, and as a result, the need for restructuring of organizations has brought with it a newer understanding of how to affect sustainable improvements in productivity and innovation. Traditionally, education has lagged behind in the paradigm shifts that saturated the business world. "In addressing our current fiscal and economic woes, too often we neglect a key ingredient of our nation's economic future-the human capital produced by our K-12 school system. An improved education system would lead to a dramatically different future for the U.S. because educational outcomes strongly affect economic growth and the distribution of income" (Wall Street Journal, April 30, 2012, p. 1).

Compounding this slow pace is the unclear status of teachers as either laborers or professionals. Without clarity on this issue, and "as long as teachers [are] viewed as quasi-professionals rather than true professionals, they [will] work in schools that [are] trotting toward the future while the rest of the world [is] running toward it at full gallop" (Lieberman & Miller, 2004, p. 10).

There are many different kinds of opportunities for teacher leadership ranging from administrative tasks, allowing teachers to make decisions on school organization and instruction

to encouraging teachers to take on leadership positions. Central to any and all of these opportunities for teacher leadership is the understanding that teacher leadership is "something that is separate from and added to teachers' classroom work" and that its increasing prominence stands to aid in the professionalization of teaching while "redesigning the basic nature of teachers' work" (Smylie, in Mangin & Stoelinga, 2008, p. ix).

In Effective Teacher Leadership (2008), Mangin and Stoelinga described two unique benefits in building instructional capacity through teacher leadership. The first benefit stated that teachers bring some level of special knowledge about teaching to the school setting and the second, teachers do this not under school authority, but with the goal of promoting trust between teachers and the instructional leaders. This second benefit, building trust, is critical to sustained change in school culture and promotes the alignment of teacher leadership with transformational leadership. With an overarching goal to improve instruction and to enhance student learning (Mangin & Stoelinga, 2008, p. 1), restructuring schools to inspire all stakeholders to work together, regardless of title or official role, is a timely and relevant reform. As teachers are the front line in this endeavor, they "are the logical leaders to support and promote change" (p. 2).

The renewed focus on teacher leadership has extended into academic and professional literature. "A brief search of the Educational Resources Information Center (ERIC), the largest education database, revealed that the total number of articles, papers, and technical reports written about teacher leadership has increased by nearly 50% during the past 10 years" (Smylie, in Mangin & Stoelinga, 2008, p. ix). Research articles, papers, and technical reports have also increased in number and according to *Books in Print*, since 2000, over 20 new books have appeared on the topic of teacher leadership (p. ix). While attention is being paid, in earnest to the concept of teacher leadership, still lacking is a universally accepted definition of the concept,

a prescription for developing, cultivating, and supporting teacher leadership, and evidence of its direct impact on student learning. To that end, the purpose of this study was to explore the relationship between teacher leadership in New York State middle and high schools and the achievement of National Board Certification for Teachers as a possible method of developing teacher leadership skills.

In response to the increase in number and size of the challenges currently being faced, districts in New York State are searching for effective ways to develop teacher leadership in order to fulfill the growing demands placed on them. Kelley (2011) posited that "continuous professional development that focuses not just on the development of teachers' skills and knowledge but also on the aspects specific to their leadership role" (p. 39) is necessary for effective teacher leadership.

Distributive Leadership

Within the broader context of leadership, teacher leadership, both formal and informal, fits into the concepts of participative leadership, leadership as an organizational quality, distributed leadership, and parallel leadership:

As compared with exclusively hierarchical forms of leadership, distributed leadership more accurately reflects the division of labor, which is experienced in the organization on a daily basis and reduces the chances of error arising from decisions based on the limited information available to a single leader. Distributed leadership also increases opportunities for the organization to benefit from the capacities of more of its members, permits members to capitalize on the range of their individual strengths and develops, among organizational members, a fuller appreciation of interdependence and how one's behavior affects the organization as a whole. (Leithwood et al., 2004, p. 28)

Citing various sources, including Leithwood and Duke (1999), Ogawa and Bossert (1995),

Spillane et al. (2001), York-Barr and Duke concluded that "leadership is not vested in one person
who is high up in the hierarchy and assigned to a formal position of power and authority," (2004,
p. 262) but rather agree with Yukl (1994) that "leadership is viewed within an organizational
context as involving 'a social influence process whereby intentional influence is exerted by one
person [or group] over other people [or groups]"(Cited in York-Barr & Duke, 2004, p. 262).

They concluded by stating that teacher leadership is evidenced through "establishing
relationships, breaking down barriers, and marshaling resources throughout the organization in
an effort to improve students' educational experiences and outcomes" (2004, p. 263).

Because of external demands and pressures on schools and administrators, distributed leadership, a model of leadership that focuses on the interactions rather than the actions of those in informal and formal leadership roles, has become an alternative approach to leadership. In a study by the National College for School Leadership (NCSL) in 2003, distributive leadership was researched and highlighted as an "emergent property of a group or network of interacting individuals" (2003, p. 7). As reported in Harris, 2008, "the growth of what Gronn (2003) has termed 'greedy work' in schools has resulted in the expansion of leadership tasks and responsibilities. This has required leadership to be actively and purposefully distributed within the school. The model of the singular, heroic leader is at last being replaced with leadership that is focused upon teams rather than individuals and places a greater emphasis upon teacher, support staff and students as leaders (Harris, 2004)" (Harris, 2008, p. 31). "Implicit within this model of distributive leadership are the leadership practices of teachers, either as informal leaders or in a formal leadership role as a head of department, subject coordinator or teacher mentor" (Harris & Muijs, 2005). As Leithwood and Riehl (2003) noted, "research suggests that

teacher leaders can help other teachers embrace goals, to understand the changes that are needed to strengthen teaching and learning and to work towards improvement" (p. 3). The clear implication is that distributive leadership is most likely to contribute to school improvement and to build internal capacity for development (Harris & Muijs, 2005, p. 27). There also have been a growing number of research studies, which claimed that distributive leadership practices have a positive effect on systematic changes and student achievement. In a study by the Wallace Foundation (2004):

A number of individual and organizational benefits have been associated with distributed leadership. As compared with exclusively hierarchical forms of leadership, distributed leadership more accurately reflects the division of labor which is experienced in the organization on a daily basis and reduces the chances of error arising from decisions based on the limited information available to a single leader. Distributed leadership also increases opportunities for the organization to benefit from the capacities of more of its members, permits members to capitalize on the range of their individual strengths and develops, among organizational members, a fuller appreciation of interdependence and how one's behavior affects the organization as a whole. (p. 28-29)

York-Barr and Duke Framework

This study referred to the theoretical framework of York-Barr and Duke as a model of teacher leadership. The constructs contained in this model align with much of the literature from which it was derived and outline the behaviors and habits of mind of effective teacher leaders. The York-Barr and Duke Framework for teacher leadership draws from the concepts of transformational leadership and distributed leadership. As such, its implementation is varied and context-based. However, central to the success of teacher leadership, as it is defined through the

York-Barr and Duke Framework, is the fluid nature of the teacher leaders' roles. The framework was chosen for its alignment with much of what is also central to the success of the achievement of National Board Certification. Throughout the York-Barr and Duke Framework, a focus on teaching and learning as well as various targets of influence are highlighted. This is similar to the precepts that are required for achievement of National Board Certification.

Teacher leaders must meet the demands of the particular time and place in which they lead, while individualizing their approach to leadership based upon the people with whom and for whom they are working. This type of leadership was examined relative to accomplished teaching, as defined by the achievement of National Board Certification for Teachers by the National Board for Professional Teaching Standards. The York-Barr and Duke Framework, in alignment with the Leithwood model for transformational leadership, espouses the idea that leadership, specifically teacher leadership, can be developed, fostered, and supported. Central to this study was determining the relationship between achieving National Board Certification and the development of teacher leadership. "Principals can improve teacher quality by supporting staff development needs. Teacher leaders can help principals support professional development by identifying teacher development needs, offering professional learning experiences, developing and delivering opportunities and evaluating the outcomes of staff development" (National Comprehensive Center for Teacher Quality, 2007, p. 3). National Board Certification may provide a form of professional development through an advanced degree that promotes teacher leadership and student achievement.

In this sea of rapid change, an institution can succeed only if all constituents collaborate. In both administration and teaching, leadership must be present. According to Leithwood et al. (1999):

Shared decision-making and teacher professionalization are key elements of many school-restructuring plans. Both elements require teachers routinely to exercise more leadership outside the classroom than traditionally has been expected of them. So facilitating the development of teacher leadership has become an important part of the role of those in formal school leadership positions. (p. 115)

In order to be a successful or effective teacher leader, one must possess those qualities that accomplished teachers possess, most notably superior pedagogical and instructional skills. Additionally, however, it is important that teacher leaders develop strong leadership skills in order to affect meaningful and sustainable change to their schools with the overall goal of improving student learning. Among those leadership skills that teacher leaders must cultivate, Leithwood et al. (2004) outlined three basics of leadership that are essential. They indicated, "there is compelling evidence of a common core of practices that any successful leader calls on, as needed" (Leithwood et al., 2004, p. 4).

- 1. Setting Directions: Leaders must be adept at "helping one's colleagues develop shared understandings about the organization and its activities and goals that can under gird a sense of purpose or vision" (Leithwood et al., 2004, p. 23).
- 2. Developing People: Evidence suggests that "direct experiences organizational members have with those in leadership roles, as well as the organizational context within which people work" (Leithwood et al., 2004, p. 24) have a substantial effect on the culture of the organization.
- 3. Redesigning the Organization: "Successful educational leaders develop their districts and schools as effective organizations that support and sustain the performance of administrators and teachers, as well as students" (Leithwood et al., 2004, p. 24).

The development of leadership skills for teacher leaders is imperative in that, in order to affect change, they must rely upon these skills and not upon compliance on the part of those they lead due to position power. As such, recognition that "people are motivated by goals which they find personally compelling, as well as challenging but achievable" (Leithwood, et al., 2004, p. 8), is imperative. Similarly, "recent evidence suggests that emotional intelligence displayed, for example, through a leader's personal attention to an employee and through the utilization of the employee's capacities, increases the employee's enthusiasm and optimism, reduces frustration, transmits a sense of mission and indirectly increases performance" (McColl-Kennedy & Anderson, 2002 – in Leithwood, et al., 2004, p. 24).

The skills and habits of mind cultivated and mastered by the most highly effective leaders have little, if anything, to do with their formal roles as leaders. Rather, it is their ability to motivate those with whom they work toward a common, well-articulated vision that sets the stage for successful leadership. As such, "highly successful leaders develop and count on leadership contributions from many others in their organizations. Principals typically count on key teachers for such leadership, along with their local administrative colleagues" (Hord, Steigelbauer, & Hall, 1984 – in Leithwood et al., 2004).

Through York-Barr and Duke's 2004 study, "What Do We Know about Teacher Leadership? Findings from Two Decades of Scholarship", the evolution of the concept of teacher leadership was traced. The history outlined by York-Barr and Duke culminated in a conceptual framework of teacher leadership (Figure 3, p. 53), which the authors offered to guide inquiry into the "differentiated paths by which teachers influence organizational capacity, professionalism, instructional improvement, and student learning" (2004, p. 255).

The literature on teacher leadership reviewed by York-Barr and Duke (2004) was comprised of articles in peer-reviewed journals, articles in non-peer reviewed journals, scholarly reviews of literature, scholarly book chapters, reports, conference presentations, and a national education newspaper. Within their literature review, York-Barr and Duke cited "several major limitations" (p. 257), including that most of the studies reviewed were "qualitative, small-scale case study designs" (p. 257). Of the few large-scale quantitative studies, the authors recognized that these studies "reflect the difficulties incurred when attempting to quantify complex variables such as teacher leadership" and that few of the studies were theoretical. Further, broad conceptualizations of teacher leadership employed by different studies rendered "comparison of findings difficult" (p. 257).

York-Barr and Duke organized the body of their article around the following seven questions:

- Why focus on teacher leadership?
- How is teacher leadership defined?
- What do teacher leaders do?
- Who are teacher leaders?
- What conditions influence teacher leadership?
- How are teacher leaders prepared to lead?
- What are the effects of teacher leadership?

In their article, York-Barr and Duke (2004) organized the various rationales for focusing on teacher leadership into four categories. The first category–Benefits of Employee Participation–addressed issues that were "largely pragmatic" (p. 258). For example, due to the complexity of educational institutions, "additional person power is needed to run the

organizational operations" (p. 258). Additionally, increasing teacher participation "can inform management and result in more effective decisions" (p. 258). Further, "greater employee participation leads to greater ownership and commitment to organizational goals" (p. 258). This view of teacher leadership's importance to school success speaks directly to the current reform era of accountability in New York State. Reorganization and distribution of leadership can play a role in schools' abilities to meet the demands that are being placed upon them.

Their second category–Expertise About Teaching and Learning–centered on advancing teaching and learning. Citing the studies of Hart, 1995; Weiss et al., 1992; and Paulu and Winters, 1998; York-Barr and Duke furthered the notion that "teacher expertise is at the foundation of increasing teacher quality and advancements in teaching and learning" (2004, p. 258). They posited that, "when accomplished teachers model effective instructional practices, encourage sharing of best practices, mentor new teachers and collaborate with teaching colleagues," (p. 258-259) teacher isolation is minimized and a more professional working environment is established. Common to both accomplished teachers (NBCTs) and teacher leaders is the possession of mastery level teaching skills. These skills not only prepare teachers to provide knowledgeable insights to organizational and instructional pursuits, but also serve as a means of leveraging credibility amongst peers. Thus, their superior skills and expertise carry weight within their organizations.

The concept of a professional working environment led into the third category—Acknowledgment, Opportunities, and Rewards for Accomplished Teachers. In order to "recruit, retain, motivate and reward accomplished teachers" (2004, p. 259), York-Barr and Duke supported the notion that teacher leaders realized their own "growth and learning" without having to leave their posts as classroom teachers. Having the opportunity to be part of the bigger

picture of their schools and of education as a whole provides teacher leaders with opportunities for "continuous learning and a source of reward" (p. 259). Intrinsically motivated, teacher leaders and accomplished teachers are eager to realize their own potential and substantively contribute to their schools and profession.

The final category describing the need to focus on teacher leadership–Benefits to Students–consisted of two corroborating ideas. Students for whom the democratic system is modeled in the school setting benefit because they "observe and experience democratic leadership" (York-Barr & Duke, 2004, p. 259). Through that model, however, it is asserted that students benefit from "higher teacher morale and better decisions about student life in school because their teachers are more centrally involved in decision making and other forms of leadership" (Barth, 2001, cited in York-Barr & Duke, 2004, p. 259).

Definitions of Teacher Leadership

"Teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice" (Katzenmeyer & Moller, 2001, p. 5). Similar to the findings of Leithwood and Duke (1999) with regard to school leadership, York-Barr and Duke (2004) found that there was "a lack of definitional clarity" concerning teacher leadership. They attribute this, in part, "to the expansive territory encompassed under the umbrella term 'teacher leadership'" (p. 260) and focus their attention on the "overarching conceptions of teacher leadership" (p. 260) and their evolution. In essence, teacher leadership is broken into three phases, each increasing in complexity and aligning with the concept of transformational leadership, as it is defined by Leithwood. The first phase in this conception of teacher leadership deals with teacher leaders as managers "whose main purpose was to further the efficiency of" (p. 260) the existing system, but

not to effect meaningful change to the system. In the second phase, the intent was to "capitalize more fully on the instructional expertise of teachers by appointing teachers to roles such as curriculum leaders, staff developers, and mentors of new teachers" (p. 260). The third phase of the evolution corroborated the findings of Silva et al., 2000 with Darling-Hammond, 1988, and described teacher leaders as playing a central role in the "process of 'reculturing' schools such that the intentions of the second wave can be realized" (York- Barr & Duke, 2004, p. 260).

Among the other definitions discussed in York-Barr and Duke (2004), Childs-Bowen, Moller, and Scrivner (2000) posited that "teachers are leaders when they function in professional learning communities to affect student learning; contribute to school improvement; inspire excellence in practice; and empower stakeholders to participate in educational improvement" (2004, p. 260). Wasley (1991) asserted that teacher leaders have the ability to engage their colleagues in meaningful reflection in pursuit of increased student engagement. Fullan (1994) argued that teacher leadership encompassed "inter-related domains of commitment and knowledge" (p. 246). Common throughout each of the above-described conceptualizations was the interrelatedness of teacher leadership with accomplished teaching. Just as teacher leaders work to affect student learning, attain mastery level teaching skills, and reflect meaningfully on their work, so must accomplished teachers demonstrate these skills in order to earn certification. This study explored the concept that ensconced within the above definitions was likely to be a correlation between teacher leadership and National Board Certification for Teachers.

National Board Certification for Teachers

According to the National Board for Professional Teaching Standards, "National Board Certification is an advanced teaching credential" that "complements... a state's teaching license" (www.nbpts.org). National Board Certification "gives teachers and schools the tools to define and measure teaching excellence" based on the Five Core Propositions (Figure 1, p. 14):

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

The process of applying for National Board Certification for Teachers requires teachers to reflect systematically on every aspect of their craft. The development or enhancement of reflective practice is essential to success as a teacher leader. Further, National Board Certification candidates address their roles as educators both in and outside of the classroom. To that end, the York-Barr and Duke Framework is in alignment with the Five Core Propositions of the National Board for Professional Teaching Standards.

When reviewed with the York-Barr and Duke Framework for Teacher Leadership, clear correlations emerged. For example, the York-Barr and Duke Framework, just as the Five Core Propositions, holds student learning as a top priority. Further, both the Propositions and the Framework focus on expanding one's influence beyond the classroom. Within the Five Core Propositions is the expectation that "teachers are members of learning communities" and within the York-Barr and Duke Framework, two of the three targets of leadership influence extend

beyond the realm of the individual teacher's classroom and focus on "Teams or Groups" and "Organizational Capacity."

While teachers who earn National Board Certification are accomplished teachers who have met the rigors of the certification process, it is the last of the five propositions — membership in learning communities—that relates directly to the concept of teacher leadership. However, as part of the proposal for the inception of the National Board for Professional Teaching Standards (NBPTS), the 1986 document, *A Nation Prepared: Teachers for the 21*st *Century* hoped to create a cadre of teachers who would "provide active leadership in the redesign of the schools and in helping their colleagues to uphold high standards of teaching and learning" (Yankelovich et al, 2001, para. 3).

According to Yankelovich et al, NBCTs are "helping to write district-wide curriculum" and in so doing are reporting a "deep commitment to participating in activities that help other teachers" (2001, para. 4). Of the 2,186 survey respondents to Yankelovich et al's 2001 survey, "virtually all (99.6 percent) of NBCTs said they are involved in at least one leadership activity" (Yankelovich et al., Key survey findings, para. 1). The survey also indicated "an increase in participation in some leadership activities after teachers have achieved certification" (Key survey findings, para. 2). This study, as stated earlier, also built on the earlier works of Sykes (2006) and Severns (2007) in order to ascertain whether the correlation indicated by the Yankelovich Group, and supported by Sykes and Severns, currently exists in New York State for middle and high school NBCTs. This study provided insight into the current activities of NBCTs. It may also serve as a viable professional development tool for principals building capacity within their schools.

As trends in education reform have certainly changed over the course of the last decade, and the number of NBCTs has continued to rise within the State of New York, determining whether the findings of Yankelovich et al. are consistent with the activities of current NBCTs in New York State would help education leaders and reformers in their effort to provide students with meaningful and successful learning experiences. As stated by Frank, Sykes,

Anagnostopoulos, et al., (2008) "the potential value added by NBPTS certified teachers as help providers has policy and practice implications in an era when teacher leadership has risen to the fore as a critical force for school improvement (p. 2). Also, "as so-called 'distributed' perspectives on leadership gain currency, uses of NBPTS certification can play a role in identifying and signaling experienced teachers' willingness to undertake more leadership" (p. 46).

What Do Teacher Leaders Do?

York-Barr and Duke's review of the literature on teacher leadership revealed that "the leadership practices and possibilities for teachers are numerous and varied, and as such leadership opportunities for teachers also are numerous and varied" (2004, p. 263). Teacher leaders serve in a variety of capacities, both formal and informal. Formal leadership positions for teachers include union representatives, department heads, curriculum specialists, mentors, or members of a site-based management team. Informal leadership positions for teachers, York-Barr and Duke (2004) continue, included "coaching peers to resolve instructional problems, encouraging parent participation, working with colleagues in small groups and teams, modeling reflective practice, or articulating a vision for improvement" (p. 263). Emerging from the "teacher quality initiatives of the 1980s" (p. 263), concepts such as mentor teacher programs, teacher career ladders, shared governance initiatives, and professional development schools have

surfaced. With this context of teacher leadership evolution as a backdrop, York-Barr and Duke discussed the interplay between formal and informal leadership positions and the teacher leader's ability to affect change—the true mark of leadership.

In York- Barr and Duke (2004), Wasley (1991) in his study of three teacher leaders of varying positions stated, "it was the teacher who was not formally designated as a leader in his school who was more fully recognized and accepted as a leader" (p. 264). As such, Wasley concluded, "teachers can serve as powerful leaders when they work collegially with other teachers to encourage examination and evaluation of instructional practices and their effects on student learning and progress" (p. 264). Within that context, York-Barr and Duke recognized that "dimensions of teacher leadership practice that frequently emerge in the literature are relationship building and collaboration" (p. 265). As such, teacher leadership practice is not directly linked with positional authority, but rather with an individual's ability to affect positive change within an educational organization.

According to Murphy 2005, (as cited in Mangin & Stoelinga, 2008) districts and schools are creating new leadership positions—coach, chairpersons, subject coordinators—which expand the responsibility for instructional leadership to teachers. This resulted in formal teacher leadership roles in large-scale school reform and in more localized contexts (p. 3).

While teacher leaders as change agents does not, according to York-Barr and Duke, necessarily depend upon the formal position of the leader, the literature (Archer, 2001; Fessler & Ungaretti, 1994; Guiney, 2001; Paulu & Winters, 1998) revealed that "dominant forms of teacher leadership reflect more traditional, formal, one-person leadership roles both in the literature and apparently in practice" (2004, p. 265). Table 1 (2004, p. 266) categorized and summarized the

"dimensions of practice" of teacher leaders and "examples of supporting literature" for each of these dimensions.

Table 1
What Do Teacher Leaders Do?

Dimensions of practice	Examples of supporting literature
Coordination, management	• Coordinating daily schedules and special events (Wasley, 1991)
	 Participating in administrative meetings and tasks (Smylie & Denny, 1990)
	 Monitoring improvement efforts; handling disturbances (Heller & Firestone, 1995)
School or district curriculum work	• Defining outcomes and standards (Paulu & Winters, 1998)
	 Selecting and developing curriculum (Darling-Hammond et al., 1995; Fessler & Ungaretti, 1994)
Professional development of colleagues	 Mentoring other teachers (Archer, 2001; Berry & Ginsberg, 1990; Darling-Hammond et al., 1995; Devaney, 1987; Fessler & Ungarett, 1994; Hart, 1995; Paulu & Winters, 1998)
	 Leading workshops (Devaney, 1987; Fessler & Ungarett, 1994)
	• Engaging in peer coaching (Berry & Ginsberg, 1990; Devaney, 1987; Fessler & Ungarett, 1994; Guiney, 2001)
	 Modeling, encouraging professional growth (Silva et al., 2000; Smylie & Denny, 1990)
Participation in school change/improvement	• Taking part in school-wide decisions (Berry & Ginsberg, 1990; Hart, 1995; Paulu & Winters, 1998)
	• Working with peers for school change (Darling-Hammond et al., 1995; Heller & Firestone, 1995; Silva et al., 2000)
	• Facilitating communities of teacher learning through organization-wide processes (Crowther et al., 2002)
	 Participating in research, notably action research (Henson, 1996)
	• Confronting barriers and challenging the status quo in school's culture and structures (Crowther et al, 2002; Silva et al., 2000)
Parent and community involvement	• Becoming involved with parents; encouraging parent participation (Paulu & Winters, 1998)
	 Creating partnerships with community businesses (Paulu & Winters, 1998)
	• Working with the community and community organizations (Crowther et al., 2002; Paulu & Winters, 1998)

Contributions to the profession

- Preservice teacher education
- Participating in professional organizations (Fessler & Ungaretti, 1994; Paulu & Winters, 1998)
- Becoming politically involved (Paulu & Winters, 1998)
- Building partnerships with colleges and universities to prepare future teachers (Darling-Hammond et al., 1995; Fessler & Ungarett, 1994; Paulu & Winters, 1998; Sherrill, 1999)

(York- Barr & Duke, 2004, p. 266).

Also in their review of the literature, York-Barr and Duke suggested "teacher leaders are or have been teachers with significant teaching experience, are known to be excellent teachers, and are respected by their peers" (2004, p. 267). Citing sources such as Snell and Swanson (2000), Lieberman, Saxl, and Miles (1988), Acker-Hocevar and Touchton (1999), Wilson (1993), Yarger and Lee (1994), and LeBlanc and Shelton (1997), teacher leaders were described as those teachers whose classroom experiences have provided them with the experience, reputation, and interpersonal skills necessary to succeed in a leadership position, whether it is formal or informal in nature. Katzenmeyer and Moller (2001) furthered this idea by listing factors that "influence a teacher's readiness to assume the role and responsibilities of a teacher leader" (as cited in York- Barr & Duke, 2004, p. 267). Their list included such factors as: "excellent professional teaching skills, a clear and well-developed personal philosophy of education, being in a career stage that enables one to give to others, having an interest in adult development, and being in a personal life stage that allows one time and energy to assume a position of leadership" (p. 267). York-Barr and Duke (2004) concluded their discussion about those who assume teacher leadership roles by stating, "opportunities for leadership seem to grow out of success in the classroom" (p. 267).

Conditions Influencing Teacher Leadership

The tradition of teaching as an individualistic, isolationist, endeavor presents a significant challenge to the "prospects of teacher leadership" (York-Barr & Duke, 2004, p. 272) in that "one

of the most prevailing norms in the teaching profession is egalitarianism, which fosters the view that teachers who step up to leadership roles are stepping out of line" (p. 272). However, York-Barr and Duke presented a hopeful outlook with regard to the future of school culture and context as it related to teacher leadership when they posited that "despite the stranglehold of established school cultures and professional norms, there are reports that these traditions are giving way to new norms more conducive to teachers sharing in valued leadership functions" (p. 272).

The literature on roles and relationships and how they pertain to teacher leadership can be broken into two dimensions: teacher leaders and their colleagues, and teacher leaders and their principals. Inherent in successful relationships between teacher leaders and their colleagues are trust and collaboration (York- Barr & Duke, 2004, p. 272). Additionally, teacher leaders must possess "subject area and instructional expertise" (p. 272) in order to be accepted by their colleagues as leaders. This, York-Barr and Duke asserted in concurrence with Little (1998), is related to the idea that "the symbolic role of any leader requires that he or she be held up as a model" (p. 272-273). Finally, York-Barr and Duke cited the work of Hart (1994) and Stone, Horejs, and Lomas (1997), stating that "further facilitating the success of teacher leaders is an understanding by colleagues that teacher leadership roles are by their nature ambiguous and, therefore, must continue to be shaped by context needs, demands and interactions" (2004, p. 273).

With regard to the relationship between teacher leaders and their principals, York-Barr and Duke's review of the literature indicated, "the relationship established between teacher leaders and their principals is consistently identified as a strong influence on teacher leadership" (2004, p. 273). If a principal is supportive of the roles of teacher leaders, the likelihood of

success for teacher leadership within that building increases. They further concluded, "principals clearly are viewed as the individuals in the principal-teacher dyad with the greatest power, and the ones who set the tone for the relationship" (p. 273). In Michael Fullan's book *Motion Leadership In Action*:

Collaborative leadership makes two fundamental contributions. First, you get more done in the short run when many leaders are working on the same agenda. In fact, the job is too big if there are not scores of leaders working together on the same priorities. For sustainability, there is a bonus. If you are really always developing collaborative leadership, it means that the junior members are being groomed as the next generation of leaders. When we think of the school principalship, we say that your job is twofold: to focus relentlessly on the student achievement agenda and to deliberately develop leadership in others as you do this. (2013, p. 83)

However, the literature revealed, "there is evidence to suggest that principal support of teacher leadership is more readily espoused than enacted" (York-Barr & Duke, p. 274), thereby limiting the capacity of prospective teacher leaders to exert their influence. In summary, the literature reviewed by York-Barr and Duke indicated, "the development of solid relationships between the principals and teacher leaders was dependent on effective communication and on intentional tending of the relationship" (p. 274). According to the Wallace Foundation, "collective leadership has a stronger influence on student achievement than individual leadership" (2010, p. 19).

Another set of conditions that influence the success of teacher leadership consists of the institutional structures. Traditional hierarchical structures in management-employee relations, the literature studied by York-Barr and Duke (2004) presented a significant challenge to the

success of teacher leadership due to the "tradition of top-down leadership, instead of shared or participatory leadership" (Institute for Educational Leadership, 2011, p. 9). Physical structures also present obstacles, according to Coyle (1997) and Fullan (1994) because of their propensity to "perpetuate isolation and autonomy among teachers" (in York-Barr & Duke, 2004, p. 276). On the contrary, "considered supportive of teacher leadership are structures such as professional development schools in which learning and teacher leadership are presumably embedded, or potentially embedded, in all teachers' roles" (p. 276 – from Darling-Hammond et al., 1995). However, York-Barr and Duke conceded that, "structure creates opportunity for teacher leadership to be effective but that, ultimately, it is what happens within the structure that will determine whether the positive potential is realized" (p. 277).

Teacher Leader Preparation

York-Barr and Duke (2004) broke down the question of how teachers are prepared to lead into three areas: teacher preparation, principal training, and organizational preparation or the development of "individual and organizational capacities" (p. 277). However, their review of the literature focused primarily on "preparation or support of teachers for leadership" (p. 278) because "very little empirical work has been conducted in this area" (p. 278).

Two frameworks for teacher leadership development were reviewed in York-Barr and Duke, (2004), Rogus (1988), and Sherrill (1999). Within Rogus, "areas targeted for development of teacher leaders included the following: demonstrating skills of effective instruction, demonstrating an inquiry orientation to teaching, working with others, creating community, leading curriculum review and improvement, articulating and communicating vision, fostering ownership among peers for programs, empowering self and others, developing political support for change, and demonstrating patience and persistence" (as cited in York-Barr

& Duke, 2004, p. 278). Sherrill, on the other hand, put forward a framework that depended upon the premise that "skills required of teacher leaders would vary somewhat depending on the career stage of the teachers with whom the leaders worked" (p. 278). Career stages were separated into pre-service preparation, induction, and ongoing professional development, with a set of core competencies including "demonstrating exemplary teaching and learning, understanding theory and research about teaching and learning, understanding theories of adult development, cultivating desired dispositions in teachers, demonstrating knowledge of clinical supervision, and guiding colleagues by means of reflection and an inquiry orientation" (p. 278).

In their conclusion regarding teacher leadership preparation, York-Barr and Duke indicated that "the teacher leadership preparation literature suggests that both formal training, such as university coursework or district-based professional development, and job-embedded support, such as coaching by principals or other administrators, are important elements for development" (2004, p. 282). They further concluded that "the emergence of leadership is fostered in the context of a learning community" (p. 282) and the need for administrative support of teacher leaders.

The Effects of Teacher Leadership

Of the effects of teacher leadership, the most widely documented is the effect that leadership has on the teacher leaders themselves (York-Barr & Duke, 2004, p. 282). Citing the work of Barth (2001), Ryan (1999), Ovando (1996), Porter (1986), Smylie (1994), and Henson (1996); York-Barr and Duke (2004) contended that teacher leaders grow professionally as leaders and as teachers as they are exposed to a wider perspective of instructional practices, curriculum development, and leadership opportunities. Additionally, in York-Barr and Duke, Smylie (1994) indicated the potential "psychological benefits for teacher leaders in that

motivation is strongest among teachers who take on new leadership roles, as long as their work is meaningful at the level of instructional practice" (2004, p. 283).

In contrast, negative effects of teacher leadership on teacher leaders were documented, as well. For example, (cited in York- Barr & Duke, 2004) LeBlanc & Shelton (1997), and Ovando (1996) reported that "teacher leaders are known to experience difficulty in switching roles between teacher and leader" (p. 283) and Porter (1986) discussed the stress that teacher leaders feel from "the juggling that occurs when these individuals are simultaneously teaching *and* leading and from the varied, ambiguous, and sometimes all-encompassing nature of their leadership work" (cited in York-Barr & Duke, 2004, p. 283). Furthermore, a significant body of literature discussed that relationship shifts for teacher leaders often "violate egalitarian professional norms" and that "a negative effect of these relationship shifts can be a sense of greater distance from and even a loss of specific, valued relationships with colleagues" (2004, p. 283).

With regard to the effects on colleagues of teacher leaders, the literature cited by York-Barr and Duke was rife with descriptors such as "lower levels of trust", "resentment", "conflict", "dissonance", "confusion", "tension" and "resistance" (2004, p. 283-284). However, a "high level of perceived impact on the instructional practices of colleagues" (p. 284) was reported by the teacher leaders themselves and their principals. In their review of Smylie (1994), York-Barr and Duke noted two conclusions: "changes in classroom practice were more likely to occur among the teachers whose work was redesigned" and "changes in classroom practice were more likely to occur when initiatives were collective, as opposed to individual, and when initiatives targeted changes in the instructional practices of teachers as opposed to organizational-level practices" (2004, p. 284). York-Barr and Duke concluded their discussion on the effects of

teacher leaders on their colleagues by stating, "the research on teacher leadership effects on colleagues and their classroom and school-level practices suggests that school culture is a considerable obstacle to be overcome if the potential positive effects are to be realized" (p. 285).

With regard to the effects of teacher leadership on students, York-Barr and Duke indicated that "little evidence exists to support" claims of the effects that teacher leadership has on students. Of the literature reviewed, York-Barr and Duke noted the difficulty in quantifying teacher leadership due to its "ambiguous variables" (2004, p. 287), as well as the conclusion that "the structure of teaching continues much as it has always been, with teacher leadership roles, functions, and interactions maneuvered within or in addition to existing, usually constraining, structures" (p. 287).

This study explored the utilization of the benchmarked skills demonstrated through achievement of National Board Certification creating a possible caveat through which leaders can harness the strength of NBCTs to affect change in schools via student achievement. "Use of National Board Certified Teachers in differentiated roles determined within their schools…has the potential to affect classroom practice in significant ways. Influencing fellow teachers and engaging them is a slow process. However, committed teacher leaders are tenacious and do whatever it takes to make things better for students" (Katzenmeyer & Moller, 2001, p. 126).

Development of the York-Barr and Duke Framework for Teacher Leadership

"Active involvement of individuals at all levels and within all domains of an organization is necessary if change is to take hold" (Ogawa & Bossert, 1995; Spillane, Halverson & Diamond, 2001 in York-Barr & Duke, 2004, p. 255).

In a summary of two decades of research, York-Barr and Duke (2004) reviewed "findings from a comprehensive review of the teacher leadership literature" (p. 256) and presented "a

conceptual framework that situates key findings of this review in a framework that can guide both current practice and future inquiry about teacher leadership" (p. 256). This model focused on a theory of action by which teacher leaders can positively influence student learning. These researchers posited that teacher leadership is comprised of seven major components, the first three of which "serve as the foundation upon which teacher leadership is possible and are largely drawn from the existing literature," (p. 289) the second three "identify the means by which teachers lead, the targets of their leadership influence, and the intermediary outcomes of changes in teaching and learning practices" (p. 289), with the final component comprising student learning.

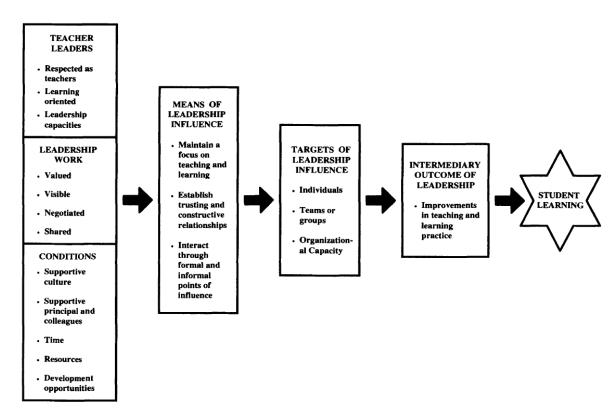


FIGURE 1. Teacher leadership for student learning: Conceptual framework.

Figure 3. Teacher leadership for student learning: Conceptual framework. Adapted from York-Barr and Duke Conceptual Framework

It is important to note that, while the foundation of the York-Barr and Duke Framework (Figure 3) comprises the first three components, the qualities possessed by teacher leaders are measurable only in as much as they exist in an organizational environment that supports those outlined through the second and third, Leadership Work and Conditions. In *Changing Leadership for Changing Times*, Leithwood, Jantzi, and Steinbach (1999) posited that "truly collaborative cultures encourage the exchange of ideas and endorse mutual problem solving, thereby providing rich opportunities for the exercise of teacher leadership," (p. 131-132) supporting the notion that organizational culture cultivates or stymies the development of teacher leaders.

The second three components of the York-Barr and Duke Framework "suggest the path by which teachers lead to affect student learning" (2004, p. 289). These components paralleled Leithwood, et al's concept of the exercise of teacher leadership mentioned prior. Within these three components, York-Barr and Duke outlined, "the means by which teachers lead, the targets of their leadership influence, and the intermediary outcomes of changes in teaching and learning practices" (p. 289).

The focus of the fourth component, Means of Leadership Influence, included "maintaining focus on teaching and learning", "establishing trusting and constructive relationships", and "interacting through formal and informal points of influence" (York-Barr & Duke, 2004, p. 290) whether one's leadership role is formal or informal.

For the purposes of this study, "maintaining focus on teaching and learning" was measured as activities and roles that promoted the learning of students beyond those for whom a teacher is directly accountable. This study focused on these components, as they were exhibited by middle and high school NBCTs in New York State. Examples included, but were not limited

to, the facilitation of professional development activities, the development of curriculum, new teacher training, pre-service teacher training, and the development of a building or departmental master schedule. Additionally, supervisory roles assumed by chairpersons, curriculum coordinators, and other professionals with similar roles and titles were also included within this measure. When identifying practitioners as teacher leaders by "interacting through formal and informal points of influence," activities of professionals serving in various capacities, including those mentioned above, as well as those with positions that are not traditionally considered teacher leadership roles, such as dean of students, were measured. According to Danielson in Teacher Leadership, (2006), "an important characteristic of a teacher leader is expertise and skill in engaging others in complex work" (p. 12). Therefore, this study was built on the work of Sykes (2006) and Severns (2007) in order to ascertain whether the correlation indicated by the Yankelovich Group existed in New York State for middle and high school NBCTs. To that end, it was not the specific title or formal role of the professional that was measured, but rather the type of teacher leadership displayed by each individual that was the focus, as was indicated in the School Leadership Survey, modified for the purpose of this study. Qualitative interviews of random respondents to the survey also added richness and depth to the overall study.

While the clearest correlation between the York-Barr and Duke Framework and the Five Core Propositions of the National Board for Professional Teaching Standards was the focus on student learning, additionally, the Five Core Propositions also aligned themselves with York-Barr and Duke in that there was a common focus on teaching and learning. Both the framework and the propositions relied heavily on teachers' reflective practices. As stated earlier, it was teachers' reflective practices along with their expertise both inside and outside of the classroom that signified teacher leadership and accomplished teaching.

With its roots in the reform initiatives of the 1980s, the recent emphasis on teacher leadership came about due to concerns regarding the status of the professionalization of teaching as a career and how the then "isolated culture of teaching diminishes teacher growth and professionalism" (Talbert & McLaughlin cited in York-Barr & Duke, 2004, p. 256). While much work has been done to promote collaboration between and among teachers, thus decreasing the role that the isolationist model perceived in the 1980s has on contemporary classrooms; a new set of variables has amplified the need for support and development of teacher leaders. Still relevant today is the concern regarding the status of the teaching profession. Additionally, the retention of highly skilled teachers is also relevant. According to Katzenmeyer and Moller, "teacher leadership opportunities can promote teaching as a more desirable career and help to retain outstanding teachers for the complex tasks of school change" (2001, p. 32). Furthermore, in this age of accountability, teacher leadership is positioned as one means of increasing teachers' sense of responsibility over all students' learning. "As teachers are given authority to make student-related curriculum and instruction decisions, they will better understand how they are responsible for student outcomes" (Katzenmeyer & Moller, 2001, p. 34). "It is in accordance with these kinds of arguments that we have seen increased advocacy for new styles of leadership that have been described variously as instructional leadership (Hallinger, 1988), transformational leadership (Leithwood & Jantzi, 1990) and shared governance (Glickman, 1990)" (Hargreaves, 2011).

Necessary, however, for measuring teacher leadership, and subsequently its impact on school change and student learning, is a framework for teacher leadership. York-Barr and Duke, through an extensive review of the literature on teacher leadership throughout the preceding two decades, created their framework of teacher leadership. Through their framework, York-Barr

and Duke (2004) outlined the "foundation upon which teacher leadership is possible" (p. 289). Educational improvement at the teaching level directly involves leadership by teachers in classrooms and with peers. In order for teachers to positively and effectively "influence their colleagues, principals, and other members of school communities to improve teaching and learning practices," (p. 288) teachers must have credibility amongst their colleagues. According to York-Barr and Duke, "teacher leaders have backgrounds as accomplished teachers, and they are respected by their colleagues" (p. 288). Furthering this idea, Hargreaves indicated that, unlike principals whose average tenure in one building spans three to five years, "it is not uncommon for a teacher to work in the same building for 20 to 30 years" (2011, ppt. 6). This greater professional longevity, Hargreaves asserted, placed teachers in a position to affect long term and sustainable change, presumably due to their prior knowledge of school history and culture and their long-term commitment to the organization. If given opportunities to provide leadership, teachers with longevity in a school building may stave off complacency and the insular views that are often associated with remaining in the classroom throughout one's entire career. The challenge for administrators, then, is to tap into the leadership potential that exists in teachers at all stages in their careers in order to affect sustained change.

Conceptual Framework

This study examined the relationship between accomplished teaching, defined as achieving National Board Certification for Teachers, and teacher leadership, as defined by the conceptual framework provided by the York-Barr and Duke Conceptual Framework for Teacher Leadership and furthered by Katzenmeyer and Moller (2001), in New York State middle and high schools. Data gathered from this study may inform administrative decisions with regard to professional development for the creation of teacher leaders under the current reform agenda,

given the current financial constraints faced by New York State schools. With the impact of accomplished teachers on student outcomes being well documented, information regarding the relationship between accomplished teaching and teacher leadership in New York State stands to potentially shed light on a relationship between teacher leadership and building capacity.

The York-Barr and Duke Conceptual Framework for Teacher Leadership aligned with National Board Certification may be useful as a resource for school improvement. York-Barr and Duke worked to align the various definitions of teacher leadership in order to measure the function and role of teacher leadership in the educational environment. Inherent in the framework are the interconnectedness of all stakeholders within a school community and the importance of a clear, concise, and systemically recognized mission and vision. When used in conjunction with clearly articulated school improvement goals, the York-Barr and Duke conceptual framework for teacher leadership possesses the potential to revolutionize the culture of a school and drive the changes that the current reform era demands. Further, "NBPTS certification can assist districts in strategic staffing of instructional support, potentially saving expenditures on outside consultants by making better use of an internal leadership cadre" (Frank, Sykes et al., 2008, p. 46). This study explored the relationship between accomplished teaching and teacher leadership so as to provide schools and districts in New York State, who are doing this reform, with a reliable method for increasing local capacity and ultimately student achievement.

The framework is dynamic, meaning that it provides flexibility and individualization depending upon the needs of any particular building at any particular time. The framework includes modeling best practices in teachers' classrooms, mentoring newly hired teachers, participating in various building, district, and community committees, and providing input with

regard to curricular decisions. With the final goal of all endeavors being to improve student learning, the way in which a teacher leader is chosen to handle any and all of the above scenarios must be considered in the same way that a skilled teacher will differentiate instruction for her students. Teacher leader roles must be differentiated according to the changing needs of the organization and the varied skills that teacher leaders possess. Additionally, the framework can be used to identify which skills need to be developed and supported for the good of the organization and which skills are plentiful.

The York-Barr and Duke Conceptual Framework for Teacher Leadership provides a systematic method of reflection that can drive school improvement. "The practice of teacher leadership requires flexibility with adjustments informed by ongoing individual and collective reflection about the effects on educational practice and student learning" (2004, p. 291). The framework, when applied to individual organizations and/or individuals within an organization, serves as a means of reflection, evaluating an individual's teacher leadership areas of strength and weakness, as well as the way in which an individual's skills interact within the context of the organization. As achievement of National Board Certification is indicative of strong reflective skills, the potential for accomplished teachers to become teacher leaders is an area worthy of further exploration.

The following chapter describes the methodology and procedures that were used to examine the relationship between National Board Certification for teachers and teacher leadership in New York State middle and high schools.

CHAPTER III

METHODOLOGY

This chapter described the methodology and procedures that were used to examine the relationship between accomplished teaching, as defined by the National Board for Professional Teaching Standards, and teacher leadership in middle and high schools in New York State. A brief introduction to the methodology was followed by a description of the research design. A description of the participants and the instrumentation was provided. Further, data analysis methodology was described and research procedures were explained. Finally, limitations and delimitations of the study were presented.

Background of the Problem

New York State's successful application for the Race to the Top funding grant detailed three prongs of a Regents reform agenda, namely: (1) a new teacher and principal evaluation and support system (APPR); (2) participation in a consortia of states to develop and adopt internationally-benchmarked standards and assessments to assure that New York graduates are college and career ready; and (3) creation of longitudinal (P-20) data systems that would measure student success and help teachers and principals to improve their professional practices (usny.nysed.gov/rttt/application/narrativessummary.pdf). Every New York State district and school is in the midst of implementing these New York State Common Core Learning Standards as one means of increasing rigor in classrooms with the intent of increasing college and career readiness. An enormous shift in the way instruction occurs and its effectiveness, since spring of 2013, has been measured by high-stakes assessments as early as spring of 2013. Principals and teachers have been accountable for student achievement as new APPR regulations "include multiple measures of educator effectiveness" (New York State Education Department, 2011). As

a result, schools and districts in New York State have been grappling with a need to continuously improve instruction and student achievement while simultaneously implementing newly adopted State and Federal initiatives that require significant time and resources.

Research Problem

School administrators' roles and responsibilities have changed significantly under the latest education reforms. Consequently, redistribution of many roles and responsibilities within a school organization has been explored to most efficiently and effectively provide students with high quality educations. In order to combat "initiative fatigue", a term coined by Douglas Reeves, a Boston-based author and consultant, school administrators must be innovative in their efforts to adhere to regulations while developing local capacity through teacher leadership in the face of sweeping educational reforms (Reeves, 2010). Therefore, the problem has been excessive leadership demands—the increase in accountability, most recently under Race to the Top and APPR, coupled with decreasing financial resources. It has become increasingly difficult for school administrators to implement and sustain the myriad ways to support the academic, social, emotional, and physical growth of each student in their charge.

Research Purpose

The purpose of this study was to explore the relationship between teacher leadership and accomplished teaching, as defined by the National Board for Professional Teaching Standards, in New York State. This study may provide schools and districts with potential strategies for building local capacity, developing teacher leadership, and ultimately improving student learning. Building capacity by developing teacher leadership through the process of National Board Certification may provide one solution for school districts and administrators as they work to meet higher demands in this new era of accountability. The research cited in this study

supported the idea that a clearer understanding of this relationship may offer school administrators a method for developing teacher leaders while providing research based professional development for teachers. Current research underscored the positive effects that NBCTs had on student achievement. Further, data collected from a 2001 National study conducted by the Yankelovich Group and the National Board for Professional Teaching Standards indicated a positive correlation between attainment of National Board Certification and teacher leadership. A similar study, by Sykes (2006) in Ohio and South Carolina, used a modified version of the research tool utilized by the Yankelovich Group, and demonstrated findings that were consistent with the 2001 Yankelovich Group study. Further, Severns (2007) in conducting a study in Louisiana further modified the Sykes tool and found similar results as in the findings of both Sykes and Yankelovich.

Research Questions

The following research questions that guided this study were:

How do self-perceptions of NBCTs, non-NBCTs, and principals in middle and high schools in

New York State compare regarding teacher leadership in the area of:

- 1. Participation in leadership activities beyond the classroom?
- 2. Sense of leadership responsibility to the profession?
- 3. Perceptions of influence in school-wide policy development?
- 4. Reports of career satisfaction due to school leadership roles?
- 5. Perceptions of administrator support of teacher leadership?

This question, and its sub-questions, were designed to explore the relationship that existed between achieving National Board Certification and teacher leadership. Examining this relationship was a way of developing a better understanding of how administrators and teachers

could successfully develop teacher leaders in this current reform era.

Research Design

This mixed method study examined the relationship between teacher leadership and accomplished teaching, as defined by the National Board for Professional Teaching Standards, in New York State. Specifically, research participants were asked to provide data regarding their experiences with NBPTS, teacher leadership, and their perceptions of how, if at all, the two were related. Middle and high school NBCTs and non-NBCTs along with principals of schools with a high concentration of NBCTs participated in a quasi-experimental research study.

Mixed method studies "combine quantitative and qualitative approaches by essentially mixing both quantitative and qualitative data in a single study. The purpose of mixed methods research is to build on the synergy and strength that exists between quantitative and qualitative research methods in order to understand a phenomenon more fully than is possible using either quantitative or qualitative methods alone" (Gay, Mills, & Airasian, 2006, p. 490). A quasi-experimental, causal-comparative mixed method approach was used in this study to examine the relationship between NBCTs and teacher leadership, the dependent variable of the study. Because the researcher could not control or manipulate the independent variables, the relationship between the variables could only be linked, not established (Gay et al., 2006; Leedy & Ormrod, 2005). Thus, the research design for this study was quasi-experimental because the subjects were not randomly assigned to the treatment group (NBCTs) and the independent variables were not manipulated. In this study, the treatment, National Board Certification, was administered prior to the study.

Population

The population for this study was all middle and high school teachers within the State of New York at the time of the survey distribution. This information was accessed using the New York State Education Department website and through the Office of Teaching Initiatives in Albany, NY. The sample group consisted of 426 middle and high school National Board Certified teachers. Marc D'Anjou, corporate secretary of the National Board for Professional Teaching Standards (NBPTS) located in Arlington VA, provided the data set listing all NBCTs in New York State. As the NBPTS was not permitted to provide contact information for these teachers, the Office of Teaching Initiatives in Albany, NY, was contacted. Information was also available through each individual district's websites. This sample group and the control group of 511 non-NBCTs in New York State were issued the modified School Leadership Survey via the professional online survey software SurveyGizmo. The control group was selected from the same districts as the sample group using similar ratios. Each non-NBCT was assigned a number, and the researcher randomly selected a statistically relevant number of survey participants by using a computer based randomizing software called "Research Randomizer" found at http://www.randomizer.org. The quantitative portion was designed to reveal the type of leadership activities in which NBC teachers were involved and gave their insight into their perceptions of these activities. The intent was for the comparison of leadership activities of NBC and non-NBC teachers to give a clearer picture of the impact on the relationship between accomplished teaching and teacher leadership in New York State.

Because research for this study centered on teacher leadership defined by York-Barr and

Duke as "leading among colleagues" in relation to the process of obtaining National Board

Certification, it was important to further investigate the contributions of NBC through qualitative

methods. This portion of the study consisted of interviews with a random sample of 15 NBCTs who agreed on the survey document to participate in an interview to examine and describe behaviors and perceptions more thoroughly. Principals were chosen from top districts in New York State with a high concentration of NBCTs. The districts were, New York City Department of Education, Schenectady City, Arlington Central, Wappingers Central, and Niskayuna Central. Their input helped to further investigate the relationship between NBCTs and teacher leadership.

Data Collection

Data collection occurred in two forms: quantitative survey and qualitative interviews. The first form of data collection was taken from the online survey. Quantitative methods were utilized to analyze the data from the online survey instrument. "The quantitative approach is practical since: (a) the research procedures will be implemented prior to initiation of the study; (b) the researcher will maintain control over possible interference factors that may confound data analysis; (c) sufficiently large samples of participants will be used; and (d) data analyses that rely on statistical procedures will be employed" (Gay, et.al., 2006 – in Starnes, 2013, p. 49).

There were a number of issues related to collecting data needed for this study. The corporate secretary of the National Board for Professional Teaching Standards located in Arlington VA provided the data set listing all NBCTs in NY State. At the time of this study, the population of middle and high school National Board Certified Teachers in New York State was approximately 507. Due to confidentiality, their contact information could not be provided. As a result, the researcher worked with the Office of Teaching Initiatives, NYS Education Department located in Albany, NY, to obtain the email addresses of the sample of NBCTs indicated above. There were many obstacles to gathering contact information, some of which included teachers changing districts, leaving the education field, changing names

(maiden/married), retiring from service and earning promotions. The control group of non-NBCTs was selected from similar districts as the sample group. Contact information was put into Research Randomizer (www.randomizer.org.) and 511 non-NBC teachers were selected. Both data sets were issued the modified *School Leadership Survey* via SurveyGizmo.

Another issue was obtaining permission to use the NBPTS survey. The first problem was that the NBPTS had difficulty locating the original survey from the Yankelovich Group, which was no longer in operation. After approximately one week, the NBPTS located the *NBPTS NBCT Leadership Survey* and emailed it to the researcher. The researcher then obtained written permission from the National Board for Professional Teaching Standards to utilize and modify the *NBPTS NBCT Leadership Survey*, which was used in the quantitative portion of this study. Finally, permission was granted via email (Appendix B) to access and modify the *NBPTS National Board Certified Teacher Leadership Survey* via NBPTS. It was necessary to do a complete analysis of the survey and adapt it to meet the needs for this study. To begin this process, each question from the Severns (2007) SLS survey was compared to the research question and sub-questions of this study. Questions were either removed or altered to align them with the five constructs of the *School Leadership Survey*.

Upon receipt of approval from the Institutional Review Board of East Stroudsburg

University, an email introducing this study was emailed to each of the study participants. The
entire survey population was sent an email explaining the basis of the study. The email
described instructions for the teachers to follow if they chose to participate in the study

(Appendix C).

An "Informed Consent" form was sent along with an email, which informed participants of the purpose of the research, potential risks to research participants, participants' rights, and investigator contact information (Appendix D).

A final data collection issue was ensuring a sufficient number of responses. The initial data collection was scheduled to begin in June 2013, but, because the New York State Regents testing calendar, along with final exam schedules and graduation activities would have potentially limited the number of survey responses, the researcher decided it was best to wait until mid-August 2013, just prior to school re-opening, to launch the School Leadership Survey. Knowing that teachers would be in the mindset of beginning a new school year and possibly revisiting their school email accounts after the summer break, the researcher thought this would maximize the participant response rate. The initial survey launch was sent to 426 NBCTs and 511 non-NBCTs on August 15, 2013. Both data sets were issued the modified School Leadership Survey via SurveyGizmo. As an incentive to encourage the response rate, a Kindle Fire was raffled to a lucky participant. Still, responses to the survey were slow. Subsequently, reminder email messages were sent via SurveyGizmo along with four additional reminders of the survey between early September and mid-November. The researcher also sent emails to the principals of the participants' schools alerting them of the survey and asking them to encourage their staff to respond (Appendix E). One district in particular, denied permission to survey their teachers until late fall, pending their review of the researchers IRB-approved protocol. By December 14, 2013, 160 surveys were received or 17% of the entire survey population. When no more surveys were to be collected, data from the SLS was entered into the Statistical Package for Social Sciences (SPSS) software, version 21, for analysis.

The second form of data collection was qualitative data from telephone interviews with survey respondents and principals. Qualitative methods in the form of researcher interviews of NBCTs and principals were utilized to increase the specificity and depth of information. A random sample of fifteen NBCT survey respondents who volunteered to be interviewed were administered an approximately 30-minute phone interview in late fall after the surveys had all been received and initial data analysis had been completed. The researcher scheduled those interviews with participants at a date and time of mutual convenience. A brief synopsis of the study was shared with participants. The semi-structured interview questions were asked, via telephone, by the researcher. Minor modifications occurred in each interview based on the responses of the participants. In addition to the NBCT interviews, five principals of middle and high schools that had a high concentration of NBCTs were also interviewed. These interviews were also conducted by telephone and occurred in mid-January, after the completion of the teacher interviews. Similarly, the length of the interviews and exact wording of the questions varied given participants responses.

Survey and interview data were then summarized or coded and analyzed. Trends and patterns compiled from teacher and principal interview data were analyzed and triangulated with the data collected from the surveys. The survey and interviews for the teachers and principals are described in detail in the next section.

The Survey Instrument

In 2001, the National Board for Professional Teaching Standards sponsored a survey, the NBPTS NBCT Leadership Survey, conducted by the Yankelovich Partners, one of the largest U.S. research-marketing firms at that time. "This research was based on 2,186 surveys

completed by National Board Certified Teachers nationwide" (Yankelovich, 2001). The three primary and three secondary objectives of this research included:

- Are NBCTs moving into positions of leadership? What positions of leadership?
- What positions are most significant?
- To what extent did achieving National Board Certification affect the attainment of these leadership positions?
- Are the leadership roles paid positions?
- Do the leadership roles affect classroom effectiveness?
- How do leadership roles contribute to career satisfaction?

(Yankelovich, 2001, p. 1-2).

These survey results were used to develop strategies for supporting NBCTs in expanding their leadership. Results were overwhelmingly positive in the correlation between achieving National Board Certification and teacher leadership.

In 2006, the National Board for Professional Teaching Standards funded another study, conducted by Sykes. The "Sykes et al. study investigated how NBC teachers in Ohio and South Carolina functioned as agents of school leadership and professionalism focusing on three issues: policy and National Board Certification; teacher influence and NBC; and the school and NBC" (Sykes et al., as cited in Severns, 2007, p. 101). This three-phase study was sent to all NBC teachers in the two states. The study consisted of a school-level survey administered to the full faculty in 47 elementary schools in the two states and selected teacher interviews in four of the schools. Results indicated that the learning outcomes discussed in this report (including the identification of Dynamic, Technical, and Deferred Learning Categories) should inform debate between educational stakeholders regarding the financial and ideological costs and benefits of

National Board Certification as a means of improving teacher quality, provide suggestions for the improvement of the assessment process, and contribute insight into the current divisive state of science education in public education (Sykes, et al., 2006, p. 3-4).

For the purposes of this study, a modified version (Appendix A) of the Sykes' School Leadership Survey (Severns, 2007) was used to measure the relationship of teacher leadership and NBCTs in New York State. Given her proposed adaptations to the Sykes study, Severns communicated with Sykes to resolve reliability issues of the survey. First, "Dr. Sykes reported that the survey used in the larger study included many items from the 1999-2000 Schools and Staffing Survey (SASS). The National Center for Education Statistics developed SASS in the mid-1980's to collect data on teacher demand and shortage, teacher and administrator characteristics, school programs, and general conditions in schools" (Severns, 2007, p. 102). Severns contended that, "using the items on the Sykes et al. study which were based on items from the SASS questionnaire, Dr. Sykes' pilot study, the use of the survey in a large published study, the expert panel, factor analysis procedures, and use of the Cronbach alpha statistic point to the validity and reliability of the School Leadership Survey" (Severns, 2007, p. 103). Content validity of the School Leadership Survey was established through a panel of experts. The SLS was administered to an expert panel prior to being administered to the middle and high school National Board Certified Teachers and non-NBCT teachers in New York State to discuss the clarity of the questionnaire, the length of time it would take to complete, and to solicit comments on the instrument. This panel included Dr. Alison Rutter, Associate Professor of Early Childhood and Elementary Education, East Stroudsburg University; Dr. Ralph Ferrie, Superintendent of the Sewanhaka Central High School District, Floral Park, New York; and Dr.

Kathleen Gulbin, Assistant Superintendent of Curriculum and Instruction, Amityville Union Free School District, Amityville, New York.

"While a survey is not useful in measuring actual behavior, it is a useful tool to determine perceptions of behavior (Sherblom, Sullivan & Sherblom, cited in Jalongo, Gerlach & Yan, Eds., 2002). It provides information from a sample population that allows the researcher to make inferences about the population. A well-designed survey provides timely data from a large number of participants in a relatively inexpensive and efficient manner" (Creswell, 1994, cited in Gulbin, 2008, p. 114). In 2007, Severns administered an adopted version of the *School Leadership Survey* to NBC and non-NBC teachers in Louisiana. Severns' *School Leadership Survey* provided insight into school leadership activities and perceptions of NBC teachers in the state of Louisiana. In fact, as predicted in the first research hypothesis of the study, the results suggested that the National Board Certification professional development model does signal greater NBC teacher participation in leadership activities. Further, "the data revealed that NBC teachers were significantly more likely to participate in leadership activities in the school, district, state, and national arenas. These findings are consistent with previous studies on teacher leadership" (NBPTS, 2001; Sykes et al., 2006).

For the purposes of this study, this researcher modified the Severns (2007) *School Leadership Survey* to explore the relationship of teacher leadership and NBCTs in New York State. Multiple items in this survey were addressed in each of the operational constructs addressed in the research question. The operational constructs in the research question were: participation in leadership activities beyond the classroom; sense of leadership responsibility to the profession; perceptions of influence in school-wide policy development; reports of career

satisfaction due to school leadership roles; and perceptions of administrator support for teacher leadership.

Teacher Semi-structured Interview

Interview questions (Appendix F) were derived from the literature and the experiences of interview participants. These questions were derived from the SLS survey, and coded to the study's constructs to ensure that each interview question was in alignment with research questions. Each of the interview questions was piloted to a small sample group prior to phone interviews in order to ensure that questions were clear and concise, as well as to estimate the amount of time necessary for each interview to be fully conducted.

Principal Semi-structured Interview

Principal interview questions (Appendix G) were also derived from the literature and the SLS survey and were coded to the study's constructs to ensure that each interview question was in alignment with the research question and its sub-questions. Approximately five minutes were allotted for each of the seven interview questions when estimating the amount of time necessary for each interview to be fully conducted.

Data Analysis

This was a mixed method study. In as much, both quantitative and qualitative data were analyzed and then the combined findings were analyzed together. These next sections explain the details of these processes.

Quantitative Data Analysis

The initial portion of this study was quantitative in nature because this sort of research was useful when investigating a large respondent pool. Existing realities were measured objectively in order to "establish its predictive or explanatory value" (Gulbin, 2008, p. 114).

A quantitative study, consistent with the quantitative paradigm, is an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures in order to determine whether the predictive generalizations of the theory hold true. (Creswell, 1994, cited in Gulbin, 2008, p. 114).

The data generated and collected were measured and analyzed through various statistical methods. Frequency distributions were utilized to help describe results of the survey. A series of one way analyses of variances (ANOVAS) were used to investigate differences between NBCTs and non-NBCTs. All statistical analyses were done with Statistical Package for the Social Sciences (SPSS) software, version 21.

Qualitative Data Collection

The second section of this study was qualitative in nature. To increase the depth of responses, the data collected from the qualitative portion of this study more fully described the nature of the relationship between teacher leadership and accomplished teaching. NBCT middle and high school teachers in New York State, as well as principals of middle and high schools with high concentrations of NBCTs, were asked to participate in a phone interview. The researcher scheduled 30-minute interviews with participants at a date and time of mutual convenience. A brief synopsis of the study was shared with participants.

Qualitative Data Analysis

Qualitative interview data collected from phone interviews with both NBCTs and principals of middle and high schools with a high concentration of NBCTs was transcribed in Microsoft Word and entered into NVivo 10 Student Software. This software helped to organize the data by coding patterns, mapping of conceptual categories and thought progression. As each interview was recorded, audio files were uploaded into the software as well. Tools built into the

software helped with classifying, sorting, and arranging the data. Codes were grouped together by meaning to form categories, and themes were developed from categories if the depth of the data collected allowed for it. The constant comparative method of data analysis whereby data is categorized by themes (Gay, et al., 2006) was followed.

Overall Analysis

After the data was collected from survey questions and phone interviews, triangulation of research questions with each method of data collection occurred. "In triangulation, researchers make use of multiple and different sources, methods, investigators, and theories to provide corroborating evidence (Ely et al., 1991; Erlandson et al., 1993; Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Merriam, 1988; Miles & Huberman, 1994; Patton, 1980, 1990). Typically, this process involves corroborating evidence from different sources to shed light on a theme or perspective. When qualitative researchers locate evidence to document a code or theme in different sources of data, they are triangulating information and providing validity to their findings" (Creswell, 2012, Kindle Locations 4659-4664). Teacher and principal interview responses were transcribed and uploaded, both as audio files and in Microsoft Word format, into the NVivo Software student edition and coded to the constructs of the study. Audio files were utilized as a resource for convenient review of each interview. Based on trends in teacher and principal responses, nodes were assigned to various portions of each interview response. Responses that were relevant to multiple nodes were coded as such. Similarly, information that did not pertain to nodes was not coded. A node, according to *The NVivo Workbook*, is "a container that lets you gather source content relating to themes, people, places, organizations, or other areas of interest" (2012, p. 240). Results were compared to one another as well as with responses to the School Leadership Survey. Data was then reviewed and analyzed for trends in

comparison to the data derived from the survey, all of which were thoroughly discussed in chapter four.

Ethics and Confidentiality

All research study participants had the right to privacy and the expectation that the data provided would be kept confidential at all times. The right to privacy and confidentiality was disclosed to research participants prior to the start of this study. All research participants received an email in which privacy and ethical standards were explained prior to completion of the survey. Further, the voluntary nature of participation was explained as well. Completed surveys were accessible only to the researcher. Paper data was shredded and electronic data was encrypted and stored in a secure electronic format. Participants were informed of their right not to participate, and were informed that participation was an appreciated addition to the study.

Recommendations from the resulting data are presented in chapters IV and V of the study. Results were also disseminated to districts and schools looking to increase capacity through teacher leadership within their organizations and to the National Board for Professional Teaching Standards.

Assumptions, Limitations, and Delimitations

An assumption is "any important 'fact' presumed to be true but not actually verified" (Gay, et al., 2006, p. 83). In this study, it was assumed that the participants responding to the *School Leadership Survey* would answer independently and would not collaborate on their answers. It is also assumed that utilizing an online survey tool may allow participants to respond anonymously to questions and may even be more truthful than they would in a personal interview (Rudestam & Newton, 2001 – in Severns, 2007, p. 95).

A limitation is "some aspect of the study that the researcher knows may negatively affect the results of the study but over which the researcher has no control" (Gay, et al., 2006, p. 83). By using survey data, there is always the disadvantage of poor participant response. Some respondents to the "survey may feel differently or have motivations for responding that differ from the non-respondents" (Leedy & Ormrod, 2005, in Severns, 2007, p. 119). One week after the introductory email was sent, a reminder email was sent with the intention of maximizing the response rate. In addition, a drawing for a Kindle Fire was offered as an incentive for participation in the online survey tool, the *School Leadership Survey*.

The causal-comparative research design was another limitation of this study. One of the independent variables, National Board Certification, was not randomly assigned to the teachers but was self-determined and voluntary. This may have had an effect on the dependent variable, teacher leadership.

Delimitations address the external validity of the study. "An examination of external validity focuses on threats or rival explanations that would not permit the results of a study to be generalized to other settings or groups (Gay et al., 2006, p. 237). In this study, only New York State teachers were surveyed.

Summary

This mixed method study explored the relationship between accomplished teaching through National Board Certification for Teachers and teacher leadership in New York State. As was the case with Severns (2007), this study utilized quantitative methods to "analyze teacher participation in school leadership activities from the treatment group of NBC teachers and the control group of non-NBC teachers" (Severns, p. 104). Additionally, the results of this study were described through the use of frequency distributions. This study showed a causal-

comparative model. The *School Leadership Survey* (adapted from Severns, 2007) "compared the NBC and non-NBC teachers' leadership behaviors and perceptions" (p. 104).

In the qualitative portion of the study, a randomly selected group of fifteen NBCTs were interviewed. These individuals discussed open-ended questions with the researcher that further clarified and deepened the responses to the survey questions. A selected group of five principals discussed open-ended questions for the same purpose. The information from the interviews was compared and contrasted with the survey results.

The next chapter will discuss the tabulation and explanation of the results of the data analyses.

CHAPTER IV

FINDINGS

Introduction

This study explored the relationship between accomplished teaching through National Board Certification for teachers and teacher leadership in New York State. Successful National Board Certification completion is based upon accomplished teaching in relation to the five core propositions of the National Board for Professional Teaching Standards, one of which relates to teacher leadership. In this study, the researcher focused particularly on proposition V, teacher leadership, and the relationship between successful completion of National Board Certification and continued teacher leadership activity in New York.

The vast and sweeping changes in education, coupled with New York State's goal of increasing rigor and preparing students to be college and career ready, leave educational leaders with little choice but to shift from traditional leadership to a more distributive approach to leadership in which the strengths of each individual are tapped for the benefit of the entire organization, regardless of formal roles. The purpose of this study was to determine whether a relationship exists between accomplished teaching and the development of teacher leadership in middle and secondary schools in New York State. The intent was to provide formal leaders in schools with possible strategies for developing and supporting teacher leaders, thereby increasing the capacity of schools to provide students with optimal educational experiences.

Research Questions

How do self- perceptions of NBCTs, non-NBCTs, and principals in middle and high schools in New York State compare regarding teacher leadership in the area of:

- 1. Participation in leadership activities beyond the classroom?
- 2. Sense of leadership responsibility to the profession?
- 3. Perceptions of influence in school-wide policy development?
- 4. Reports of career satisfaction due to school leadership roles?
- 5. Perceptions of administrator support for teacher leadership?

The subjects of the study were mainly National Board Certified Teachers, as well as a sample group of non-NBCTs and five principals from middle and high schools in New York State that had high concentrations of National Board Certified teachers in their schools. This causal comparative mixed method study used both quantitative and qualitative methods to collect data that was analyzed and described in this chapter. Quantitative measures were used to examine teacher leadership activities of NBCTs and their non-NBCT colleagues in public middle and high schools in New York State by issuing the School Leadership Survey (SLS), a modified version of the 2001 national Yankelovich Group study (Sykes, 2006; Severns, 2007), which explored teacher leadership and National Board Certification for Teachers. The quantitative portion of this study revealed the type of leadership activities in which NBCTs are involved and provided insight into their perceptions of these activities. To elicit a richer understanding of the thinking behind their participation, the researcher conducted interviews with NBCTs and principals. Because quantitative research for this study centered on teacher leadership defined by York-Barr and Duke as "leading among colleagues" (2004, p. 261) in relation to the process of obtaining National Board Certification, further investigation through qualitative measures was

necessary to deepen and expand the information received from the data collected. The researcher conducted interviews with 15 NBCTs who responded to the modified *School Leadership Survey* (SLS) and volunteered on this survey to be interviewed. These teachers discussed 11 open-ended questions that further clarified and deepened their responses to the survey and complemented the statistical results reported in the quantitative section. In addition, to further triangulate the relationship between NBCTs and teacher leadership, five principals from the top school districts in New York State with the highest concentration of NBCTs were also interviewed. The qualitative portion relied on these interviews to further expand the research questions that guided this study primarily through the lens of NBCTs and principals. The qualitative method employed was a series of interview questions with NBCTs and principals.

Interview questions, Appendices F and G, were derived by this researcher and aligned with the study's research questions and its sub-questions, as well as the survey questions.

Data Collection

Quantitative data collection consisted of the SLS distributed repeatedly throughout the fall of 2013 to a population of middle and high school teachers within the State of New York. The sample group consisted of 426 middle and high school National Board Certified teachers. The control group consisted of 511 non-National Board Certified Teachers. Ultimately, responses were received from 160 respondents, which represented 17% of the survey population. These responses were entered into the Statistical Package for Social Sciences (SPSS) software for analysis. In consultation with Dr. Corinne Donovan, Adelphi University, and Dr. David Rheinheimer, East Stroudsburg University, several statistical treatments were administered with the data, which was discussed in narrative descriptions, as well as graphically represented in

tables. The findings were divided into repeated themes: Demographics, Participation in Leadership Activities Beyond the Classroom, Sense of Leadership Responsibility to the Profession, Perceptions of Influence on School-wide Policy Development, Reports of Career Satisfaction due to School Leadership Roles, and Perceptions of Administrator Support for Teacher Leadership.

Analysis of Demographics

The first three questions of the SLS were purely informational but shed some light on the population differences when comparing this study's results to former studies, namely Sykes (2006) and Severns (2007). The survey population in this study ranged from one to forty years in education; however, less than one percent (.024) of the respondents had less than five years teaching experience, allowing for a closer comparison of NBCTs and eligible service non-NBCTs. In order to begin the process of National Board Certification, teachers must have at least three years teaching experience, while NYS allows teachers five years to complete their master's degree as a pre-requisite for professional certification. In comparing this survey's population to that of the Severn's study (2007) in which 27% of NBCTs and 40% of non-NBCTs had less than ten years' experience, this study had many more veteran teachers with only 15% overall in the under 10 years' group (Table 2). Since most of the respondents to this survey were NBCTs (65.6%), it was not surprising that more than 99% of the survey respondents had five or more years of teaching experience.

Table 2

Frequency Distributions for Demographic Survey Items

Survey Item	Frequency	Relative Frequency	
Years Working in Education			
10 years or less	23	.15	
11 to 20 years	85	.54	
More than 20 years	49	.31	
Highest Level of Education C Bachelor's Degree Master's Degree	5	.03	
Bachelor's Degree Master's Degree Master's + 30 ESD	5 68 72 8	.42 .44 .05	
Bachelor's Degree Master's Degree Master's + 30	5 68 72	.42 .44	
Bachelor's Degree Master's Degree Master's + 30 ESD Doctorate	5 68 72 8	.42 .44 .05	
Bachelor's Degree Master's Degree Master's + 30 ESD	5 68 72 8	.42 .44 .05	

Note. Sample sizes for the three demographic survey items were 157, 162, and 162, respectively.

Another area of interest regarding the survey population was highest level of education attained. Of the respondents, 42% held a master's degree, the basic requirement of NY State for permanent certification. The remainder exceeded this requirement with 44.4% holding a master's degree plus thirty credits, 9% holding a doctorate, and 8% holding an educational specialist degree. Inexplicably, 5% held only a bachelor's degree (Table 1). By comparison, in the Severns (2007) study, it was reported that 51.8% held a bachelor's degree, 25.8% held a master's degree, 18% held a master's degree plus thirty credits, 3.1% held an educational

specialist degree, and 1.3% held a doctorate degree. The certification requirements in New York State might explain this difference. In New York State, 95.4% of the total survey population reported that they had a master's degree, master's degree plus thirty, or doctorate degree. NYS certification requirements may have some bearing on the response pattern to the research question, as reported further along in this chapter.

Overall, of the 160 respondents to the SLS, 66% were NBCTs and 34% were non-NBCTs (Table 1). Compared to the figures in the Severn's 2007 study in which 35% NBCTs and 65% non-NBCTs responded to the survey, the respondents in this study were almost the reverse which might have an effect on the findings.

Analysis of Themes

Initial themes were identified through the SLS survey. Additionally, all transcriptions were entered into NVivo 10 Student Edition software and coded to categories designed to correspond with themes identified through the SLS survey and in alignment with the research questions of this study. A constant comparative method of open coding data analysis (Gay, et al., 2006) was used to categorize data according to participation in leadership activities beyond the classroom, sense of leadership responsibility to the profession, perceptions of influence in school-wide policy development, reports of career satisfaction due to school leadership roles, and perceptions of administrator support for teacher leadership.

Participation in Leadership Activities Beyond the Classroom

In this section, NBCTs were asked to describe ways in which they are serving or have served in teacher leadership capacities. As previously established by Yankelovich et al, NBCTs are "helping to write district-wide curriculum" and in so doing are reporting a "deep commitment to participating in activities that help other teachers" (2001, para. 4). According to Smylie, in

Mangin & Stoelinga, teacher leadership is "something that is separate from and added to teachers' classroom work" (2008, p. ix). Additionally, the York-Barr and Duke Framework states:

Teacher leaders lead by maintaining a focus on teaching and learning and by establishing trusting and constructive relationships. They lead from formal positions of leadership as well as through informal, collegial interactions. As leaders, they influence the development of individuals, collaborative teams and groups, and organizational capacities...to improve teaching and learning in their schools (2004, p. 288).

Of the 2,186 survey respondents to the Yankelovich et al. 2001 survey, "virtually all (99.6 percent) NBCTs said they are involved in at least one leadership activity" (Yankelovich Partners, 2001, key survey findings section, para. 1). This research was also supported by Sykes and Severns in their respective studies. In both of those studies, they found that NBCTs participated in teacher leadership activities more than their non-NBCT colleagues. Their studies corroborated with the Yankelovich findings in that the minimum number of teacher leadership activities was more than one. However, the findings of this study suggested that the difference in participation in teacher leadership activities between NBCTs and non-NBCTs was minimal. To examine each of the constructs measured by this survey, scales were constructed by determining either the mean or the total of each scale. To examine Participation in Leadership Activities beyond the Classroom, data were examined by first grouping survey questions related to participation in leadership activities beyond the classroom and totaling the responses. This grouping consisted of fourteen different activities. For each activity, respondents indicated if they participated at a school level, district level, state level, or national level; each of these responses was assigned one

point, and the maximum total for each activity was four points. The Cronbach's Alpha for this scale was .86, an acceptable level as suggested by prior researchers (George & Mallery, 2003).

A one-way ANOVA was used to test for differences between NBCTs and non-NBCTs. The analysis was not significant as displayed in Table 3 (F (1, 158) = 0.58, p > .05). The findings showed that there was no significant difference between the mean scores for the NBCT and non-NBCT groups for participation in leadership activities beyond the classroom. Therefore, there was no difference between the reported levels of participation in leadership activities beyond the classroom for NBCTs and non-NBCTs. This data differs from Severns' (2007) findings that "NBCTs participated in teacher leadership activities more than their non-NBCT colleagues" (2007, p. 111).

Table 3

ANOVAs for NBCT/Non-NBCT Group Comparison for SLS Factors

Numerator Denominator					
Effect	df	df	MSBG	F-Ratio	
Part beyond class	1	158	0.14	0.58	
•	1	158	1.23	5.48*	
Policy Influence					
Percp. of Influence	1	158	0.81	1.80	
Level of Influence	1	158	1.34	2.72	
Career Satisfaction	1	158	1.11	2.87	
Percp. Of Admin	1	158	0.18	0.55	
Support					

Group Means for Resp to Profession

NBCT Group	N	Group Mean
NBCT	106	3.40
Non-NBCT	54	3.21

Note. MSBG = mean square between groups. p < .05

TD1

The interpretation of the qualitative data which follows shed a different perspective on these findings.

Teacher Interviews

Responses related to participation in leadership activities beyond the classroom were coded according to formal and informal teacher leadership capacities or activities. Those deemed formal, as indicated in chapter two of this study, included "positional authority" (Rohrs,

2012, ppt. 15). For example, a department head is considered a formal teacher leadership position because the position of department head has authority or power over others; hence, it has "positional authority."

Formal Teacher Leadership

Given the limited number of formal leadership positions in schools, it would not be expected for there to be more teachers reporting formal leadership opportunities than informal. This was the case in this study, although one third of respondents did indicate having or aspiring to a formal teacher leadership role. Mary, whose certification is in career and technical education, indicated that she "acts as a department leader at certain times", while Sue, a French teacher, acts as the building representative for her union and serves as the first level of communication for the teachers' association in her building. Sue also stated that, "she is a member of the building committee to address issues such as working/learning conditions, etc." Two interviewees, Alice and Stephanie, became department heads following their certification, one in a permanent capacity and the other in a rotating capacity in her department. Denise, another NBCT, reported that she had interviewed for a master teacher position, one of formal leadership that had just been introduced in her district. While Denise did not receive the position, the colleague who did was a National Board Certified Teacher, although not included in the study. Denise also had the opportunity to become District Curriculum Coordinator for her department. Another interviewee, Greg, who teaches in a gifted math program, indicated that since achieving National Board Certification, he has served as a summer administrator at a local university. He stated that NBC gave him "credibility" and because of this credibility, people listen to him.

Informal Teacher Leadership

Informal teacher leadership activities were further coded between official and unofficial activities. Official informal teacher leadership activities included active involvement in various professional organizations, as well as committee membership at the school, district, local, state, and national levels. Unofficial informal activities included those activities in which interviewees participated that were self-directed such as working with less experienced colleagues on lesson planning and voluntarily attending school-wide events. Further examples included "becoming very aware of the reason to speak up for student learning and being militant about it.....The superintendent proposed phasing out German and cutting French and I mobilized the community and spoke out," said Cara, a German teacher who also grades for the College Board. Cara also spoke about being proactive in the wake of systemic change. Another example, Phil, a middle school science teacher commented, "When they first made the shifts in Living Environment, I sought training to become an item writer. I didn't sit back. I made a difference."

Informal, official teacher leadership activities were broad and varied. For example, Beth was asked to present on National Board Certification at a New York State Family and Consumer Sciences professional development program. Additionally, she has served as a teacher representative on committees such as her Site Based Team and on PPS Child Study Teams. Another interviewee, Sue, was asked by her principal to prepare a presentation about National Board Certification to her faculty following her achievement. She is also a member of a building committee to address building issues (working/learning conditions, etc.). Alice, a literary specialist, reactivated a defunct reading council with other colleagues. This council is still viable, and she holds a leadership position within this organization. Jim has two appointed positions on local professional development committees and Phil belongs to the Middle School

Science Leadership Committee. Other informal official leadership activities included teaching in-service or professional development courses, bringing curriculum programs into their schools, participating in assessment review on the state level, maintaining membership in Shared Decision Making committees, participating in administrative personnel hiring committees, and teaching at the university level.

Although not specifically asked, many interview respondents indicated that their informal leadership activities were not dependent on their status as National Board Certified Teachers.

The majority of interview respondents indicated that they had participated in informal leadership activities both prior to and after achieving National Board Certification. For example, Greg, who recently renewed his NBC, stated that in the last twenty years he has been a department leader at the middle school level with eighteen math teachers, and he served as a team leader and building union leader, along with various informal teacher leadership activities. Phil stated that National Board Certification did not change anything for him. He has always been on the school leadership committee, conducted professional development for staff, designed teaching techniques, created assessments for the department, and mentored other teachers. He claims that he has always gone the extra mile and that NBC did not make a difference. However, he did state that NBC provided him with a "good lens" in which to look at himself. It forced him to diagnose and dissect his practices.

In addition to informal official teacher leadership activities, many of the interviewees indicated that they were also involved in unofficial leadership activities for which there was no formal or official recognition. Examples of these leadership activities included meeting with administrators, parents, and other teachers to improve the school environment, working with colleagues from other departments on interdisciplinary units of study, assisting teachers with

lesson planning, mentoring new teachers, helping colleagues to understand data, and coordinating student teacher placement at their school level. Five interviewees were involved with recruiting and encouraging other teachers to pursue National Board Certification and provided support to candidates as they went through the process.

Of the interviewees, some did indicate that their level of leadership activity related to National Board initiatives was at its height immediately following receipt of National Board Certification and diminished as time lapsed. For example, one respondent, Joan, stated that she felt very strongly about it at the beginning, eight years ago, and recruited and encouraged other teachers to pursue National Board Certification. She has since drifted away from talking about National Board Certification. Another said that she offered more support to colleagues and reviewed standards in the beginning when she was more enthusiastic about the process, indicating that as time passed, her enthusiasm for National Board and teacher leadership waned. That same interviewee reported an overall decrease in leadership activity as time passed following National Board Certification. Those interviewee's collective reasons for this included lack of recognition, time constraints, and they were not sought out as teacher leaders by administration.

As stated in York-Barr and Duke's review of the literature, "the leadership practices and possibilities for teachers are numerous and varied, and as such leadership opportunities for teachers also are numerous and varied" (2004, p. 263). Respondents also stated that, "opportunities for leadership seem to grow out of success in the classroom" (p. 267). Overall, the majority of NBCTs interviewed reported being involved and in many cases, were highly involved in leadership activities beyond the classroom.

Principal Interviews

According to principals, when asked what opportunities they had provided for NBCTs to demonstrate their teacher leadership, the most popular response centered on the common theme of professional development. Principal Jones stated that NBCTs are chosen to lead trainings and professional development "because they are good." However, he further explained by saying that non-NBCTs, if they deserve, were chosen as well. A few principals felt that just going through the process was evidence of strong leadership qualities. As a result, principals indicated that they would lean on NBCTs for leadership opportunities a bit more than non-NBCTs. Conversations between principals and NBCTs were also a common thread. Topics such as turnkey trainings, cognitive coaching, and faculty meeting presentations, strategic planning, RTI, APPR, Common Core Learning Standards, and curriculum mapping were just some of the initiatives discussed with principals. In turn, many principals utilize their NBCTs to deliver professional development to their staff. As Principal Smith stated, "I go to them because it's part and parcel of their makeup." Smith then stated, "NBCTs are leaders for the same reason they pursued NBC. But if there is some type of challenge in the building, NBCTs are sought out first." Principal Smith also mentioned the new state implementation of APPR and in what ways NBCTs provided feedback on this process. These findings supported Lustick and Sykes (2006) who concluded that although further research is necessary, candidacy for National Board Certification for Teachers provides professional development which is substantive and worthwhile for the professionalization of teaching.

All five principals agreed that NBCTs stand out as leaders in their schools. One common thread was that NBCTs take on leadership roles such as department chairpersons, team leaders, group/club advisors, members of teaching associations, leaders in professional development, and

are visible at many school events. This supports, despite some of the NBCTs' responses, "there is an increase in participation in some leadership activities after teachers achieve certification" (Yankelovich, 2001, p. 3). Principal Williams discussed the recertification of certain teachers in his school as some of them had obtained their certification more than ten years ago. They have since become department or team leaders. Another principal, Mr. James, stated that even though the non-NBCTs also take on responsibilities outside the classroom, NBCTs are "showing up to leadership capacity." That principal expects that when teachers become National Board Certified, they bring some type of professional development knowledge to the building. Principal Williams also makes it a habit to discuss issues on a regular basis regarding teaching and current best practices, and finds the NBCTs a valuable resource. In that building, NBCTs are looked up to by other faculty members, as was found by Katzenmeyer and Moller (2001) who stated that "schools benefit from the involvement of talented teachers in accomplishing the vision for change in their schools"(p. 31). Lastly, Principal James stated, "the very nature of people who pursue certification are leaders already." He furthered by stating that rarely do teachers who are not leaders in their departments or subject areas pursue this certification. He sees NBC as a "crowning achievement of professional development," indicating that it validates the work they are already doing.

Overall, although the statistical results reveal there is no difference between the NBCTs and non-NBCTs with regard to their participation in leadership activities beyond the classroom, the qualitative data suggests that NBCTs are very involved and their principals' perceptions support that NBCTs do participate in many instances to a greater degree.

Sense of Leadership Responsibility to the Profession

Sense of Leadership Responsibility to the Profession is the perception that there is a professional obligation to serve as a leader in education and is emblematic of leadership.

Lifelong learners are self- directed and are committed to continually improving their own skills and the broader systems of which they belong. For example, this theme falls into the York-Barr and Duke Framework under Means of Influence in that maintaining a focus on teaching and learning, one of the components under Means of Influence, requires that a teacher leader be a lifelong learner as well as teacher. As stated in chapter two of this study, maintaining a focus on teaching and learning is measured as activities and roles that promote the learning of students beyond their own classes. Quantitative and qualitative data collected speak to this measure, directly and indirectly. In Severn's second hypotheses, Sense of Responsibility to the Teaching Profession, the findings indicated that 98.5% of the NBCTs who participated in the study indicated that they were willing to devote the extra time and effort required to be leaders in the profession.

To examine the Sense of Leadership Responsibility to the Profession, questions 10, 11, 12, and 17 were averaged. For example, these questions asked about putting in extra time and effort to be a leader in the profession, a responsibility to help prepare new teachers, responsibility to encourage others to enter the teaching profession, and a responsibility to participate in curriculum planning and development. The Cronbach's Alpha for this scale was .68. George and Mallery (2003) suggest that > .60 is questionable, and > .70 is acceptable. The reliability for sense of responsibility to the profession for this study, .68, is very close to the acceptable level.

A one-way ANOVA was used to test for differences in sense of leadership responsibility to the profession between NBCTs and non-NBCTs. The results of the ANOVA revealed a significant group difference for sense of responsibility to the profession (F(1, 158) = 5.48, p < .05) as reported in Table 2. NBCTs had a stronger sense of responsibility to the profession (M=3.40) than non-NBCTs (M=3.21). Survey and interview respondents in this study provided data that supported Severns' findings.

Teacher Interviews

The information ascertained from teacher interviews was reinforced by the qualitative data. Overall, the majority of NBCTs interviewed did, in fact, feel a strong sense of leadership responsibility to the profession. Responses to the question, "How has National Board Certification influenced your sense of leadership responsibility to your profession?" provided information on interviewees' sense of leadership responsibility with regard to the nature of leadership responsibility, the level of commitment, and the change over time of the sense of leadership responsibility to the profession. With regard to the nature of leadership responsibility reported, the majority of teachers indicated that their achievement of National Board Certification positioned them to mentor newer teachers and candidates for NBC, as well. Additionally, interviewees perceived an increase in the amount of responsibility they felt to provide these services to their colleagues, but that their sense of responsibility had been at its height just after earning certification. Two of the Core Propositions of the National Board for Professional Teaching Standards can be related to teacher leadership: "Think systematically about their practice and learn from experience, and Are members of learning communities" (NBPTS, 2002, What Teachers Should Know and Be Able to Do). Thinking systematically about one's practice includes a more global perspective on the profession. Further, membership in

learning communities is demonstrative of leadership in that it reaches beyond a teacher's own students. For example, one sort of learning community may be a cohort of candidates for National Board Certification. As the Core Propositions "represent what all accomplished teachers share in their expertise and dedication to advance student achievement" (http://www.nbpts.org/five-core-propositions), both within their own class and beyond, accomplished teaching and a sense of leadership responsibility to the profession go hand in hand.

Of those who spoke positively about their sense of leadership responsibility to the profession, they stated that NBC made them very aware of the reasons for speaking up for student learning, being militant about it, and having the courage to stand up to others, including administration. They reported a sense of purpose and calling and giving back to the school community at large. Some spoke of a sense of pride that is felt after achieving certification which has influenced them wanting to help the community and being a better teacher.

Confidence levels were discussed with most stating that NBC provided the impetus "to take on the reins of leadership." Some also reported that working with colleagues was becoming more and more a part of their responsibility, "especially with Common Core Standards pressure." One interviewee, Greg, indicated that he had "a sense of responsibility to bring younger and less experienced teachers to be the best that they can be."

Of the few that did not answer in a positive manner about their sense of leadership responsibility, their comments were as follows: "My children have consumed me and professional development has taken a back seat", some felt they had leadership skills prior to becoming NBC, one stated that they felt very strongly at the beginning when they first received certification, and has drifted away from talking about National Board Certification.

Principal Interviews

When asked to discuss their perceptions of NBC on their NBCTs and non-NBCTs, principals reported that the leadership activities of their NBCTs have had a positive impact on their entire school. For example, four of the five principals used the word "reflection" when speaking about the perceived influence of National Board Certification on their National Board Certified Teachers. Principal interviews focused primarily on the leadership activities and leadership responsibility of NBCTs. Principals indicated that the NBCTs in their school displayed an increase in leadership responsibility to the profession through their level of participation in leadership activities. Their sense of commitment was evident in their leadership participation. Principal Williams commented that the NBCTs in his building take on leadership positions such as professional development training and curriculum writing. These positions create "more pathways for becoming a better teacher" for all teachers in the building. In this way, Williams feels that National Board Certification has had a positive influence over the entire building.

Williams further stated that, "more and more teachers are considering achieving certification." In the area of sense of leadership responsibility to the profession, teacher leadership and mentoring roles are prevalent in these schools and mostly self-directed.

According to Principal Jones, "at faculty meetings, NBCTs seem more advanced. They speak up. This is supportive of National Board Certification and the process." These responses indirectly relate to NBCTs' sense of leadership responsibility as they exemplify a sense of leadership responsibility through their work as teacher leaders.

Question two, "What do you perceive to be the influence of National Board Certification on your school?" related to the findings of Katzenmeyer and Moller (2001) who stated "as

teachers are given authority to make student-related curriculum and instruction decisions, they will better understand how they are responsible for student outcomes" (p. 95). For example, teachers who feel a sense of responsibility to their profession are those who voluntarily maintain membership in professional organizations, lead curriculum development initiatives, focus on program wide improvements, etc. This is relevant to this study in that, in this age of accountability, teacher leadership is positioned as one means of increasing teachers' sense of responsibility over all students' learning.

Overall, the statistical results revealed that NBCTs did show a stronger sense of leadership responsibility to the profession than their non-NBCT colleagues. The interpretation of the qualitative data gave direct insights from NBCTs and principals that supported this finding.

Perceptions of Influence on School-wide Policy Development

In the area of school-wide policy development, quantitative and qualitative data collected in this survey are not consistent with Severns' third hypothesis that "NBC teachers were more likely to report a sense of influence in school-wide policy" (p. 115). Lustick and Sykes (2006) also supported Severns' findings. Severns' regression analysis supported the concept that NBC was the strongest predictor of teachers reporting that they felt they had greater influence in school-wide policy. The data collected through this study indicated that achievement of National Board Certification was not a predictor of influence on school-wide policy. Rather, data indicated that influence on school-wide policy is minimal. By contrast, perceptions of responsibility to influence school policy were strong.

This research question relates to the York-Barr and Duke Framework at the Targets of Leadership Influence Level, addressing the organizational capacity aspect of the framework.

Perceptions of influence on school-wide policy serve as a Target of Leadership Influence. However, teacher interviewee respondents consistently indicated that they felt that barriers existed between their level of influence as teacher leaders and school-wide policy.

To examine perceptions of Influence in school-wide policy development, questions 15 and 16 on the SLS, which asked teachers' responsibility to influence policies and approaches regarding standardized testing and teachers' responsibility to influence policy changes concerning the structure of the school day, were combined by calculating an average between the two responses. These questions were measured by level of agreement such as strongly agree, agree, disagree, and strongly disagree. The Cronbach's Alpha for this scale was .81, indicating a good level of internal reliability (George & Mallery, 2003). Of the respondents to the SLS survey, 87.7% agreed/strongly agreed that teachers have a responsibility to influence policies and approaches regarding standardized testing. Similarly, 90.1% of respondents agreed/strongly agreed that teachers have a responsibility to influence policy changes concerning the structure of the school day.

A one-way ANOVA was used to test for perceptions of influence in school-wide policy development differences among NBCTs and non-NBCTs. The analysis was not significant as indicated in Table 2 (F (1, 158) = 1.80, p > .05). The findings show no significant difference between the NBCTs' and non-NBCTs' perception of influence in school-wide policy development.

To examine levels of influence in school-wide policy, an average was calculated across questions 33-36 which asked respondents to indicate teachers' influence in establishing school-wide or department curricula, determining the content of in-service professional development programs, setting school-wide discipline programs, and allocating resources (e.g., curricular

materials, computers, textbooks). The Cronbach Alpha for this scale was .74, an acceptable level of reliability (George & Mallery, 2003). The SLS survey reported, with regard to the area of establishing school-wide or departmental curricula, that 13.5% of respondents perceived no influence, 30.7% perceived limited influence, 55.8% perceived moderate to great deal of influence. With regard to influence over determining the content of in-service professional development programs, 30.1% reported a moderate to great deal of influence, 43.6% reported limited influence, and 26.4% reported no influence. In the area of setting school-wide discipline programs, 49.7% reported no influence, 26.4% reported limited influence, 16.6% reported moderate influence, and 7.4% reported a great deal of influence. Finally, in the area of allocating resources, 79.1% reported little to no influence, 14.7% reported moderate influence and 6.1% reported a great deal of influence. In summary, response distribution varied depending upon the area of influence.

A one-way ANOVA was used to test for differences in level of influence in school-wide policy development between NBCTs and non-NBCTs. The analysis was not significant as displayed in Table 2 (F (1, 158) = 2.72, p > .05). The finding suggests there is no significant difference between perceptions of NBCTs and non-NBCTs level of influence in school-wide policy development.

Teacher Interviews

Activities that would be considered a means of influencing school-wide policy include some that would have been discussed in question 1a, but in a more specific manner. Most respondents to question six, "In what ways have you been able, specifically, to influence school-wide policy as a result of achieving National Board Certification?" indicated that they were not able to influence school-wide policy as a result of achieving National Board Certification. This

result is consistent with the finding of the SLS data above. Of those who stated that they had been influential in school-wide policy, it was a potential influence independent of their status as National Board Certified Teachers.

By contrast, four of interviewees indicated that they had participated in formal leadership activities that were involved with school-wide policy. The few examples of teacher participation in school-wide policy included serving on several committees, such as Site Based Team and Shared Decision Making Committees. Stephanie, in particular, established goals for the RTI committee and made recommendations to her principal and Board of Education. As a result, the goals were implemented. Another interviewee, Cara, reported being instrumental in ensuring that the district's German program remained intact.

Of those who stated that they had been involved with school-wide policy, nearly one third indicated that they had been involved with school-wide policy prior to achieving National Board Certification. Therefore, their influence on school-wide policy appears to be independent of their status as National Board Certified Teachers.

Principal Interviews

All five principals agreed that NBCTs stand out in their schools. Principal responses complement those teachers as they indicated there are indirect methods for teacher leaders to influence school-wide policy such as membership on committees dealing with RTI, APPR, Common Core Learning Standards implementation, and curriculum mapping. Principal James mentioned that they sought the feedback of NBCTs in the implementation of APPR to a large degree because of the alignment of APPR with the Standards of the National Board for Professional Teaching Standards.

Principals further indicated that NBCTs' teacher leadership skills should be further utilized, a statement that aligns with the Yankelovich group (2001), "the challenge now is to further integrate them into the decision-making process, ensuring that their growing leadership capabilities do not go untapped" (p. 1). The results of the SLS survey, teacher interviews, and principal interviews suggest that this is especially true of the survey population of this study.

Overall, the statistical results reveal there is no difference between the NBCTs and non-NBCTs with regard to their perception of influence on school-wide policy development.

Qualitative data gave direct insights from NBCTs and principals which supports and further explains what was revealed by the statistical results. NBCT and principal interviews revealed that teachers possess a sense of responsibility to influence school-wide policy. However, nearly one third of interviewees indicated that opportunities to influence school-wide policy were beyond the teacher's realm of influence.

Reports of Career Satisfaction Due to School Leadership Roles

According to Berg, "When teachers use the National Board Certification experience to improve the quality of their teaching practice, there are substantial benefits...teachers can become beneficiaries of both intrinsic and extrinsic benefits. They gain a sense of confidence in their teaching competence as well as an increased sense of satisfaction in their work" (2003, p. 23). With regard to the York-Barr and Duke Framework, career satisfaction due to leadership roles enhances the feeling of value and is furthered by a supportive culture, supportive principal, and colleagues, as well as time for development opportunities. These conditions are present in the framework at the levels of Leadership Work and Conditions. Teacher interview responses dealing with career satisfaction reveal consistency with the York-Barr and Duke Framework in this area. Taken as a whole, respondents who indicated that a positive and supportive culture

existed within their school and district also reported having had more leadership opportunities, as well as a greater sense of career satisfaction.

For purposes of this study, to examine Career Satisfaction due to school leadership roles, questions 13 and 14 were averaged. These questions asked teachers to rate themselves using the scale strongly agree, agree, disagree, and strongly disagree. These questions asked, "My involvement in leadership activities makes me feel more significant in my position, and my involvement in leadership activities enhances my career satisfaction." The Cronbach Alpha for this scale was .75, indicating an acceptable level of internal reliability (George & Mallery, 2003).

A one-way ANOVA was used to test for reports of career satisfaction due to school leadership roles between NBCTs and non-NBCTs. The results were not significant as displayed in Table 2, (F(1, 158) = 2.87, p > .05). The findings revealed no significant difference between the perceptions of NBCTs and non-NBCTs' reports of career satisfaction due to school leadership roles. In response to question 13 which asked respondents to rate the statement, "My involvement in leadership activities makes me feel more significant in my position," 88.3% agreed or strongly agreed. In response to question 14 which asked respondents to rate the statement, "My involvement in leadership activities enhances my career satisfaction," 92% agreed or strongly agreed. In summary, NBCTs and non-NBCTs alike report a sense of career satisfaction due to leadership roles.

Quantitative data collected with regard to reports of career satisfaction due to school leadership roles are not consistent with those of Severns (2007) whose results indicated "more than 90% of NBC teachers reported that participation in leadership activities results in career satisfaction and makes them feel more significant in the teaching profession" (p. 136).

Teacher Interviews

Without exception, all teacher respondents reported an increase in their level of career satisfaction as a result of achieving National Board Certification. Phrases such as "a notch in my belt" were used to describe their increase in career satisfaction. Interviewees indicated feeling "much more comfortable in the classroom especially when administrators come in." Phil, stated that they have "reached the highest level a public teacher can reach" and have "demonstrated excellence, short of achieving an administrative degree or a doctoral degree." Greg indicated that achieving National Board Certification has re-energized him, while Stephanie indicated that NBC had taught her how to involve others in conversations and to find the why and how of things. This increase in school community and learning that these experiences provide, according to this interviewee, increased their sense of career satisfaction. Further, Stephanie indicated that she and other NBCTs are more "at peace" with what they can change and what they can do. National Board Certification, those interviewees reported, provided an extra feather in their cap and gave them a sense of belonging.

Principal Interviews

In asking principals what they perceived to be the influence of achieving National Board Certification on NBCT's level of career satisfaction, Principal James stated, "other than achieving a doctorate degree, it is the highest accolade they can have." That principal feels it helps teachers answer the question, "How can I advance?" Another principal, felt that teachers see National Board Certification as an extra credential and gives them a feeling of exemplary status. That district has established a professional community which is intended to increase job satisfaction. They also feel that it affords teachers with career mobility. Another principal, Mr. Smith, stated there is a positive influence in level of career satisfaction due to the fact the

teachers are learning more about their craft and are exposed to other ways of teaching. Mr. Smith also reported that this career satisfaction gives them more of an ability to be fulfilled and that the potential for career mobility along with continuous learning aid in providing career satisfaction as they help to increase confidence and avoid professional stagnation. According to Principal Smith, "National Board Certification brings validation for their efforts and work as educators. Teachers are always questioned by the media and society. People like to know that their work is meaningful and not in vain. Teachers teach for intrinsic reasons and it is nice to be recognized for making a commitment to your craft, profession, and career." Mr. Smith continued by stating that pursuing National Board Certification is really an extra commitment in showing that this is something that you value. "This district recognizes the value of having NBC and achievement is revered in this district." He further stated that parents do not see it for the true price that you have to pay to achieve it; they expect it. Smith also stated that his district also expects doctorates and multiple master's degrees. Finally, Mr. Williams indicated that everybody comes into the profession to make a difference and National Board Certification provides that opportunity. "Achieving National Board Certification means that they reached the next level, asking them 'How do I become exceptional?' They go through the rigor of changing teaching for the classroom." The execution of leadership tasks can therefore, be related to teacher self-efficacy (Frost, 2011). Being a teacher leader can lead to a greater level of job satisfaction because it offers challenging career opportunities for accomplished teachers. This also supports the idea proposed by Barth (2001), "teachers who become leaders experience personal and professional satisfaction, a reduction in isolation, a sense of instrumentality, and new learnings – all of which spill over into their teaching. As school-based reformers, these teachers become owners and investors in the school, rather than mere tenants" (p. 443).

Overall, the statistical results reveal there is no difference between the NBCTs and non-NBCTs with regard to career satisfaction due to school leadership roles. Interpretation of the qualitative data, however, provided direct insights from NBCTs and principals and implied that there was an increase in career satisfaction that results from achieving National Board Certification. However, principal responses also indicated that other means of increasing the level of career satisfaction are available to teachers and are sought. Examples of these included doctoral degree achievement, and advancement into formal leadership roles.

Perceptions of Administrator Support for Teacher Leadership

To examine teachers' beliefs about administrative support, four questions (4, 5, 6, and 7) were combined by taking the average across them. These included such questions as: The principal includes National Board Certified Teachers (NBCTs) more than other teachers in school leadership activities, The principal encourages NBCTs more than other teachers to share ideas and innovations, Central office administrators support teachers pursuing National Board Certification, and My principal supports teachers pursuing National Board Certification.

Respondents were asked to indicate their level of agreement to each of these statements on a four point scale (strongly disagree, disagree, agree, and strongly agree). The Cronbach alpha for this scale was .76, indicating that the scale has acceptable internal reliability (George & Mallery, 2003).

A one-way ANOVA was used to test for differences between NBCTs and non-NBCTs on their beliefs about central office support. The analysis was not significant as displayed in Table 2 above (F(1, 158) = 0.55, p > .05). The findings show no significant difference between the perceptions of NBCTs and non-NBCTs.

Responses to each of the four questions were consistent. Overall, survey respondents indicated that they did not perceive that principals treated their NBCTs differently than their non-NBCTs due to National Board Certification. According to the survey respondents, when asked if the principal included NBCTs more than other teachers in school leadership activities, 55.6% disagreed and 31.5% strongly disagreed. Similarly, when asked if the principal encouraged NBCTs more than other teachers to share ideas and innovations, 56.2% disagreed and 32.7% strongly disagreed.

When responding to questions regarding support during the certification process, reports were similarly consistent. On the building level, when asked if their principal supported teachers pursing National Board Certification, 61.1% agreed and 13.6% strongly agreed. When asked if Central Office Administrators supported teachers pursuing National Board Certification, 50% of survey respondents agreed and 12.4% of survey respondents strongly agreed.

Teacher Interviews

The first question that was asked of teachers to support this theme was, "In what ways have your school and administration been supportive of your National Board Certification and teacher leadership?" Teacher interview respondents indicated a number of ways in which they perceived having received support and recognition upon having earned certification. Many teachers discussed the presence of a stipend in their teachers' contract as one method of support provided by the district. Others indicated that their principals supported them by promoting them to formal leadership roles such as department head or team leader. Others received plaques and were recognized by the Board of Education and their superintendent.

Teacher interview respondents indicated that they received varying levels of support as candidates going through the process of National Board Certification. One teacher, Jim,

Another teacher, Sue, reported that her "school administration was supportive of her National Board Certification and allowed her the place and time to do the hard work to meet for professional development time" throughout the process. Stephanie stated her district was incredibly supportive and reported that, "the union paid for a certain amount and let her use professional development days off to achieve NBC."

By contrast, five teacher interview respondents indicated a lack of support. One interviewee, Joan, indicated having received no recognition and that administration was not outwardly supportive, but had not acted as an obstacle during the certification process. One teacher reported that their superintendent stated, "Teachers should get National Board Certification on their own." Joan also stated that the district would do away with the stipend if they could. It was no wonder that Joan previously stated that she would not renew her NBC and has waned in interest. Another teacher, Donna, stated that she does not "believe the administration understands the National Board Certification process" and provided limited support. Question 7 (Appendix B) asked principals, "How familiar are you with the process for achieving National Board Certification?" The findings of this study indicated that the majority of principals were not familiar with the process with the exception of one principal who had started the process but did not finish. Donna also stated, "I achieved certification for more guidance. I got tired of people bailing out" of the teaching profession. She also reported receiving no support from administration during the certification process.

Overall, teacher responses were not consistent with regard to the level of support they received during the National Board Certification process. Further, teachers' reports of their perceptions of recognition upon achieving National Board Certification varied, as well. There

was, however, consistency between the perceptions of teachers in that those who reported support during the process also reported receiving recognition upon achieving certification.

Furthermore, teacher interview responses differed from responses to the four questions related to this theme: The principal includes National Board Certified Teachers (NBCTs) more than other teachers in school leadership activities, The principal encourages NBCTs more than other teachers to share ideas and innovations, Central office administrators support teachers pursuing National Board Certification, and My principal supports teachers pursuing National Board Certification. Responses differed in consistency. SLS respondents indicated that they did not believe that NBCTs were supported and promoted more than non-NBCTs, while teacher interview respondents' reports varied.

Principal Interviews

Self-perceptions of principals differed from teacher perceptions of principals with regard to administrator support for teacher leadership. Overall, principals reported that they provided support for teacher leadership, concerning both National Board Certification and other areas of teacher leadership. All five principal interviewees reported their districts negotiated monetary incentives for NBCTs candidates. However, one principal, Mr. Reyes, reported limited support stating he wants to "increase the network within the high school for the teachers to get ideas" while preparing for National Board Certification, but he had provided "no release time throughout the day, unless it was funded by the National Board." This mindset aligns with the literature that states, "There is evidence to suggest that principal support of teacher leadership is more readily espoused than enacted" (York-Barr & Duke, p. 274).

To demonstrate the variation in responses, another principal interviewee, Mr. James, reported that there was a part-time district coordinator employed specifically for the NBC

process. In addition, James reported that candidates also "work nights and on weekends while in the process of achieving National Board Certification." Principal Jones reported giving time, resources, coverage, a formal recommendation, and literature on best practices as resources.

With regard to recognition as one means of providing support, principals reported that they did provide support. For example, NBCTs were acknowledged at weekly department meetings, and recognized at faculty meetings. As stated earlier, Mr. Jones, reported on his belief that "the process leads to growth and self-reflection and endorses it," provided release time to candidates in pursuit of National Board Certification.

The researcher found that principals utilize their NBCTs for professional conversations, professional development, and taking on many forms of teacher leadership within their school. The researcher also found that teachers, especially when in a supportive environment and when supported by their principals, take on these leadership roles (formal or informal) more readily. This is consistent with York-Barr and Duke's review of the literature that states, "the relationship established between teacher leaders and their principals is consistently identified as a strong influence on teacher leadership" (2004, p. 273). Further, in *Changing Leadership for Changing Times*, Leithwood, Jantzi, and Steinbach (1999) posit that "truly collaborative cultures encourage the exchange of ideas and endorse mutual problem solving, thereby providing rich opportunities for the exercise of teacher leadership," (p.131-132) supporting the notion that organizational culture cultivates or stymies the development of teacher leaders.

Summary

This study was designed to explore the relationship between National Board Certification and teacher leadership in New York State by measuring the extent to which the achievement of National Board Certification for Teachers promotes teacher leadership. The research question

that framed this study presented and discussed both quantitative and qualitative data. The data came from three sources:

- 1. The *School Leadership Survey* sent to middle and high school teachers in New York State;
- 2. Interviews of fifteen NBCTs who volunteered from the survey; and
- 3. Interviews of five principals of NYS schools with a significant number of NBCTs.

The operational constructs of the research question were addressed by multiple survey and interview questions. The operational constructs, sub-sets of the research question were: participation in leadership activities beyond the classroom; sense of leadership responsibility to the profession; perceptions of influence in school-wide policy development; reports of career satisfaction due to school leadership roles; and perceptions of administrator support of teacher leadership.

Analysis of the SLS survey and telephone interviews were described in this chapter.

Data collected from the SLS survey revealed a lack of difference between NBCTs and non-NBCTs in four of the five constructs: leadership activities/opportunities, influence on policy development, career satisfaction, and perceptions of support. The qualitative responses from both the NBCTs and principals, however, refuted the apparent lack of difference between NBCTs and non-NBCTs by expounding upon the accomplishments of NBCTs. In the area of school-wide policy development, while there was no significant difference between NBCTs and non-NBCTs, it is of note that one third of the teachers who were involved in policy development reported that it was independent of their status as a NBCT. Principal interviews further revealed that opportunities to influence school-wide policies were often beyond the reach of teachers. In the area of career satisfaction, while there was no significant difference between the perceptions

of NBCTs and non-NBCTs, all teachers and principals reported an increase in career satisfaction. It is also of note that principals did state that other means of achieving career satisfaction are sought by teachers (i.e. doctorate degrees and formal teacher leadership roles). Although four of the five constructs yielded no differences between the groups, survey data did suggest one area of significance in the quantitative data (sense of leadership responsibility to the profession). In this area, NBCTs had a stronger sense of responsibility to the profession. This result was reinforced by the qualitative data that gave direct insights from NBCTs and principals that supported this finding. The lack of differences between the NBCTs and non-NBCTs and the significance of the sense of responsibility to the profession was discussed in detail in Chapter 5.

The final chapter of this study discusses findings and draws implications from the study, makes suggestions for future studies and discusses limitations. In addition, the extent to which the achievement of National Board Certification for Teachers promotes teacher leadership in New York State is discussed.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Currently, New York State is in the midst of sweeping educational changes, brought on by a perfect storm of influences. For instance, "in May 2010, the New York State Legislature in an effort to secure federal Race to the Top funds—approved an amendment to Educational Law 3012-c regarding the Annual Professional Performance Review (APPR) of teachers and principals" (New York Principals, March, 2013, p. 1). According to this amendment, all teachers and principals receive a performance score based on the growth and achievement of their students. This amendment was put into practice during the 2012-2013 school year. Under APPR regulations, most schools have developed and adopted Student Learning Objectives (SLOs) for their building. New York State's SLO process is tailored to the specific requirements of our teacher and principal evaluation system in that the achievement of students in the entire school is part of the overall evaluation of every teacher and principal (Engageny.org). Teachers are accountable not only for the students in their own classrooms, but also for the students in the entire school. In high schools this means that they are responsible for students not only in their own discipline, but in every other discipline, as well. These mandates and policy changes create substantial demands to teachers' and administrators' workloads. In order to maintain high standards and prevent against "initiative fatigue," (Reeves, 2010) district and school leaders need to leverage the current leadership capacity of teachers in a way that is unprecedented. A more distributive view of leadership must be employed, harnessing the leadership capacities of teachers and, in turn, helping to professionalize the teaching profession. Leveraging the capacity of teachers and supporting the development of teacher leadership is becoming

increasingly important. National Board Certification may be one method of building this necessary capacity.

Recognizing that changes in education policy will alter the form and future of American education, the National Board for Professional Teaching Standards has been:

Forging crucial partnerships and mobilizing NBCTs to shape the discourse on the future of education in America. This includes actively engaging in the most pressing issues in education reform — from the Common Core State Standards to teacher evaluation — and serving as a convener of accomplished teachers and diverse stakeholders to move the ball forward. (NBPTS, 2014, Empowering educator expertise section, para. 3)

As such, NBPTS has adopted two Strategic Goals, 1) building educator effectiveness across the career continuum, and 2) promoting a vision of accomplished teaching that elevates the profession (NBPTS, 2014, Strategic priorities section, para. 1). These strategic goals speak not only to what has been defined as accomplished teaching through National Board Certification for teachers, but also to what has been defined as teacher leadership according to the research conducted by York-Barr and Duke and the research discussed throughout this study.

This mixed method study explored the relationship between accomplished teaching through National Board Certification for teachers and teacher leadership in New York State. Successful National Board Certification completion is based upon accomplished teaching in relation to the five core propositions of the National Board for Professional Teaching Standards. This study focused on teacher leadership, as it pertains to accomplished teaching, which is addressed most directly by the fifth core proposition of the NBPTS. Given the current state of education, coupled with the current mission and goals of the National Board for Professional Teaching Standards, the purpose of this study was to determine whether a relationship exists

between successful completion of National Board Certification and continued teacher leadership activity in middle and high schools in New York State.

To determine if there was a relationship between obtaining NBC and teacher leadership, the *School Leadership Survey*, based on modifications of the 2001 national Yankelovich Group study (Sykes, 2006; Severns, 2007), was sent to 426 middle and high school NBCTs and 511 middle and high school non-NBCTs in New York State. In addition, qualitative interviews were conducted with a random selection of fifteen NBC survey respondents and five principals of schools identified by New York State as having a high number of NBCTs in employment. This causal comparative study used the quantitative and qualitative data, which was compared and triangulated to address the following research questions:

How do self-perceptions of NBCTs, non-NBCTs, and principals in middle and high schools in New York State compare regarding teacher leadership in the area of:

- a. Participation in leadership activities beyond the classroom?
- b. Sense of leadership responsibility to the profession?
- c. Perceptions of influence in school-wide policy development?
- d. Reports of career satisfaction due to school leadership roles?
- e. Perceptions of administrator support for teacher leadership?

The results of this study and a discussion of findings are presented in this chapter, followed by limitations and implications for practice. The chapter concludes with recommendations for further research and a conclusion.

Summary of Results

- Participation in leadership activities beyond the classroom

 Both NBCTs and non-NBCTs were involved in teacher leadership activities within their schools, but limited beyond that scope. NBCTs interviewed discussed interest in formal leadership roles, but were typically robustly involved in informal leadership activities, regardless of the time pressures of their teaching responsibilities and the increased workload resulting from the Regents Reform.
- Sense of leadership responsibility to the profession
 NBCTs indicated a higher level of commitment to initiatives that improved teaching and learning, and hence the profession. Both sets of interviews included discussions of teacher commitment and heightened levels of responsibility to the profession.
- Perceptions of influence in school-wide policy development
 Neither NBCTs nor non-NBCTs perceived much influence in school-wide policy development. Those initiatives were typically perceived as administrative and not directly related to teaching and learning.
- Reports of career satisfaction due to school leadership roles
 Both NBCTs and non-NBCTs perceived a high level of career satisfaction, although
 NBCTs discussed the benefits of their leadership as examples of their satisfaction.
- Perceptions of administrator support for teacher leadership
 Both groups perceived a degree of interest by administrators in their leadership initiatives
 regarding teaching and learning. NBCTs agreed that there was support, however
 intangible, for their attaining NBC.

Discussion of Findings

Demographics

Although not directly related to the research questions, two interesting points emerged within the demographics. First, the population of this study's survey respondents was very different from those of the prior two studies Sykes (2006) and Severns (2007). In this study, the population consisted primarily of teachers with five or more years of teaching experience and had an inverse percentage of NBCTs and non-NBCTs to the other studies. As a result, a closer comparison than was possible in prior studies could be made between NBCT and non-NBCT respondents, as 99% of the respondents were either NBCTs or eligible for National Board Certification. Also, while two thirds of the respondents to this study were NBCTs, only 35% of the survey respondents to Severns' study were NBCTs. With this inverse relationship, one would have expected an even greater difference with more NBCTs expounding upon their teacher leadership prowess and teacher leadership opportunity, but perhaps the overall population of respondents in this study represent a more extensive veteran and accomplished group, more likely to experience teacher leadership.

A second interesting related point which may have affected the findings was in regard to the level of education of each respondent. In this study, while 42% held a master's degree, the basic requirement of New York State for professional certification, 53% had gone beyond that degree and acquired significant advanced knowledge including their master's plus 30, doctorates, or advanced knowledge of a specific field of study. The response population of this study is quite different from the response population in prior surveys. The level of study required in New York State to obtain a higher level of knowledge, attain mastery level as a teacher, and maintain professional certification compels those teachers to be ongoing learners. They are in a

continuing stage of professional development. It is possible that being required to earn a master's degree professionalizes teachers in New York State to an extent that decreases the propensity of New York State teachers to pursue NBC. In conjunction with the higher percentage of NBCTs in this study, this higher percentage may suggest that the overall population was more educated and accomplished than in the previous studies. Even those teachers without NBCT had already obtained a level of expertise from their advanced courses which could have led them to aspire to leadership roles. The variance in the certification process and level of education between the two demographics might explain the difference in respondents with NBCTs and those without National Board Certification.

Participation in Leadership Activities Beyond the Classroom

Minimal difference was reported between NBCTs and non-NBCTs with regard to participation in leadership activities beyond the classroom. Both groups reported participation in leadership activities, with developing curriculum and providing professional development being the most commonly reported leadership activities and developing teacher evaluation tools being least reported. Further, one third of teacher respondents indicated having or aspiring to a formal teacher leadership role. Formal leadership roles included department head and master teacher, both positions that include positional authority. Nearly all of the teacher interview respondents indicated that they had participated in informal leadership activities both prior to and after achieving National Board Certification. It is possible that this more educated and experienced population of teacher interview respondents, in comparison to those in prior studies, would be more likely to pursue teacher leadership. This idea correlates with the theory of an overall more educated and experienced population who would be more likely to pursue teacher leadership. Principal interview responses indicated that NBCTs participate in leadership activities to a

greater degree than non-NBCTs. However, principals also reported that their non-NBCT leaders participated in leadership activities, as well. Principals may turn to their NBCTs when available, but given the paucity throughout the state, they also recognize the capacity of those with advanced degrees and expert knowledge.

Sense of Leadership Responsibility to the Profession

NBCTs demonstrated a stronger sense of leadership responsibility to the profession than their non-NBCT colleagues. Further, all teacher interview respondents reported a broader view of this concept. They reported that they "see things from both sides", and "are responsible to bring younger and less experienced teachers to be the best they can be, especially with regard to the Common Core Learning Standards." From the makeup of the population of survey respondents as discussed earlier, 95% of the respondents had an advanced degree of which 66% of those were NBCTs. This might infer a highly motivated population with a strong sense of responsibility due to years of experience required for NBC and level of education attained. Throughout these interviews, teachers highlighted various leadership activities in which they had become involved after achieving NBC that provided this sense of responsibility using phrases such as "validation for the profession", "confidence in skills", "courage to stand up to administration and speak up for the rights of students", and "responsibility to influence others to achieve NBC." While master's level and beyond may encourage expert knowledge, the focus of the NBPTS standards emphasize giving back to the profession, the sense of responsibility. A sense of responsibility to the profession is one rationale for teachers to take the extra step in obtaining NBC.

Principal interviews also supported a strong sense of leadership responsibility from their NBCTs, as well. Again, those were principals with concentrations of NBCTs in their schools.

It is assumed that they have some knowledge of their expertise. As one principal stated, "the very nature of the people who pursue certification are leaders already." Rarely does he see a teacher who is not a leader in their department or subject areas pursue NBC. He sees NBC as a crowning achievement of professional development, as well. It validates the work they are already doing. Principals reported their NBCTs "have taken active roles during faculty meetings and various initiatives involving teaming, RTI, and curriculum mapping." The degree of commitment of NBCTs is another rationale for principals to encourage more of their teachers to go this extra step in obtaining the NBC.

Perceptions of Influence on School-Wide Policy

In the area of perception of influence on school-wide policy development, there was no significant difference between NBCTs and non-NBCTs. Further, in the area of levels of school-wide policy development, there was no significant difference between NBCTs and non-NBCTs. That neither group believed that they had much influence on school-wide policy is a finding worthy of further discussion and study. In an era of schools needing teachers to assume a broader leadership role, influence on school-wide policy is one path that teachers are not considering or even aware as possible to consider. Lack of teacher influence on school-wide policy is counter to the needs of this new reform era. One third of interview respondents reported that opportunities to influence school-wide policy were beyond the scope of teacher leaders. The majority of interview respondents' perceptions indicated a culture in which influence on school-wide policy was under the jurisdiction of building level administration, central administration, and the board of education. Still, one respondent indicated that her activism with regard to the German program in her district was instrumental in the district's decision to maintain the program. That example could incite others to attempt this leadership

path. It was interesting that both NBCTs and principal interview respondents revealed a sense of responsibility to influence school-wide policy, despite the perception that influence was limited. Doors must be opened to make teachers aware of these opportunities and the need for their leadership.

This study's results suggested that NBCTs and non-NBCTs perceived they had a lack of influence on school-wide policy. It is also possible that both of these differences may be related to the Regents Reform Agenda and its influence on education as a whole. Across the State, regulations regarding performance evaluation of teachers and principals, along with the number, length, and purpose of assessments for students, have been largely imposed without building consensus amongst educators. Rather than opening doors for the teachers with leadership abilities and strengths, the top-down reforms are squashing interest and closing doors to all but what goes on in teachers' own worlds. Teachers' hands are tied. They have to abide by all the testing regulations and performance standards and because of these and the Regents reform, they have to be more concerned about these imposed assessments than about trying to affect school policy. The regulations, standards, and accountability measures being implemented are having a negative influence on teacher leadership.

Career Satisfaction

NBCTs and non-NBCTs alike reported a sense of career satisfaction due to leadership roles. All teacher interview respondents reported an increase in their level of career satisfaction as a result of having achieved National Board Certification. Teacher interview respondents reported having a "change in role" in their school, "boosted self-esteem", increased perceptions of "worth to society" and a more professional self-perception. Principal interview respondents indicated that they perceived achievement of National Board Certification to have increased

teachers' level of career satisfaction, but that other means of increasing the level of career satisfaction were also available to teachers and were sought after. Examples of this included earning doctorate degrees, administrative degrees, and other advanced degrees. Obtaining NBC was not the defining component in career satisfaction; teacher leadership roles played a significant part as well. Common to all responses is the intrinsic value of achieving at a level higher than what is mandated by contract or State regulation. As one principal stated, "She feels everybody comes into the profession to make a difference and National Board Certification provides that opportunity. Achieving NBC means that they reach the next level, asking themselves, 'How do I become exceptional?' They go through the rigor of changing teaching for the classroom." This additional rigor, even after obtaining masters plus thirty or the equivalent, could put these teachers on a higher plain for achieving school and professional goals necessary for this reform climate.

Administrative Support for Teacher Leadership

NBCTs and non-NBCTs reported no difference in perception of support for teacher leadership provided by principals or central administration personnel. Teacher responses were not consistent with regard to support from administration across the interviews. Administrators were not equal to one another in their degree of support. However, within individual interviews, levels of support throughout the certification process were consistent with perceptions of recognition upon achieving certification. Teachers who reported that their principals and district administrators provided formal recognition upon achieving National Board Certification also reported a greater extent of support throughout the process. Support, in these incidents, was more likely to take on the form of release time or cohort support for these teachers. All principal interview respondents stated that they provided support throughout the National Board

Certification process and formally recognized teachers who achieved National Board Certification. Examples of support were varied: One principal indicated that honoring a teacher at a faculty meeting was support, while another principal's perception was providing release time for the teacher to prepare their NBC portfolios. Examples of recognition upon achieving NBC were varied as well: One principal reported formally recognizing new NBCTs at faculty meetings. One teacher stated that she was recognized by the central administration in her district, while a third reported having to remind her principal on more than one occasion that she had achieved NBC and should be recognized. Throughout principal interviews, low principal awareness of the process for achieving National Board Certification was revealed, potentially impacting the level and type of support provided to candidates. The principals were aware their teachers were endeavoring to earn NBC, but they were not cognizant of the depth of requirements and the commitment it took to do so. Had they been more aware of the process they might have been even more supportive and encouraging during it. Furthering this concept, increased state level support for NBPTS and National Board Certification might have increased principal awareness as well as provided further caveats through which to provide support for candidates.

Limitations

This study attempted to explore the relationship between teacher leadership and accomplished teaching as defined by National Board Certification. The researcher noted a vast difference in the proportion of NBCTs to non-NBCTs who answered the survey in comparison to the proportion of NBCTs in New York State. In this study, 99% of SLS respondents were either NBCTs or eligible for National Board Certification. As such, their perspectives limit the findings in that with or without National Board Certification, survey respondents' exhibit

leadership qualities. Another limitation that this data exposed came from non-response bias.

Because the survey dealt with perceptions of National Board Certification, non-NBCTs may not have considered themselves appropriate respondents.

This study relied on self-reports of NBCTs and principals for its qualitative data. Bass and Avolio (1995) indicated that leaders tend to rate themselves as transformational to a somewhat greater extent than their followers rated them. Further, Podsakoff, MacKenzie, and Bommer (1996) posited that results could be skewed in either direction depending upon relationships with current leaders. Differences in perceptions based upon role may bear relevance to the findings that correspond with research question 1e.

Further, this study was limited in that only middle and high school teachers in New York State were included. Although the qualitative data collected in this survey supports the quantitative data, generalizations from qualitative data collections cannot be made due to the sample size and the nature of the sample.

The current position of the researcher, as principal of a middle-high school where momentum for National Board Certification of Teachers has recently grown, may have added a personal bias with regard to the National Board Certification process.

This study was also limited by the lack of triangulation between NBCTs and principals in their own schools. Further, interviews with non-NBCTs may have provided a more comprehensive data base to analyze as well.

Definitions of teacher leadership are broad and varied, both throughout the literature and in practice, presenting a limitation to this study. Further limiting this study is the intrinsic nature of teacher leadership.

The sample population of this study was pre-treated with NBC, which ultimately puts them in support of NBC, creating an innate motivational bias.

Given these limitations, the findings still indicate implications for practice. These are discussed in the section below.

Implications for Practice

Given what was found in responses to the research questions, several salient points were raised regarding implications for practice. These points included 1) a lack of time for both teachers and principals due to myriad of pressures caused by multiple reforms initiated in the State in recent years, 2) the rigor for attaining NYS professional certification for teachers, 3) principal awareness of the NBC process, 4) level of administrative support, and 5) the power of the teacher.

Lack of Time

"No time to say hello, goodbye! I'm late! I'm late! I'm late!" - The White Rabbit

Throughout the course of this study, interview respondents repeatedly indicated a sense of pressure with regard to time. Five interview respondents indicated that a lack of time might have limited their ability to participate in leadership activities. In fact, one difficulty experienced by the researcher was scheduling interviews with willing interview participants due to their complex schedule of responsibilities. However, the statements made by interview respondents differ significantly from what would be expected based on findings regarding their participation in leadership activities. Nine of the fifteen interviewed teachers reported being involved in leadership activities. What appears to be the case is that participation in leadership activities is taking place in a robust way, but there is also a difference between actual level of participation and their desired level of participation in leadership activities. One interview even took place via

cell phone and a hands free connection during the interviewee's commute from work to the class he was taking at the university. That, he indicated, was the only free time he had since the implementation of the Regents Reform Agenda that required excessive planning and collaborating on curriculum and lesson planning. That teacher is committed to the profession and is involved in leadership within that context. When considering participation or the lack of participation in surveys and interviews, the increase in pressure may account for the relatively low response rate to the SLS survey, despite multiple launches and the possibility of winning a Kindle Fire. Further, among the few teachers whose responses to interview questions indicated a lack of participation in leadership activities or influence over school-wide policies, a lack of time was cited. Given the demands of these reforms, administrators may be well served to leverage the leadership skills of their NBCT and non-NBCT teacher leaders alike by providing time for participation in more teacher leadership activities, thus providing opportunities for more influence on school-wide policies.

New York State Certification Requirements vs NBCT

Some states are more rigorous than others when qualifying for a professional teaching degree. In New York State, teachers are required to earn a master's degree in order to attain professional certificates for teaching. This requirement may have been one of the reasons for the difference between this study's findings and the two prior studies in South Carolina (Sykes, 2006) and Louisiana (Severns, 2007), as a master's degree is not required. This requirement might attract a more committed pool of teachers who enter the profession because they are fully aware of the expectations they need to fulfill in order to maintain their teaching credentials, thereby increasing the professionalization of teaching in New York State. Some may equate NBC to a master's degree due to the rigorous process. The requirement to earn a master's degree

may also reduce interest in achieving National Board Certification, as teachers are already required to achieve a higher degree than their counterparts in other states. Further, until recently, New York State did not provide any incentives to teachers who applied for NBC certification. Currently, in New York State, less than one percent (0.77%) of the total teaching population has achieved National Board Certification. By contrast, in Ohio 2.9% of the teaching population has achieved National Board Certification, in Louisiana 3.7% has achieved, and in South Carolina 17% of the total teaching population has achieved National Board Certification (NBPTS, *State Rankings by Total Number of National Board Certified Teachers*, 2013; Local School Directory.com, 2014). This lack of incentivizing might also contribute to the relative lack of interest in National Board Certification in New York State.

This information is also relevant to this study because it may help to explain the similarities in reports between NBCTs and non-NBCTs on the SLS Survey. Further, although reports of principals indicated that there is strong participation in leadership activities among NBCTs, they also indicated that non-NBCTs are provided with leadership opportunities, as well. Every principal agreed that their NBCTs stand out as leaders in their schools, but that "the very nature of the people who pursue certification are leaders already." The findings of this study indicated that, while National Board Certification may not develop leadership qualities, it might help to identify leaders.

One conclusion that can be determined is that teacher leaders are attracted to National Board Certification as one form of achievement and demonstration of teacher leadership. This is an example of "going beyond." Not only do these teachers earn their requisite Master's degree, but they are compelled to demonstrate their accomplishments by earning NBC. One principal stated that achieving National Board Certification "validates the work they are already doing."

However, it is not clear that the process of achieving National Board Certification for Teachers has an impact on teacher leadership. Furthermore, principals provided anecdotal evidence supporting the idea that teacher leaders are more likely to seek National Board Certification as opposed to the National Board Certification process serving as a tool for developing teacher leadership. An implication from this study may be that in order to have better teachers and teacher leaders, it's probably best to have NBCTs and/or a master's degree.

Principal Awareness

Principal interviews revealed a lack of familiarity with the process of achieving National Board Certification, despite claims of providing support to candidates. Four of the five principals were relatively unfamiliar with the process of National Board Certification and the fifth was aware mainly because she had attempted the process while teaching full time. This lack of familiarity may be due to similar stresses of administration. In this era of APPR, professional development has been reduced mostly to CCLS. Principals are looking to support their entire staff through the transition into the Common Core. At the same time, schools and districts have had to create APPR documents and SLOs from which evaluations will come. Principals, especially if they are not familiar with the rigors of the NBC process, may not be able to support candidates as much as they would like because they are pre-occupied with other administrative and managerial tasks. The onset of the Regents Reform Agenda may play a part as well. Not having time to support those teachers whose professional development would help manage the increase in accountability is a catch-22 for administrators who need the support of those NBCTs to assist with the leadership goals of their schools.

Another explanation for this perceived lack of awareness may have to do with the overall participation level of New York State with regard to National Board Certification for Teachers.

While National Board Certification for Teachers has gained momentum in New York State, less than one percent of New York's teachers have achieved certification. As indicated by the National Board Council of New York, "although National Board Certification had been available since 1993, only 40 NYS teachers had achieved certification between 1993 and 2000" (http://nbcny.org/). To date there are 1,602 NBCTs in New York, a significantly larger number than in 2000, yet still significantly fewer than in South Carolina, Ohio, and Louisiana, relative to the total teaching population. Further, despite the fact that "NYS Education Law Part 80-3.6 allows teachers to meet the five year 175 hour/professional development requirement for maintaining certification (effective 2/2/2004) upon achievement of National Board Certification", (http://nbcny.org/) principals interviewees demonstrated an overall lack of familiarity with National Board Certification.

Within the researcher's own district, awareness of National Board Certification was minimal. In fact, the only NBCTs in the district of the researcher's school have all achieved National Board Certification under the researcher's administration. The researcher first learned of National Board Certification in Pennsylvania, the former place of residence and employment. Pennsylvania happens to be one of eleven states that have doubled the number of NBCTs in the last five years, whereas this increase is not the case in New York (NBPTS, 2013). In New York, the number of NBCTs has increased from 1,012 in 2008-2009 to 1,602 in 2012-2013 (NBPTS, Elevating the teaching profession, 2013). Momentum for National Board Certification must not slow down. Encouraging NBCTs will only aid in accomplishing the goal of increasing teacher leadership and accomplished teaching in schools.

Support

Principals who were interviewed claimed that they were very supportive of NBC, but their degree of support varied to the extreme. One principal, for example, reported giving no release time for work toward certification, while others gave not only release time, but also had a part-time National Board coordinator on staff to lend assistance. While the level of support between principals varied, self-perceptions of principal support were consistently strong. One principal, however, admitted to not having used his NBCTs as leaders effectively, but it was a professional goal he had set to do in the future. He realized the school-wide advantages of supporting teacher leaders and ultimately supporting and promoting future NBCTs.

Further, the level of support varied between districts as well. With regard to stipends offered to National Board Certified Teachers, some districts provided large stipends, while other districts offered no stipend at all. Interview respondents reported financial incentives including steps on their salary scale, an additional 3% of their salary, and up to \$3,000 a year for ten years following certification. The most common stipend reported was \$2,000 a year reported by five interview respondents. However, while stipends for achievement of National Board Certification exist on many levels in various locations throughout New York State, "the transformation they (NBCTs) experienced was significant and it changed the motivation from external factors, like money and recognition, to an intrinsic desire to change and become better" (Starnes, 2013, p. 106).

The Power of the Teacher

Both teacher and principal interviews revealed that NBCTs and teacher leaders influence their colleagues and, in turn, their schools. Among the varied definitions of teacher leadership a common theme persisted regarding the extension of influence beyond a teacher's own classroom.

Of the interview respondents, one factor that may account for this is the process of achieving National Board Certification. One teacher interviewee indicated that her preparation for Common Core Learning Standard implementation was significantly influenced by the process of achieving National Board Certification. Other interview respondents indicated that they possessed leadership skills prior to obtaining National Board Certification, but stated that their experience with NBC did provide an opportunity to hone these skills. Whether serving as mentors for pre-service or new teachers, acting as activists in support of their programs, or serving on building level committees, NBCTs and teacher leaders influenced their schools in ways that extended beyond their own classrooms.

The findings of this study have spawned several areas for future research.

Recommendations for Further Study

This section describes areas in which future research could add to the literature about National Board Certification, NBPTS, National Board Certified Teachers, and teacher leadership.

One recommendation for further study is to compare the teacher leadership profile of successful candidates and unsuccessful candidates for National Board Certification. This comparison would potentially address the reports of principals who indicated that their NBCTs do participate to a greater extent in leadership activities but there are ample opportunities for non-NBCTs, as well.

Research into the potential relationship between certification requirements for teachers in New York State and the percentage of teachers who apply for and/or earn National Board Certification is yet another area for further study. Relatively stringent certification requirements in New York State for teachers may influence motivation for achieving National Board

Certification in New York State. With regard to the professionalization of teaching, the certification requirement of a master's degree may influence perceptions about earning NBC.

Conducting a series of case studies of National Board Certified Teachers and/or teacher leaders to determine the nature of leadership activities and the amount of time spent over a lengthy period is an area for further research that may inform the body of knowledge with respect to the degree of involvement in teacher leadership activities. Studying the activities of case study participants would provide data regarding areas in which professional development is needed and areas where activities are lacking. Strategic planning of professional development initiatives might benefit from research obtained.

Another area of study might involve the level of incentives available. Where a tangible incentive was available, the intensive process involved with achieving NBC may encourage more teachers to attain that certification. For districts without stipends, other forms of recognition need be in place as a means to encourage NBCTs in that district.

Exploring the sources (peer vs. principal) of support for candidates for National Board

Certification for Teachers is another area for further study. A fuller comprehension of how

effective support is provided for candidates would aid in targeting methods of candidate support
throughout the process.

This study focused on middle and high school teachers. A similar study focusing on the teacher leadership activities of elementary teachers and National Board Certification may provide more insight into the characteristics of teacher leaders from another population.

Conclusion

"Within every school there is a sleeping giant of teacher leadership, which can be a strong catalyst for making change" (Katzenmeyer & Moller, in *Teacher leader model standards*, 2012, p. 12).

This study set out to find possible tools for arousing this sleeping giant of teacher leadership in New York State middle and high schools. Because of the current state of affairs resulting from the Regents Reform Agenda and economic difficulties facing our schools, the timing is ripe and the stakes are high. Formal leadership paradigms will no longer get the job done when it comes to preparing students for a world that is changing as rapidly as they are. School leaders face changes that require a modification in the way that they approach education. The clear implication is that distributive leadership is most likely to contribute to school improvement and to build internal capacity for development (Harris & Muijs, 2005, p. 27). There also have been a growing number of research studies which claimed that distributive leadership practices have a positive effect on systematic changes and student achievement.

Harnessing the power of teacher leadership stands to provide educators with the tools that are needed to make lasting positive change, despite the increase in workload due to the introduction of the Common Core Learning Standards, changes in accountability and data collection, as well as the increased standardized testing. As stated by Arne Duncan, U.S. Secretary of Education, in a recent speech at the National Board of Professional Teaching Standards Teaching and Learning Conference, March 14, 2014, "...the only way that higher standards, and new systems of support and evaluation, will work, is if teachers lead this change in partnership and collaboration with principals, parents, and communities." In essence, the Targets of Leadership Influence, with regard to the York-Barr and Duke Teacher Leadership for

Student Learning: Conceptual Framework must be on the individual, team, and organizational level.

As stated above, New York is undergoing unprecedented and great change in education. Prior studies conducted by Yankelovich, Sykes, and Severns in other states and at other times, indicated that there was a higher level of participation in teacher leadership activities amongst National Board Certified Teachers than non-NBCTs. New York State educators have found themselves in a position where the mantra has become "all hands on deck" in a way that is new and unprecedented.

While similar findings were found between this study and the prior studies cited above with regard to leadership responsibility to the profession, differences were found in other categories. For example, the SLS survey responses indicated that there was no difference in participation in leadership activities of NBCTs and non-NBCTs. Further, this study's results suggested that NBCTs and non-NBCTs perceived that they have a lack of influence on schoolwide policy. According to the York-Barr and Duke Framework for Teacher Leadership, a lack of influence on school-wide policy poses a barrier for teacher leaders in their Means of Leadership Influence. Influence on school- wide policy, as a point of influence, is perceived as unavailable to aspiring teacher leaders and teacher leaders alike. The parity in participation in leadership activities and perceived lack of influence may be related to the implementation of the Regents Reform Agenda in New York State. Currently, teachers and principals are being evaluated on the performance of their students while the newest set of standards, the Common Core State Standards, is being introduced. These broad changes in education have taken place without consensus from educators, and may have a role in teachers' leadership activities as well as their perceptions of influence on school-wide policy.

The historical dichotomy that existed between teachers and administrative leaders may be dissolving as a result of the Regents Reform Agenda and economic hardships faced in New York due to tax caps. In order to overcome the State's failure to properly implement the Regents Reform Agenda with time, money, and resources, educators must lean on one another to provide students with the high level of education that has been the tradition in New York State. Harnessing the power of teacher leaders and waking the sleeping giant of teacher leadership capacity is critical to the future of education in New York State.

In the face of the perfect storm of what New York State policymakers call education reform, waking the sleeping giant of teacher leadership capacity and harnessing the power of teacher leaders is critical to the future of education in New York State.

References

- Acker-Hocevar, M., & Touchton, D. (1999, April). A model of power as social relationships:

 Teacher leaders describe the phenomena of effective agency in practice. Paper presented at the annual meeting of the American Educational Research Association. Montreal,

 Quebec, Canada.
- Archer, J. (2001). Teacher re-creation. Education Week, 20(16), 46-50.
- Bales, R. (2004). Perceived indicators of support leading to the successful attainment of the national board for professional teaching standards certification, (Doctoral dissertation).

 Retrieved from http://etd-submit.etsu.edu/
- Barth, R. S. (2001). Teacher leader. Phi Delta Kappan, 82, 443-449.
- Bass, B. M., & Avolio, B. J. (1995). Multifactor leadership questionnaire: Leader form, rater form, and scoring key for MLQ (Form 5x-Short). Redwood City, CA: Mind Garden.
- Bennett, N., Wise, C., Woods, P., & Harvey, J. (2003). Distributed leadership: A review of literature. *National College for School Leadership*, 3-14. Retrieved from http://oro.open.ac.uk/id/eprint/8534
- Berg, J. H. (2010). Constructing a clear path to accomplished teaching. *Theory Into Practice*, 193-202. Retrieved from http://www.tandfonline.com
- Berg, J. H. (2003). *Improving the quality of teaching through National Board*Certification. Norwood, MA: Christopher-Gordon.
- Brookover, W., B., & Lezotte, L., W. (1979). Changes in school characteristics coincident with changes in student achievement. (Occasional paper no. 17). Institute for Research on Teaching, College of Education, Michigan State University: East Lansing, MI.
- Cochran, K. (1997). Pedagogical content knowledge: Teachers' integration of subject matter,

- pedagogy, students, and learning environments. NARST. Retrieved from http://www.narst.org/publications/research/pck.cfm
- Creswell, J. W. (1994). Research design: Qualitative & quantitative approaches. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five*approaches (Kindle Locations 4659-4664). Retrieved from http://www.amazon.ca
 /Qualitative-Inquiry-Research-Design-ebook/dp/B00AFFRONG
- Crowther, F., Ferguson, M., & Hann, L. (2009). *Developing teacher leaders* .Thousand Oaks, CA: Corwin Press.
- Danielson, C. (2006). *Teacher leadership that strengthens professional practice*. Association for Supervision and Curriculum Development.
- Darling-Hammond, L. (2000). *National commission on teaching & America's future*. Washington, D.C.: American Association of Colleges for Teacher Education.
- Denzin, N., & Lincoln, Y. (1998). *Collecting and interpreting qualitative materials*.

 Thousand Oaks, CA: Sage.
- Dilworth, M.E., Aguerrebere, J.A., & Keller-Allen, C. (2006). *National Board for Professional Teaching Standards initial thoughts on the reauthorization of the No Child Left Behind Act*. Unpublished manuscript. Retrieved from http://www.nbpts.org
- Duncan, A. (2014, March 14). Closing Remarks- Speech presented at the NBPTS Teaching and Learning Conference. Washington, D.C.
- Education is the key to a healthy economy. (2002, April 30). *The Wall Street Journal*, p. 1. Retrieved from http://online.wsj.com
- Engageny.org. (2012). Annual professional performance reviews: 2012-13. Retrieved from http://usny.nysed.gov/rttt/teachers-leaders/plans/docs/

- Engageny.org. (2012). Student learning objectives. Retrieved from http://engageny.org/resources/student-lerning-objectives/
- Engageny.org. (2012). Teacher/Leader effectiveness: Student learning objectives.

 Retrieved from http://www.engageny.org/resource/teacherleader-effectiveness-student-learning-objectives
- Fessler, R., & Ungaretti, A. (1994). Expanding opportunities for teacher leadership. In D. R. Walling (Ed.), *Teachers as leaders* (pp. 211-222). Bloomington, IN: Phi Delta Kappa.
- Frank, K., Sykes, G., Anagnostopoulos, D., Cannata, M., Chard, L., Krause, A., & McCrory, R. (2008). *Does NBPTS certification affect the number of colleagues a teacher helps with instructional matters?* San Francisco, CA: American Educational Research.
- Frost, D. (2011). Supporting teacher leadership in 15 countries: the international teacher leadership project, phase 1 A report. Leadership for Learning University of Cambridge Faculty of Education. Retrieved from http://www.teacherleadership.org.

 uk/uploads/2/5/4/7/25475274/itl_report_.pdf
- Fullan, M. (1993). *Probing the depths of educational reform*. Levittown, PA: The Falmer Press.
- Fullan, M. (2010). *Motion leadership*. Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2011). *Choosing the wrong drivers for whole system reform.* Summary of Seminar Series Paper No. 204, Centre for Strategic Education.

 Retrieved from http://www.michaelfullan.com/media/13501655630.pdf

Fullan, M. (2013). *Motion leadership in action*. Thousand Oaks, CA: Corwin Press.

- Gabriel, J. G. (2005). *How to thrive as a teacher leader*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Gay, L. R., Mills, G.E., & Airasian, P. (Eds.). (2006). Educational research. Upper Saddle

- Brook, NJ: Pearson Education, Inc.
- George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston, MA: Allyn & Bacon.
- Goldhaber, D., Perry, D., & Anthony. E. (2003). NBPTS Certification: Who applies and

 What factors are associated with success? University of Washington and Urban Institute.

 Retrieved from http://www.urban.org/UploadedPDF/410656_NBPTSCertification.pdf
- Guiney, E. (2001). Coaching isn't just for athletes: The role of teacher leaders. *Phi Delta Kappan*, 82, 740-743.
- Gulbin, K. M. (2008). Transformational leadership: Is it a factor for improving student achievement in high poverty secondary schools in Pennsylvania? (Doctoral dissertation). Retrieved from http://dspace.iup.edu/
- Hargreaves, A., (2011). *Teacher leadership the best hope for sustaining school change*.

 Retrieved from www.ride.ri.gov/HQLP/Mid_Career/RIASP/Teacher_Leadership.ppt
- Hargreaves, A., Fink, D. (2004). The seven principles of sustainable leadership. *Educational Leadership*. Retrieved from http://www.marylandpublicschools.org
 /NR/rdonlyres/F7D49A8D-E9D0-4C49-9DE63A878BC9F1F4/18748/seven_principles.pdf
- Harris, A. (2005). *Leading or misleading? Distributed leadership and school improvement*. Retrieved from http://faculty.education.illinois.edu/westbury/JCS/Vol37/harris.htm
- Harris, A. (2008). *Setting the stage: Teacher working conditions*. Retrieved from http://workingconditions.net/?p=185
- Harris, A., & Muijs, D. (2005). *Improving schools through teacher leadership*. Buckingham, UK: Open University Press.
- Harris, D., & Sass, T. (2007). The effects of NBPTS-certified teachers on student achievement.

- Washington DC: National Center for Analysis of Longitudinal Data in Educational Research, Urbane Institute.
- Hart, A. W. (1994). Creating teacher leadership roles. *Educational Administration Quarterly*, 30, 472-497.
- Hart, A. W. (1995). Reconceiving school leadership: Emergent views. *Elementary School Journal*, 96, 9-28.
- Henson, K. T. (1996). Teachers as researchers. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (2 nd. ed., pp. 53-64). NY: Simon & Schuster.
- Institute for Educational Leadership. (2001). Leadership for student learning: Redefining the teacher as leader. *Institute for Educational Leadership*, pp.1-36.

 Retrieved from http://www.iel.org/programs/21st/reports/teachlearn.pdf
- Institute for Educational Leadership. (2008). Teacher leadership in high schools: How principals encourage it how teachers practice it. *Institute for Educational Leadership*, pp. 1-23.

 Retrieved from http://www.iel.org/pubs/metlife_teacher_report.pdf
- Jaimes, I. (2009). Distributed leadership practices in schools: Effect on the development of teacher leadership- a case study. Retrieved from http://digitallibrary.usc.edu/cdm/ref/collection/p15799coll127/id/181409
- Jalongo, M. R., Gerlach, G. J., & Yan, W. (Eds.). (2002). *Research methods*. Guilford, CN: McGraw-Hill.
- Jalongo, D. & Leithwood, K. (1996). Toward an explanation of variation in teachers' perceptions of transformational leadership. *Educational Administration Quarterly*, 32, 512-539.
- Katzenmeyer, M., & Moller, G. (2001). Awakening the sleeping giant, helping teachers develop

- as leaders. Thousand Oaks: Corwin Press.
- Kelley, J.D., (2011). Teacher's and teacher leaders' perceptions of the formal role of teacher leadership. *Educational policy studies dissertations*. Paper 70. Retrieved from http://digtalarchive.gsu.edu
- Kennelly, A. (2001). Teachers survey data report. Memorandum to Mary Buday, National Board for Professional Teaching Standards. Southfield, MI.
- Key issues: Enhancing teacher leadership. (2007). National Comprehensive Center for Teacher Quality. October 2007, p. 3 Retrieved from http://www2.tqsource.org/strategies http:///leadership/EnhancingTeacherLeadership.pdf
- Koppich, J.E., Humphrey, D.C., & Hough, H.J. (2006). Making use of what teachers know and can do: Policy, practice, and national board certification. *Education Policy Analysis*Archives, 15(7), 1-30.
- Lambert, L. (2003). *Leadership capacity for lasting school improvement*. Alexandria, VA: Association for Supervision & Curriculum Development.
- LeBlanc, P. R., & Shelton, M. M. (1997). Teacher leadership: The needs of teachers. *Action in Teacher Education*, 19, 32-48.
- Leedy, P. D., & Ormrod, J. E. (2005). Practical research: Planning and design (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Leithwood, K., & Jantzi, D. (1998). *Distributed leadership and student engagement in school*.

 Paper presented at the annual meeting of the American Educational Research Association,

 San Diego, CA. Retrieved from http://eric.ed.gov/PDFS/ED424645.pdf
- Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times.*Changing Education Series. Florence, KY: Taylor and Francis Group.

- Leithwood, K. & Riehl, C. (2003). What we know about successful school leadership. *American Educational Research Association*, January 2003.
- Leithwood, K., Seashore L. K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/How-Leadership-Influences-Student-Learning.pdf
- Leithwood, K., Mascall, B., Strauss, T., Sacks, R., Memon, N., & Yashkina, A. (2007).

 Distributing leadership to make schools smarter: Taking the ego out of the system.

 Leadership and Policy in Schools, 6(1), 37-67. Retrieved from http://www.citeulike.org/user/cbounds/article/3381175
- Lieberman, A., & Miller, L. (2004). Teacher leadership. San Franciso, CA: Jossey-Bass.
- Lieberman, A., & Miller, L. (2005). Teachers as leaders. *The Educational Forum*, 69(2), 151-162.
- Lieberman, A., Saxl, E. R., & Miles, M. B. (1988). Teacher leadership: Ideology and practice. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 148-166). NY: Teachers College Press.
- Little, J. W. (1998). Assessing the prospects for teacher leadership. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 78-106). NY: Teachers College Press.
- Local School Directory. Com. (2014). Retrieved from http://www.localschooldirectory.com
- Louisiana Department of Education. Teach Louisiana. Retrieved from Teachlouisiana.net /pdf/licensurestructure.pdf
- Lustick, D., & Sykes, G. (2006). National board certification as professional development: What are teachers learning? *Education Policy Analysis Archives*, 14(5). Retrieved from http://epaa.asu.edu/epaa/v14n5/

- Mangin, M., & Stoelinga, S. (2008). Effective teacher leadership using research to inform and reform. NY: Teachers College Press.
- Mangin, M., & Stoelinga, S. (2010). *Examining effective teacher leadership*. New York: Teachers College Press.
- Murphy, P. (2005). *Connecting teacher leadership and school improvement*. Thousand Oaks, CA: Sage.
- National Board Council of New York. (n.d.). What is National Board Certification?

 Retrieved from http://nbcny.org
- National Board for Professional Teaching Standards (n. d). *The Five Core Propositions*.

 Retrieved from http://secure.nbpts.org/toolkitweb/index.html
- National Board for Professional Teaching Standards. (2001). *Leading from the classroom*.

 Retrieved from http://www.nbpts.org/UserFiles/File/leading_from_the_classroom(1).pdf
- National Board for Professional Teaching Standards. (2002). What Teachers Should Know and Be Able to Do. Retrieved from http://www.nbpts.org/site/default/files /documents/certificates/what_teachers_should_know.pdf
- National Board for Professional Teaching Standards. (2007). A research guide on National Board Certification of teachers. Arlington, VA.
- National Board for Professional Teaching Standards. (2008). *National Board Certification and Teacher Retention*. Retrieved from http://www.nbpts.org/resources/research/national_board_certifica1
- National Board for Professional Teaching Standards. (2009). *National Board Certification for educational leaders (NBCEL) National Board Certification for teacher leaders*. Retrieved from http://www.nbpts.org/products_and_services/national_board_certifica1

- National Board for Professional Teaching Standards (2009). Voices of influence: Advancing high quality teaching through national board certification. Arlington, VA.
- National Board for Professional Teaching Standards (2011). *National Board Certification Statistics*. Retrieved from http://nbpts.org/about_us/national_board_certification.htm
- National Board for Professional Teaching Standards (2012). *edTPA partners to join National Board effort to improve teacher training in math and science*. Retrieved from
 http://www.nbpts.org/2012-11-06-nbpts-news
- National Board for Professional Teaching Standards (2012). *The Five Core Propositions*. Retrieved from http://www.nbpts.org/the_standards/the_five_core_propostions
- National Board for Professional Teaching Standards (2013). *Elevating the teaching profession*. Retrieved from http://www.nbpts.org
- National Board for Professional Teaching Standards (2013). Number of board-certified teachers tops 100,000 as new studies show significant gains in student achievement. Retrieved from http://www.nbpts.org/nbpts-2013-01-08-nbct-student-achievement
- National Board for Professional Teaching Standards (2013). 2013 State rankings by

 total number of National Board Certified Teachers. Retrieved from

 http://www.nbpts.org/sites/default/files/documents/CertificationDay2013/2013_StateRan
 kings_TotalNBCTs.pdf
- National Board for Professional Teaching Standards (2014). *The Beginnings of a movement*. Retrieved from http://www.nbpts.org/beginnings-movement
- National Board for Professional Teaching Standards (2014). *Empowering educator expertise*. Retrieved from http://www.nbpts.org/empowering-educator-expertise
- National Board for Professional Teaching Standards (2014). *Strategic priorities*.

 Retrieved from http://www.nbpts.org/strategic-priorities

- National College for School Leadership (2003). What leaders read 2 key texts from education and beyond. Retrieved from http://dera.ioe.ac.uk/5140/1/media-761-8f-randd-what-leaders-read-education-full.pdf
- National Commission on Teaching and America's Future (1996). What matters most: Teaching for America's future. Report of the National Commission on Teaching & America's future. Woodbridge, VA: National Commission on Teaching and America's Future.
- National Comprehensive Center for Teacher Quality (2007).

 **Key issue: Enhancing teacher leadership. Retrieved from http://www2.tqsource.org

 /strategies/leadership/EnhancingTeacherLeadership.pdf
- New York State Education Department. (2011, May 16). Regents adopt rules for evaluating teacher and principal effectiveness. Retrieved from http://www.oms.nysed.gov/press/EvaluatingTeacherPrincipalEffectiveness.BORAdoptRules.html
- New York State Education Department. Requirements for professional certificate.

 Retrieved from http://www.highered.nysed.gov/tcert/faqcertip.html#four
- New York State Principals. (March 14, 2013). An open letter of concern regarding

 APPR Legislation for the evaluation of teachers and principals. Retrieved from

 https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxuZX

 d5b3JrcHJpbmNpcGFsc3xneDo0MDRkOGZiNTc5OTFjYTB1
- NVivo Workbook (Computer software). (2012). Victoria, Australia: QSR International Pty Ltd.
- Ogawa, R.T., & Bossert, S.T. (1995). Leadership as an organizational quality. *Educational Administration Quarterly*, 31(2), 224-243.
- Oplatka, I. (2006). Going beyond role expectations: Toward an understanding of the determinants and components of teacher organizational citizenship behavior. Sage Journals. Retrieved from http://eaq.sagepub.com/content/42/3/385.short

- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome.

 Lexington, MA: Lexington Books.
- Osterman, K.F., Crow, G.M., & Rosen, J. L. (1997). New urban principals: Role conceptions at the entry level. *Urban Education*, *32*(3), 373-393.
- Ovando, M. N. (1996). Teacher leadership: Opportunities and challenges. *Planning and Changing*, 27, 30-44.
- Palmer, C. (2011). *Insiders' Voices: A phenomenological study of informal teacher leadership*from the perspective of those who choose to lead (Doctoral Dissertation) Retrieved from http://etd.library.pitt.edu
- Paulu, N., & Winters, K. (1998). *Teachers leading the way: Voices from the National Teacher Forum.* Washington, DC: U.S. Department of Education.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22, 259-298.
- Porter, A. C. (1986). Teacher collaboration: New partnership to attack old problems. *Phi Delta Kappan*, 69, 147-152.
- Randall, E.D. (2013). Educators feel 'initiative fatigue'. *On Board, pp. 1-6*.

 Retrieved from http://www.nyssba.org/news/2013/02/23/on-board-online-february-25-2013/educators-feel-initiative-fatigue/
- Random.org . Retrieved from http://www.random.org
- Reeves, D. (2010). *The learning leader: How to focus school improvement for better*results. Alexandria, VA: Association for the Supervision of Curriculum Development.

- Regents Education Reform Plan and New York State's Race to the Top. Retrieved from usny.nysed.gov/rttt/application/narrativessummary.pdf
- Rogus, J. F. (1988). Teacher leader programming: Theoretical underpinnings. *Journal of Teacher Education*, *39*, 46-52.
- Rohrs, K. (2012). *Putting the teacher in teacher leaders*. Retrieved from http://earcos.org/elc2012/handouts/rohrs-courtney.ppt
- Rutledge, L. (2009). Teacher leadership and school improvement: A case study of teachers participating in the teacher leadership network with a regional education service center.

 Theses and Dissertations-Counseling, Leadership, Adult Education, and School

 Psychology. Retrieved December 8, 2012 from https://digital.library.txstate.edu
- Ryan, S. (1999, April). *Principals and teachers leading together*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.
- Salazar, Y.C., Jr. (2010). Teacher to leader: A mixed methods approach to investigating teacher leadership in program improvement Secondary Schools (Doctoral Dissertation).

 Retrieved from http://sdsu-dspace.calstate.edu
- Sato, M., Hyler, M. E., & Monte-Sano, C. (2002, April). *The National Board Certification*process and its impact on teacher leadership. Paper presented at the annual meeting of the Educational Research Association, New Orleans, LA.
- Seashore L. K., Wahlstrom, K., Michlin, M., Gordon, M., Thomas, E., Leithwood, K., Anderson, S., et al. (2010). Learning from leadership: Investigating the links to improved student learning. Final report of research to the Wallace Foundation. *Center for Applied Research and Educational Improvement*. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Pages/Investigating-the-Links-to-

- Improved-Student-Learning.aspx
- Severns, K. (2007). *National Board Certification and school leadership in Louisiana*(Doctoral Dissertation, University of New Orleans). Retrieved from http://louisdl.louislibraries.org
- Shavelson, R. J. (1996). Statistical reasoning for the behavioral sciences (3rd Ed.).

 Boston, MA: Allyn & Bacon.
- Sherrill, J. A. (1999). Preparing teachers for leadership roles in the 21st century. *Theory into Practice.* 38, 56-61.
- Smylie, M. A. (1994). Redesigning teachers' work: Connections to the classroom. In L. Darling-Hammond (Ed.) *Review of research in education* (Vol. 20, pp. 129-177). Washington, DC: American Educational Research Association.
- Snell, J., & Swanson, J. (2000, April). The essential knowledge and skills of teacher leaders: A search for a conceptual framework. Paper presented at the annual meeting of the American Education Research Association, New Orleans, LA.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice:

 A distributed perspective. *Educational Researcher*, 30(3), 23-28.
- Starnes, J. (2013). *National Board Certified Teachers in Pennsylvania: A Study of Motivation and Persistence* (Unpublished doctoral dissertation). East Stroudsburg University, East Stroudsburg, PA.
- Stone, M., Horejs, J., & Lomas, A. (1997). Commonalities and differences in teacher leadership at the elementary, middle, and high school levels. *Action in Teacher Education*, 19, 49-64.
- Strodl, P. (1992, March). *A model of teacher leadership*. Paper presented at the Annual Meeting of the Eastern Educational Research Association, Hilton Head, SC.

- Survey Gizmo. Retrieved from http://www.surveygizmo.com
- Talbert, J. E., & McLaughlin, M. W. (1994). Teacher professionalism in local school contexts. *American Journal of Education*, 102(2), 123-153.
- Teacher leadership model standards. Teacher leadership exploratory consortium.

 (2012). Retrieved from http://www.teacherleaderstandards.org/downloads

 /TLS_Brochure.pdf
- Teddlie, C., & Stringfield, S. (1993). Schools make a difference: Lessons learned from a 10-year study of school effects. NY: Teachers College Press.
- Triska, J. W. (2007). *Measuring teacher leadership* (Doctoral Dissertation). Retrieved from http://humboldtdspace.calstate.edu
- Wallace Foundation (2004). p. 28-29. *How leadership influences student learning*. Retrieved from http://www.wallacefoundation.org/pages/the-state-how-leadership-influences-student-learning.aspx
- Weiss, C. H., Cambone, J., & Wyeth, A. (1992). Trouble in paradise: Teacher conflicts in shared decision- making. *Educational Administration Quarterly*, 28, 350-367.
- What Leaders Read 2 Key texts from education and beyond. National College for School Leadership (2003). Retrieved from http://dera.ioe.ac.uk/5140/1/media-761-8f-randd-what-leaders-read-education-full.pdf
- Wilson, M. (1993). The search for teacher leaders. *Educational Leadership*, 50(6), 24-27.
- Yankelovich Partners. (2001). Leading from the classroom. Accomplished Teacher,
 - 7- 10. Retrieved from www.nbpts.org/UserFiles/File/leading_from_the_classroom (1).pdf
- Yarger, S, J., & Lee, O. (1994). The development and sustenance of instructional leadership. In D.R. Walling (Ed.), *Teachers as leaders: Perspectives on the professional development of teachers* (pp. 223-237). Bloomington, IN: Phi Delta Kappa Educational

Foundation.

- York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Review*, 74(3), 255-316.
- York-Barr, J., Sommers, W., Ghere, G., & Montie, J. (2006). *Reflective practice to improve schools. An action guide for educators*. Thousand Oaks, CA: Corwin Press.
- Yukl, G. (1994). Leadership in Organizations (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Appendix A

School Leadership Survey

1. How many years have you been working in education?
2. What is your highest level of education completed?
Bachelor's degree
Master's degree
Master's Plus 30
Educational Specialist Degree
Doctorate
3. Are you a National Board Certified Teacher?
Yes
No

4. Please indicate your level of agreement with each statement about the current conditions in your school district.

	Strongly Disagree	Disagree	Agree	Strongly Agree
The principal includes *NBCT's more than other teachers in school leadership activities				
The principal encourages NBCT's more than other teachers to share ideas and innovations				
Central office administrators support teachers pursuing National Board Certification				
My principal supports teachers pursuing National Board Certification				
In this school district, NBCT's hold more leadership positions than other teachers				
Compared to non-National Board Certified Teachers, NBCT's are more effective in assisting other teachers with their instruction				

^{*} National Board Certified Teacher

5. Please indicate your level of agreement with each statement about the current conditions in your school district.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I am willing to put in extra time and effort to be a leader in my profession				
Teachers have a responsibility to help prepare new teachers				
Teachers have a responsibility to encourage others to enter the teaching profession				
My involvement in leadership activities makes me feel more significant in my position				
My involvement in leadership activities enhances my career satisfaction				
Teachers have a responsibility to influence policies and approaches regarding standardized testing				
Teachers have a responsibility to influence policy changes concerning the structure of the school day				
Teachers have a responsibility to participate in curriculum planning and development				

6. Please identify any professional roles or professional activities in which you have participated in the last five years (check all that apply)

	School Level	District Level	State Level	National Level
Mentoring other teachers				
Serving as a team leader (e.g., grade level, subject area, consulting teacher, or program leader)				
Developing curriculum materials				
Selecting curriculum materials				
Evaluating other teachers				
Serving on teacher hiring committees				
Providing professional development				
Working with teacher preparation programs at college or university				
Developing teacher evaluation models				
Mentoring, coaching, and encouraging National Board Certification candidates				
Seeking grants to support teaching and learning projects				

Continued

6. Please identify any professional roles or professional activities in which you have participated in the last five years (check all that apply)

	School Level	District Level	State Level	National Level
Featured, showcased or highlighted as an expert on teaching and learning in the press				
Authoring articles				
Disseminating/interpreting professional development information				
Other (List)				

7. Please indicate your influence over SCHOOL-WIDE policy in your school in the following areas

	No Influence	Limited Influence	Moderate Influence	A great deal of influence
Establishing school-wide or departmental curricula				
Determining the content of in-service professional development programs				
Setting school-wide discipline programs				
Allocating resources (e.g., curricular materials, computers, textbooks)				
Other (List)				

8. If known, what is the number of National Board Certified Teachers in your district/school?
9. Please enter your email address below if you wish to receive the results of this survey. Your answers will be completely confidential. Your email address will only be used to send you the results of the survey.
10. Thank you for participating in this survey. Please enter your email address in the space below if you wish to be entered in the drawing for the Kindle Fire. Your answers will be completely confidential. Your email address will only be used to enter you in the drawing.
11. If you are interested in participating in a phone interview based upon this survey, please enter your phone number and best time to call in the space below.
Thank you for your participation!

Appendix B

Email permission to use the survey

----Original Message-----

From: Marc D'Anjou < MD'Anjou@NBPTS.ORG>

To: kath90 < kath90@aol.com>

Sent: Tue, Nov 27, 2012 1:28 pm

Subject: Research Request

Hello Ms. Sottile,

Thank you for your request to receive the survey tool used in the 2001 survey conducted by Yankelovich Partners. The National Board does not have a copy of the survey tool that was used, and we are trying to contact the research firm which has acquired Yankelovich to determine if the survey tool is still available and then to determine if there is permission to share the tool. If more information is learned, then I will share that with you.

In the meantime, I have attached two documents that may be useful to your research. The document from Yankelovich Partners dated April 2001 is an internal memo detailing the survey findings, including the survey methodology and questions. Please do not share or distribute this document, since it is an internal document.

The second document contains the survey's highlights.

I hope this information is helpful.

Again, thank you for your interest in the National Board.

Best regards,

Marc D'Anjou | Corporate Secretary

National Board for Professional Teaching Standards

1525 Wilson Blvd., Suite 500 | Arlington, VA 22209

mdanjou@nbpts.org

(703) 465-8865 Office

(703) 465-2715 Fax

Appendix B continued

From: kath90@aol.com [mailto:kath90@aol.com]

Sent: Tuesday, November 27, 2012 4:15 PM

To: Marc D'Anjou

Subject: Re: Research Request

THANK YOU. I have these two documents and am desperate for the tool. Thank you so much for your

help as well. If you have any good luck finding it I will be grateful.....K

Dec 12 2012

RE: Research Request

Hello Ms. Sottile,

Good news! We were able to locate the survey tool that was used in 2000. I have attached the survey tool for your reference.

Best regards,

Marc D'Anjou | Corporate Secretary

National Board for Professional Teaching Standards

1525 Wilson Blvd., Suite 500 | Arlington, VA 22209

mdanjou@nbpts.org

(703) 465-8865 Office

(703) 465-2715 Fax

Appendix C

Email to teachers

From: Kathleen Sottile

To: Middle and High School Teachers

Subject: School Leadership Survey for Teachers

Please consider participating in the Teacher Leadership Survey http://www.surveygizmo.com. It will take about 2-5 minutes and you may win a Kindle Fire! More information is below. This survey is for middle and high school teachers. Thanks!

Dear Educator:

I am a doctoral student conducting my dissertation study under the direction of Dr. Douglas Lare and Dr. Alison Rutter, professors in the Doctoral program in Leadership Studies and Administration from East Stroudsburg University, located in East Stroudsburg, Pennsylvania. The purpose of this study is to explore the relationship between accomplished teaching through National Board Certification for teachers and teacher leadership in New York State. For that purpose, I am collecting information about teacher perceptions of their leadership roles, involvement in leadership beyond the school level, career satisfaction and influence over school policy.

I am requesting your assistance by participation in an online survey, which will involve approximately five minutes. Your participation in this study is voluntary. The results of this study may be published, but your name will not be used. Completion of this survey will also be considered your consent to participate.

It is important that I collect as many responses as possible. In an effort to thank participants for completing the survey there will be a drawing for a Kindle Fire. As our school year comes to a close on June 21, 2013, I have chosen this date for the raffle. All participants will be notified of the winner by email. When the research is completed, the results will be available to you.

The link to the survey is: http://www.surveygizmo.com/s3/1278200/survey

Thank you in advance for your participation. If you have any questions, please feel free to contact me by email: kath90@aol.com

Sincerely,

Kathleen Sottile

Appendix D

Consent to participate in research

East Stroudsburg University

Exploring the relationship between accomplished teaching through National Board Certification for teachers and teacher leadership in New York State

You are asked to participate in a research study conducted by Kathleen Sottile, a student in the Doctoral program in Leadership Studies and Administration from East Stroudsburg University. You were selected as a possible participant in this study because you are a middle or high school teacher or administrator in New York State. Your participation in this research study is voluntary.

PURPOSE OF THE STUDY

The purpose of this study is to determine whether a relationship exists between accomplished teaching and the development of teacher leadership in middle and secondary schools in New York State.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following:

- Complete the Teacher Leadership Survey
- Participate in a phone interview

POTENTIAL RISKS AND DISCOMFORTS

Personally identifiable information may be used to collect information necessary to validate the Teacher Leadership Survey. The information obtained from the surveys and interviews will be coded and/or pseudonyms will be used, thereby safeguarding against potential risk of identification.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Your participation in the research may provide useful information to those school and district administrators a well as aspiring teacher leaders, NBCTs, and National Board Certification candidates as they work to enhance the professional practices within their organization in an effort to meet the constantly changing demands of the current educational reforms and simultaneously ensure that

student achievement continuously grows. Teacher preparation programs may also find this information useful as they prepare future teachers for the evolving profession of teaching.

PAYMENT FOR PARTICIPATION

You will not receive any payment for participation in the study or phone interview, however, in an effort to increase participants participation in the Teacher Leadership Survey, a raffle of a Kindle Fire will be held as an incentive.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of information stored on a secure network, which is protected by a password, or in a locked filing cabinet located in the researchers office at Floral Park Memorial High School, 210 Locust Street, Floral Park, New York, 11001.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact: Kathleen Sottile, 1201 Washburn Street, Scranton, Pa., 18504 or at 750 West Broadway, Apt. 4Q, Long Beach, New York, 11561. Telephone contacts are 570-241-2913 (cell) or work 516-488-9300, ext. 9386.

Shala E. Davis, Ph.D., IRB Chair, East Stroudsburg University, 200 Prospect Street, East Stroudsburg, Pa., 18301-2999, 570-422-3336.

Appendix E

Email to principals- School Leadership Survey

From: Kathleen Sottile
To: Principals
Subject: School Leadership Survey
Dear Educator:
I am a doctoral student conducting my dissertation study under the direction of Dr. Douglas Lare and Dr Alison Rutter, professors in the Doctoral program in Leadership Studies and Administration from East Stroudsburg University, located in East Stroudsburg, Pennsylvania. The purpose of this study is to explore the relationship between accomplished teaching through National Board Certification for teachers and teacher leadership in New York State. For that purpose, I am collecting information about teacher perceptions of their leadership roles, involvement in leadership beyond the school level, career satisfaction and influence over school policy.
This email is to inform you that teachers in your school will receive this survey. This survey will take no more than 2-5 minutes to complete. The link to this survey is attached to this email for you to peruse as well. As it is important that I collect as many responses as possible, there will be a drawing for a Kindle Fire at the close of the survey. Please encourage your teachers to participate, as the information they provide will help further our knowledge base regarding teacher leadership and accomplished teaching.
The link to the survey is: http://www.surveygizmo.com/s3/1278200/survey
As a fellow New York principal, I thank you for your time and support in this endeavor.
Kathleen Sottile
Principal
Floral Park Memorial High School

210 Locust Street

Appendix F

Teacher interview question form - NBCTs

NBCT Name	Interviewer		
NBCT Phone Number			
Interview Start Time	Interview End Time		

- 1. As a National Board Certified Teacher, describe ways in which you are or have served in teacher leadership capacities.
- 2. How has National Board Certification influenced your sense of leadership responsibility to your profession?
- 3. In what ways have your school and administration been supportive of your National Board Certification and teacher leadership?
- 4. In what ways has obtaining National Board Certification changed your relationship with your non-NBC colleagues?
- 5. In what ways have you been able to influence your school as a result of achieving National Board Certification?
- 6. In what ways have you been able, specifically, to influence school-wide policy as a result of achieving National Board Certification?
- 7. How has achieving National Board Certification influenced you as an individual?
- 8. How has achieving National Board Certification influenced your level of career satisfaction?
- 9. How did the process of obtaining National Board Certification prepare you to employ your leadership skills?
- 10. How has achieving National Board Certification influenced your relationship with your principal and/or your colleagues?
- 11. How has achieving National Board Certification influenced you as a leader and/or a learner?

Appendix G

Interview question form - principals

Principal Name	Interviewer
Principal Phone Number	
Interview Start Time	Interview End Time

- 1. What do you perceive to be the influence of National Board Certification on your NBC teachers? Non-NBC teachers?
- 2. What do you perceive to be the influence of National Board Certification on your school?
- 3. Do your NBCTs stand out as the teacher leaders in your school? Explain.
- 4. What opportunities have you provided for NBCTs to demonstrate their teacher leadership?
- 5. How have you supported and/or plan to support candidates for National Board Certification?
- 6. What do you perceive to be the influence of achieving National Board Certification on NBCTs' level of career satisfaction?
- 7. How familiar are you with the process for achieving National Board Certification?