

Fall 12-11-2014

A Study on the Relationships of Professional Development, Teacher Working Conditions and Job Satisfaction while Controlling for Years of Teaching Experience and Grade Level Taught

Daniel W. Silvia

Seton Hall University, vandan133@yahoo.com

Follow this and additional works at: <https://scholarship.shu.edu/dissertations>



Part of the [Educational Administration and Supervision Commons](#), and the [Educational Leadership Commons](#)

Recommended Citation

Silvia, Daniel W., "A Study on the Relationships of Professional Development, Teacher Working Conditions and Job Satisfaction while Controlling for Years of Teaching Experience and Grade Level Taught" (2014). *Seton Hall University Dissertations and Theses (ETDs)*. 2037.

<https://scholarship.shu.edu/dissertations/2037>

A STUDY ON THE RELATIONSHIPS OF PROFESSIONAL
DEVELOPMENT, TEACHER WORKING CONDITIONS AND JOB
SATISFACTION WHILE CONTROLLING FOR YEARS OF
TEACHING EXPERIENCE AND GRADE LEVEL TAUGHT

BY

DANIEL W. SILVIA

Submitted in Partial Fulfillment of the Requirement for the Degree of

Doctor of Educational Administration

Seton Hall University

December 2014

SETON HALL UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Doctoral Candidate, **Daniel W. Silvia**, has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ed.D.** during this **Fall Semester 2014**.

DISSERTATION COMMITTEE
(please sign and date beside your name)

Mentor:
Dr. Elaine Walker Elaine M. Walker 12/10/14

Committee Member:
Dr. Daniel Gutmore Daniel Gutmore 12/11/14

Committee Member:
Dr. Mark DeMareo Mark DeMareo 12/10/14

The mentor and any other committee members who wish to review revisions will sign and date this document only when revisions have been completed. Please return this form to the Office of Graduate Studies, where it will be placed in the candidate's file and submit a copy with your final dissertation to be bound as page number two.

© 2014 Daniel W. Silvia

Table of Contents

Dedication	vi
List of Tables	vii
Chapter I	1
THE PROBLEM AND PROCEDURES	1
Introduction.....	1
Problem Statement and Research Questions.....	1
Relevance and Purpose of the Study.....	2
Significance of the Study	7
Definition of Terms.....	8
Limitations of the Study.....	11
Chapter II	11
REVIEW OF LITERATURE	11
Introduction.....	11
A Brief Historical Perspective of Professional Development.....	12
Effective Professional Development and Current Trends.....	17
Professional Development and Student Achievement	21
Characteristics of Professional Development	23
Working Conditions for Teachers.....	25
Teacher Job Satisfaction	28
Chapter III.....	31
METHODOLOGY	31
Introduction.....	31
Research Design.....	31
The Population	33
The Sample	34
The Participants	35
The Instrument	36
Data Collection	40
Data Analysis.....	41
Human Subjects' Protection	42

Chapter IV.....	43
ANALYSIS AND PRESENTATION OF DATA	43
Introduction.....	43
Exploratory Statistics.....	43
Research Questions.....	50
<i>Research Question 1 - To what extent is there a relationship between teacher’s satisfaction with their professional development experiences and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher’s years of experience working in education?</i>	<i>50</i>
<i>Research Question 2 - To what extent is there a relationship between teacher’s satisfaction with their professional development experiences and teacher working conditions while controlling for grade level taught and teacher’s years of experience working in education?.....</i>	<i>54</i>
<i>Research Question 3 - Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher’s Knowledge, which has the strongest relationship with teacher job satisfaction?</i>	<i>60</i>
<i>Research Question 4 - Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and satisfaction with Professional Development, which has the strongest relationship with teacher professional development?.....</i>	<i>63</i>
Summary of Results.....	66
Chapter V.....	68
CONCLUSIONS AND RECOMMENDATIONS FOR PRACTICE AND POLICY	68
Introduction.....	68
Findings	70
Conclusions.....	73
Implications.....	75
Future Research	77
Summary	79
Appendix A Letter to Teachers.....	82
Appendix B Approval from Superintendents to contact Teachers.....	84
Appendix C Survey Instrument.....	88
Appendix D Email Granting Permission from Dr. Eric Hirsch and Dr. Thomas Meagher	98
References.....	106

Dedication

Albert Einstein stated, “Wisdom is not a product of schooling but of the lifelong attempt to acquire it.” I truly believe that the pursuit of wisdom is my lifelong journey. During this pursuit there have been many people who have guided and inspired me on my educational journey. I owe my thanks to those who have offered such support and guidance.

I would especially like to acknowledge my Mentor, Dr. Elaine Walker for her countless hours of assistance. In addition, thank you to my Committee Members, Dr. Daniel Gutmore and Dr. Mark DeMareo. Collectively, your direction and support was invaluable and I would have never been able to endure my doctoral journey without it. In addition, I would like to thank my colleagues in education for always being there for me and for moving me to persist until completion.

Finally, I would like to acknowledge the most important person in my life. If not for her support, I would never have been able to develop into the person I am today. My wife, Vanessa, has endured countless hours keeping our lives and our children’s lives together, while I am working either at school working or on my school work. Thank you from the bottom of my heart. I would also like to acknowledge my children, D.J, Andrew, and Emily for being a constant reminder of why I have been working so hard completing my dissertation and education. You are all truly an inspiration to me.

List of Tables

Table 1: Breakdown of Survey Items for Major Variables.....	43
Table 2: Descriptive Statistics of the Major Variables in the Study.....	49
Tables 3: Descriptive Statistic of the Major Variables in the Study After the Data was Transformed into Rank	51
Table 4: Alpha Levels for Major Variables in the Study.....	53
Table 5: Teacher Job Satisfaction by Grade Level and Quartiles of Professional Development with Years of Teaching Experience as a Covariate	55
Table 6: ANOVA of Rank Job Satisfaction as a Function of Professional Development, Grade Levels and Years of Teaching Experience.....	57
Table 7: Teacher Working Conditions by Grade Level and Quartiles of Professional Development with Years of Teaching Experience as a Covariate.....	59
Table 8: Tests of Between-Subjects Effect.....	61
Table 9: Mean Ranks of Ratings of Teacher Working Conditions by Quartiles of Professional Development.....	62
Table 10: Pairwise Comparisons of Rank Mean Levels of Teacher Work Satisfaction by Quartiles of Professional Development	63
Table 11: Spearman Rank-Order Correlation Coefficients Between the Variable Teacher Job Satisfaction and Three Characteristics of Effective Teacher Professional Development From All Schools.....	65
Table 12: Pearson Correlation Coefficients Between the Variable Teacher Professional Development and the Four Areas of Teacher Working Condition From All Schools.....	68

Chapter I

THE PROBLEM AND PROCEDURES

Introduction

“Over the next ten years, 1.6 million teachers will retire, and 1.6 million new teachers will be needed to take their place. This poses both an enormous challenge and an extraordinary opportunity for our education system: “if we succeed in recruiting, preparing, and retaining great teaching talent, we can transform public education in this country and finally begin to deliver an excellent education for every child” (Duncan, 2011, pg. 1). Indeed, teacher preparation and professional development is an extremely important issue facing our educational system today. There is a great deal of research that supports the idea that the most important factor that affects student achievement is a highly qualified effective teacher (Rockoff, 2004; Harding & Parsons 2011; Phillips 2010; Sanders & Rivers 1996; Desimone & Long 2010). This one variable has, over the course of time, stood up as the most important on a child’s education. According to Sanders & Rivers, “Students who have highly effective teachers for three years in a row will score 50 percentile points higher on achievement tests than students who have less effective teachers three years in a row” (Sanders & Rivers, 1996).

Problem Statement and Research Questions

The problem statement for this study is; what is the relationship between professional development, teacher working conditions, and teacher job satisfaction taking into consideration the grade taught and years of experience of a teacher? There are four research questions that are investigated through this study:

- 1) To what extent is there a relationship between teacher's satisfaction with their professional development experiences and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education?
- 2) To what extent is there a relationship between teacher's satisfaction with their professional development experiences and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education?
- 3) Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher's Knowledge, which has the strongest relationship with teacher job satisfaction?
- 4) Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and satisfaction with Professional Development, which has the strongest relationship with teacher professional development?

To investigate these relationships and answer the research question a definition of the terms is described later in Chapter 1.

Relevance and Purpose of the Study

The present research seeks to expand upon a study that was completed by Thomas Meagher in May of 2011. Meagher conducted a non-experimental quantitative study which examined 23 lists of characteristics of professional development. Meagher identified the most frequently identified characteristic found among the 23 lists as part of his study. Meagher administered a survey that was primarily composed of Likert scale questions to secondary mathematics teachers in one county in Illinois. The survey measured the teachers' perceptions of

three variables, teacher professional development, teacher job satisfaction, and teacher working conditions. The results were calculated and analyzed using Pearson correlation coefficients. There were four research questions that were created to guide Meagher's study. The results of the analysis showed a significant relationship between teacher professional development and teacher working conditions, but found no statistically significant association between teacher professional development and teacher job satisfaction.

Given these results, the present study looks to expand on Meagher's initial research while controlling for grade level taught and teachers' years of experience working in education. Controlling for these two variables is important. The job functions of a high school or middle school teacher are significantly different than that of an elementary school teacher. Controlling for teacher's years of experience will also allow the researcher to see trends within the data collected between teachers who are new to the profession as compared to those that are at the end of their career. There is research that shows that the type of students that you teach can affect job satisfaction of a teacher (Johnson, Berg & Donaldson, 2005). There is also research that has investigated the relationship between years of experience teaching and the stress and job satisfaction that teachers experience (Klassen & Chiu, 2010). Investigating these variables and how they may affect teacher job satisfaction and teacher working conditions is important as they may be factors that impact performance in the class. In light of the research, further investigation is needed to investigate the relationship between these variables and teacher job satisfaction. In addition, this study expands upon the population and sample which was a limitation in Meagher's study.

As part of the greater body of literature, there has been little research to examine the impact that these two new factors have on the relationship between teacher job satisfaction, teacher working conditions and professional development. In examining this relationship, including the new variables, could offer a great deal of insight on how professional development is provided for different types of teachers. Investigating the grade level taught will allow us to examine whether Meager's results are the same when using a broader population than high school math teachers. Teacher grade level, as well as teachers years of experience, may be something that is used in the decision making process of future professional development.

The proposed study is an extension of the research that was done by Meagher. The additional variables and expansion of the sample of teachers connects to the literature and other research that has been done. This study looks to investigate the impact, if any, that professional development in conjunction with grade level taught and years of teachers experience impact job satisfaction and teacher working conditions. This study does not propose to examine the direct relationship between professional development and student achievement but it is important to understand the literature on the subject and how it is used as a context for this study.

The body of literature supports that effective teachers using sound instruction techniques and strategies improves student performance. To have more effective teachers in the classroom, they must be provided sound professional development to change their teaching practices in the classroom. "Professional development plays a key role in addressing the gap between teacher preparation and standards based reform; it is a key focus of U.S. efforts to improve education" (Birman, Desimone, Porter & Garet, 2000, pg. 28). There is a great deal of research that examines what are the characteristics of effective professional development. An analysis of the

literature, done by Birman, identifies six characteristics. The six characteristics are form, duration, participation, content focus, active learning and coherence (Birman, Desimone, Porter & Garet, 2000).

In addition, Guskey notes that “If teachers are to effectively teach all students to high standards, virtually everyone who affects student learning must be virtually learning all the time” (Guskey, 1999, pg. ix). Guskey is critical of the current state of professional development in the United States. He believes that, after reading a great deal of the literature on professional development, that the current practices in professional development do not improve student learning (Guskey, 1999, pg. x). This is why it is so important to examine what we are doing and improve upon it as an educational community.

Education reform is a current priority not only in the state of New Jersey but, at the national level. The national education reform includes teacher evaluation based on student performance, adoption of the national common standards as well the use of research based instructional strategies that show student growth. “The vision of practice that underlies the nation's reform agenda requires most teachers to rethink their own practice, to construct new classroom roles and expectations about student outcomes, and to teach in ways they have never taught before - and probably never experienced as students” (Darling-Hammond & Milbrey, 1995, pg. 1). As the educational landscape changes and expectations of teachers and educational leaders’ changes, it is imperative that professional development be provided in these areas to meet the challenges that are being proposed as part of the national educational reform movement.

The proposed study will provide administrative decision makers with important information to consider when investing into professional development. Multiple data sources are needed to evaluate professional development. District leaders and administrators are trying to improve student performance during a time when financial resources are dwindling. The results from the study can be used as one data point to consider when choosing to use those limited financial resources.

Educational leaders must be mindful of the culture and well-being of an organization. The well-being and health of employees is something that must be taken into an account for educational leaders to be successful. Bolman and Deal identify this area of concern in their book “Reframing Organizations”. They identify different frames that should be considered when managing a successful organization and one is the human resources frame. The human resources frame identifies the interplay between organizations and people. There are many theorists that have examined people and their needs as well as organizational health. It is imperative that leaders invest in their employees. According to Cascio and Boudreau, 2008; Lawler, 196 Lawler and Worley, 2006; Pfeffer, 1994, 1998, 2007; Waterman, 1994 have stressed the importance of having motivated and skilled employees provides organizations with a strategic advantage. Employees who have high job satisfaction and a positive belief about their working conditions will be more motivated to work hard for an organization. Administrators can use information from the study to make decisions about how professional development impacts people’s attitudes towards work.

Connecting professional development to actual student achievement has been extremely difficult for researchers. Guskey (2009) identified that there is an exceptionally modest amount

of research that provides evidence that professional development improves student learning. There are so many variables that make up student achievement and so many definitions of student achievement that it becomes almost impossible to make a direct connection. However, the research has been able to show, that regardless of the definition for student achievement that researchers use, effective teachers impact it directly. The single most important factor in a student's success is the teacher in front of the classroom. Professional development provides educational leaders to build teacher capacity, which in turn will make them better teachers, and ultimately impact student achievement.

The words highly qualified are used well over 80 times in the No Child Left Behind Act. (NCLB 2001). Although, the purpose of this research is not to show a relationship between professional development and student achievement, one can see how the two are intertwined. Instead, the researcher wants to investigate how professional development effects teachers' perceptions of the work that they do each and every day and their satisfaction with their jobs.

Significance of the Study

The overall purpose of the study is to continue the investigation of characteristics of professional development and how those characteristics are associated with job satisfaction and teacher working conditions, when taking into account a teacher's years of experience teaching and which grade level they teach. Effective professional development is not easily understood. In fact there are just as many definitions of effective professional development as there are for student achievement. In an era of dwindling funds, it is imperative to provide professional development that increases teachers' capacity and retains good teachers so that educational institutions do not waste time and resources on teachers that will not be teaching in four years.

The significance of this study is to expand on the current educational literature on the subject of professional development. The results can be used by future professional developers when making decisions about how the choice of professional development could impact the teachers. In addition, this study looks to expand on research previously done by Meagher. This study looks to expand Meagher's research to preschool through grade 12 public educators while taking into consideration the years of experience a teacher has in teaching, as well as teacher assignment. The limitations of the study is that it only uses a small sample and would be difficult to draw strong conclusions about the relationships to all schools in the state of New Jersey. It is also difficult to assume that the teachers who completed the survey are representative of teachers in the state of New Jersey. It would not be feasible for this study to try and survey all teachers in the state of New Jersey.

The following definition of terms, except for grade level taught and teacher's years of experience teaching, were taken directly from Dr. Meagher's study complete in May 2011. The two additional terms were developed specifically for this research study.

Definition of Terms

The term teacher professional development is the mean of the 16 items numbered 1-16 from the online questionnaire that explain the presence of an ongoing program offered to educators to develop new knowledge, skills, approaches and dispositions to improve their effectiveness in their classrooms (Elmore, 1997; Loucks-Horsley et al., 1998).

The term teacher working conditions is the mean of the 24 items numbered 17-40 from the online questionnaire that explain the presence of physical and daily schedule attributes,

school leadership attributes, and professional development opportunities of the teacher's work environment.

The term teacher job satisfaction is the mean of the 16 items numbered 42-57 from the online questionnaire that explain the presence of feelings as a worker in the teacher's current teaching position (Hirsch, Emerick, Church, & Fuller, 2006; Huysman, 2007).

The term enhancement of teacher's knowledge is the mean of the six items numbered 1, 6, 7, 8, 15, and 16 from the online questionnaire that explains the presence of professional development experiences that enhance the teacher's understanding of both the content they teach in the classroom and the ways students learn that content (Guskey, 2003).

The term collaboration is the mean of the four items numbered 2-5 from the online questionnaire that measure the presence of opportunities for teachers to work together, reflect on their practices, exchange ideas, and share strategies and expertise during teacher professional development experiences (Guskey, 2003).

The term time and resources is the mean of the six items numbered 9-14 from the online questionnaire that measure the presence of time during teacher professional development experiences to deepen teachers' understanding of content, analyze students' work and develop new approaches to instruction (Guskey, 2003).

The term time factors is the mean of the three items numbered 17, 18, and 19 from the online questionnaire that explain the presence of impediments on teacher's time to plan and collaborate (Hirsch et al., 2006).

The term facilities and resources is the mean of the five items numbered 20 through 24 from the online questionnaire that explain the presence of important resources such as instructional materials, communications technology, office equipment, and a clean safe work environment (Hirsch et al., 2006).

The term school leadership is the mean of the seven items numbered 25 through 31 from the online questionnaire that measure the presence of leadership conditions that contribute to trusting, supportive, empowering environments and sustained efforts to address teacher concerns (Hirsch et al., 2006).

The term professional development is the mean of the nine items numbered 32-40 from the online questionnaire that measure the extent the resources and opportunities available for teachers to participate in professional development (Hirsch et al., 2006).

The term grade level taught is the teachers self-reported grade level that they taught in the 2012-2013 academic school year. If a teacher taught multiple grades they were identified as a multiple grade level teacher.

The term teacher's years of experience teaching is the teachers self-reported years of experience teaching at the beginning of the 2012-2013 academic school year. Building on the findings of Sanders and Rivers, there is even more of an impact on student achievement and standardized test scores when we begin to look at our historically lowest performing students in the United States. One line of research proposes that assigning great teachers five years in a row to a class of disadvantaged children could close the achievement gap between these students and their privileged peers (Hanushek, Kain, O'Brien, & Rivkin, 2005). As the United States looks to

close the achievement gap, it is impossible to ignore the importance of professional development programs that prepare and provide students with effective teachers.

Limitations of the Study

The study does have limitations that are identified by the researcher. The first limitation is that the sample that was obtained was a convenience sample. A larger sample that was random or that included many school districts was time and cost prohibitive for the scope of this research. A second limitation is that the sample only examined three school districts in two counties in New Jersey. The findings cannot be used to draw direct connections or larger conclusions based upon the sample size. A third limitation is that some of the sample sizes of the data that were broken into quartiles, resulted in small sample sizes and large standard deviations that could suggest variability. One final limitation is that the number of teachers in specific grade levels was limited. The analysis would not be valid if each grade level taught was explored. To complete this type of analysis a larger sample that consisted of more teachers per grade would be needed to have any statistical significance.

Chapter II

REVIEW OF LITERATURE

Introduction

The literature review has been developed to give insight into the relevant literature which exists that relates to this study. A synthesis of the most important components of the literature has been included. It has been structured to give the reader a context to understand the current study being completed. A brief historical perspective on professional development is provided, as well as the current view of effective professional development, in addition to common

characteristics of effective professional development. In addition, a section has been created to provide the reader with the literature that shows teacher working conditions and teacher job satisfaction.

A Brief Historical Perspective of Professional Development

Historically, providing teachers with the skills that they need to teach children has not always been a priority. Teacher preparation and professional development has been shaped over the history of public education in the United States by different reform movements and in response to world events. National, state and local policymakers have molded professional development and teacher preparation over the past century.

In the 18th century, most education was set up to address specific trades that children would adopt as professions. Villages and small towns came together to establish small one room school houses. The school would only be open a short period during the year. Classes were often taught by unmarried women from the town that had little education themselves and taught students very rudimentary information and skills. In an effort to provide training for teachers working with students in the early 1800's, there was the creation of "normal schools". Students attending normal schools had completed their education at a common school. Common schools were funded by local property taxes, were available to all white children, and were run by local school committees that were subject to very little state regulation. The students attending normal schools ranged in age from fourteen to seventeen years old (Angus, 2001; Richey 1957). Normal schools were essentially teacher training schools.

In the 19th century, these "normal schools" developed into teacher colleges at the university level. It should be noted that students that attended the teacher colleges varied

significantly on previous educational experiences. Most public school educators, during the early part of the 19th century, did not complete a high school education. Students went directly from common schools directly into normal schools (Tyack, 1967). The curriculum in the teachers college provided instruction in “general education, professional study, specialization in subject areas, and extended practice in teaching” (Richey, 1957, pg. 43). In the western part of the country students attending these programs had completed secondary school and in the eastern part of the country students did not (Angus, 2001; Valentine, 1946). These schools were in place of common schools and were specifically designed to prepare students for the vocation of teaching (O’Connor, 1995; Tyack, 1967).

In addition to teachers colleges, teacher institutes were developed to provide teachers instruction in specific basic areas. At the end of the 19th century and in the beginning of the 20th century, teacher institutes were held across the United States (O’Connor, 1995; Tyack, 1967). These institutes were often taught by veteran teachers and were provided to supplement what was missed in the instruction teachers were given in the teachers colleges (Richey, 1957; Tyack, 1967). The first teachers who attended teacher’s institutes at the turn of the century had a secondary education. Most of the teachers at this time were trained in the normal schools, which were considered second-rate as compared to the secondary schools at the turn of the 19th century (Meagher, 2011). In the early 1900’s most states had required public school teachers to have a minimum of a high school diploma (Richey, 1957). As the educational landscape changed and teacher colleges prepared teachers more comprehensively, the institutes no longer provided useful knowledge that teachers had not received in their teacher preparation programs (Meagher, 2011). Professional development adapted with the different views of education in the United

States. One of the most significant views of education that developed was the progressive view of education.

Fast-forward to the late 1800's or early 1900's; the progressive movement led by John Dewey, and others, shifted the focus on what and how we should be teaching students. The progressive movement embraced the individuality and strengths of each individual student and their collection of experiences, and that it was imperative to develop students that thought critically and were socially conscious so that they could participate in the developing society. "To Dewey, by virtue of educating the rising generation, the school is serving to develop the potentials of future society" (Tanner & Tanner, 2007, pg. 107). Students were no longer to be passive learners or receptacles for knowledge, but instead instruction was to be child centered that engaged the student in active learning (Schugurensky & Aguirre, 2005). The progressive movement looked to level the playing field by educating all children, not just the rich, with a basic education and not geared towards vocational experiences. Dewey recognized that to meet this new vision of education would require significant training for teachers. Universities began developing programs to develop teachers to meet this new societal shift in education.

After World War II, and during the Cold War, educational priorities shifted in response to internal and external forces. "In the 1950s, fear of rising Communist powers world-wide, combined with the brewing civil rights movement and slowly shifting social values, not only brought public questioning regarding the roles and responsibilities of public education, but it also resulted in increased federal oversight and influence in the daily lives of all Americans" (Anderson Steeves, Evan Bernhardt, Burns & Lombard, 2009, pg. 72). In response to the launching of Sputnik by the USSR, the federal government urged states to adopt curriculum that

focused on science and mathematics. The focus had become to develop technical teachers to educate the future generation of students in hard science and complex mathematics.

Most states required standards of teacher preparedness to meet this need outlined by the federal government. Universities offered various models of teacher training that consisted of formal classes on teaching, and most states adopted continued training requirements during the first years of a teacher's career, and professional development throughout the teacher's career in the form of in-service trainings.

The next major evolution in education will probably be remembered historically as the age of "No Child Left Behind". In August of 1981, the National Commission on Excellence in Education was chartered under the authority of 20 U.S.C. 1233a to, among other purposes and functions, "review and synthesize the data and scholarly literature on the quality of learning and teaching in the nation's schools, colleges, and universities, both public and private, with special concern for the educational experience of teen-age youth" (Gouwens, 2009, pg. 123). In response to this charge, the National Commission on Excellence in Education in 1983 developed a report entitled "A Nation at Risk".

The report stated that "what is at risk is the promise first made on this continent: All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost. This promise means that all children by virtue of their own efforts, competently guided, can hope to attain the mature and informed judgment needed to secure gainful employment, and to manage their own lives, thereby serving not only their own interests but also the progress of society itself" (U.S. Dept. of Ed., 1983b, pg. 115). In 2001, the No Child Left Behind Act was passed into legislation. The No

Child Left Behind Act represented a focus on accountability of states, local school districts, and teachers to ensure all students were provided a high quality education. Part of the No Child Left Behind Act specifically addressed teacher preparedness.

Teachers and educational professionals were expected to be “highly qualified” in the areas that they were teaching. The United States Department of Education informed states that to be deemed highly qualified, teachers must have a bachelor's degree, full state certification or licensure, and prove that they know each subject they teach. Individual states were left to develop systems to determine how teachers would meet the “highly qualified” criteria. Recent developments in education policy and practice, such as the No Child Left Behind Act and high-stakes testing, increase expectations on educators to improve student learning (Kedzior & Fifield, 2004). There is a great emphasis put on outcomes for students. There are a number of research studies that specifically look at the impact of the expertise of a teacher impacting student learning. “Research shows that teacher expertise can account for about 40 percent of the variance in students’ learning in reading and mathematics achievement - more than any other single factor, including student background...” (Rhoton & Stile, 2002, p. 1).

The No Child Left Behind Act has currently not been reauthorized by Congress which expired in 2007. The United States Department of Education believes there are major revisions that need to be made to improve the education of students in the United States. In fact, the federal government has been allowing states to receive waivers from following the No Child Left Behind Act. The 26 states that have received permission to be excluded from the No Child Left Behind Act include Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New Mexico,

New York, North Carolina, Ohio, Oklahoma, Rhode Island, South Dakota, Tennessee, Utah, Virginia, Washington and Wisconsin. However, most states needed to prove to the United States Department of Education that they were creating a more significant accountability system than what No Child Left Behind required.

Teacher professional development and preparedness are currently a major topic of decision makers at the local level of education. The failing economy has created a significant demand on resources. Developers of professional development are looking more and more at what is best practice, as well as financially practical. There has been a surge in using in-house expertise to develop staff because there are little to no funds available to bring experts from outside of an educational community to provide professional development to teaching staff.

Effective Professional Development and Current Trends

Effective professional development is three words that have been extremely difficult to define. Most educational professionals would agree that effective professional development should be measured by the gains that students make in regards to achievement. “A research synthesis confirms the difficulty of translating professional development into student achievement gains despite the intuitive and logical connection” (Guskey & Yoon, 2009, pg. 495). A research study that was conducted by the American Institutes for Research analyzed over 1300 studies that were related to learning outcomes for students and professional development. Not only was the information deemed from this review meaningful, but even more so, what was not found was significant. “ One of the most discouraging findings in the project was the discovery that only nine of the 1343 studies met the standards of credible evidence set by the What Works Clearinghouse, the arm of the United States Department of Education” (Guskey

& Yoon, 2009, pg. 496). The further review of these studies attempted to find common themes even though they represented an extremely small pool of research.

Out of the nine studies that were reviewed, the ones that could show a positive relationship between the professional development and student outcomes had professional development that followed a workshop model or a summer institute model. Most practicing developers of professional development opportunities for teachers have viewed both of these models as ineffective models of professional development even though there is no research to support it as ineffective. In fact, this review would state the opposite, although there is not enough research to support this model either. Another misnomer is that professional development that is school based yields better results than having outside experts provide training for staff. In a current analysis of available research, “the professional development efforts that brought improvements in student learning focused principally on ideas gained through the involvement of outside experts” (Guskey & Yoon, 2009, pg. 496). It is clear though, in evaluating the lack of current literature and research that focuses on professional development and student achievement, that there is just not enough evidence based research that can clearly state that one type of professional development is more effective than another.

In addition, another characteristic that was found to be consistent in all of the professional development opportunities that showed improved student achievement was time provided for professional development. The research is clear though that increased time alone is not sufficient. The time must be organized well and the time must be spent on meaningful activities. “It is clear that effective professional development requires considerable time, and that time must be well organized, carefully structured, purposefully directed, and focused on

content or pedagogy or both” (Guskey, 2009, pg. 497, Birman et al. 2000; Garret et al. 2001; Guskey 1999).

It is clear though that there is just not enough scientifically based research that can connect professional development to student achievement. Student achievement within itself is defined differently in most studies and is extremely difficult to determine cause and effect relationships with educational practices because there are so many factors that impact student achievement. There needs to be far more intense research that examines these relationships in a rigorous manner to assist developers of professional development for educators in the future. Much of the research conducted on professional development continues to be descriptive rather than quantitative (Sawchuk, Nov. 10, 2010). Over twenty billion dollars annually is expended towards professional development of teachers (NCES 2008). It is imperative that more research is conducted to ensure that these resources are being allocated to meaningful programs that make teachers better and ultimately raise student achievement.

Until very recently, the focus of professional development for teachers has leaned towards preparing teachers before they taught. Jennifer King Rice, a professor of education policy at the University of Maryland College Park stated, “We’ve recognized professional development as important, but we don’t have very clear standards for what we’re looking for and we don’t have much accountability for what teachers engage in” (Sawchuk, 2010). Professional development has been seen as in-service days. The in-service model is when districts have provided teachers one or sometimes two days of training on a topic. The in-service model is disjointed and usually lacks any follow up to see if what teachers are taught is implemented in the classroom. The Federal No Child Left Behind Act of 2001, for instance, defines all professional

development funded through the law to include activities that are not one-day or short-term workshops or conferences. Unfortunately, there is little evidence to suggest that states and districts adhere to this directive. “Survey data from the National Center for Education Statistics, the most recent publicly available, shows that in the 1999-2000 school year, 95 percent of teachers took part in workshops or training in the previous 12 months, compared with 74 percent who reported working in an instructional group and 42 percent who participated in peer observation” (Teacher professional development, 2006, pg. 47).

A three part study by the Stanford Center for Opportunity Policy in Education in partnership with the National Staff Development Council provided a great deal of descriptive information about professional development for teachers internationally and in the United States. One of the findings was: “Teachers in four states—Colorado, Missouri, New Jersey, and Vermont—reported above-average participation in professional development”. Although the quality of the professional development was never examined, just that they participated in professional development. The most current model of professional development is ongoing instead of a workshop model. The new model envisions that professional development should be sustained, coherent, take place during the school day and become part of a teacher’s professional responsibilities, and focus on student results (Wei, et al, 2009). Many public educational institutions have adopted the concept of providing professional development in professional learning communities.

A professional learning community defined by Richard Dufour, “ is an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve” (Dufour, Dufour, Eaker & Many,

2006, pg. 11). Although many educators are using professional learning communities as a model of professional development, there is little research in the field to show a positive relationship between any model of professional development and student achievement.

Professional Development and Student Achievement

The relationship between professional development and student achievement is not easily defined. Most of the literature used different definitions of student achievement. Some of the research and studies utilize standardized test scores, statewide assessments, and student grades. In addition often there were specific types of professional development (i.e. online professional development, Professional learning communities, whole school reform) that were being examined in relationship to student achievement. There are many authors and professionals that believe that there professional development improve student achievement. In addition there are other researchers that have found that there is no true evidence that shows that professional development impacts student achievement.

The national center for educational statistics (1994) identified increases in student achievement when teachers are fully certified, have a master's degree and participate in professional development. Darling (2000) made an association that teachers that have more professional development training were more likely to use teaching practices in the classroom that were connected to higher reading achievement. Schmoker (2002) advanced that professional development focused on effective teaching practice provided impressive gains in student achievement. Schmoker beliefs were built on a 1997 U.S Department of Education Study which found that effective teaching accounted for as much as a 16-point difference in reading and math scores (Jordan, Mendroe, and Weerasinghe 1997). Banchemo (2006) reported a comprehensive

study showed that poorly qualified teachers negatively impact student achievement and that teachers ranked as high quality teachers increase student achievement. A great deal of the research connects the quality of the teacher in impacting student's achievement but not a direct relationship between professional development and student achievement.

Researchers that question the connection between professional development and improved student achievement have found that there is a lack of empirical research to substantiate the relationship. The connection between students achieving at high levels because their teachers have learned better ways to teach has been found to be flawed in some research due to the methods of most studies (Yoon, Duncan, Lee, Scarless, & Shapely, 2007). The most comprehensive evaluation on the body of research on student achievement and professional development was examined by Thomas Guskey and Kwang Suk Yoon in 2009. "Scholars from the American Institutes for Research analyzed findings from over 1,300 studies that potentially address the effect of professional development on student learning outcomes" (Guskey & Yoon, 2009, pg. 495). "One of the most discouraging findings in the project was the discovery that only nine of the original 1,343 studies met the standards of credible evidence set by the What Works Clearinghouse, the arm of the U.S. Department of Education that is charged with providing educators, policy makers, researchers and the public with scientific evidence about what works in education" (Guskey & Yoon, 2009, pg. 496). In addition, the nine studies that met the criteria focused on elementary schools only. "Obviously, these findings paint a dismal picture of our knowledge about the relationship between professional development and improvements in student learning" (Guskey & Yoon, 2009, pg. 497).

Since this analysis there has been very little research that would meet the standards that were applied by the analysis completed by the Scholars from the American Institutes for Research. There is clearly a gap in the literature on this topic “The amount of valid and scientifically defensible evidence we currently have on the relationship between professional development and improvements in student learning is exceptionally modest” (Guskey & Yoon, 2009, pg. 499). “Finally, researchers as well as practitioners must pursue greater rigor in the study of professional development. If public schools are spending about \$20 billion annually on professional development activities, then it merits serious study” (NCES 2008).

Characteristics of Professional Development

Based upon the review of the literature done by Dr. Thomas Meagher in his dissertation that this study attempts to replicate, there are common characteristics among different professional development programs. In analyzing multiple lists, Dr. Meagher was able to identify the most common characteristics in the lists to assist in the development of the instrument used to survey teachers about professional development. The literature review that was completed by Dr. Meagher was extensive and looked at all of the relevant research in this area. After reviewing other relative research since the publication of Dr. Meagher’s study in March 2011, there have been no significant additions to the research body in regards to lists of characteristics.

The examination of lists of characteristics of professional development included, but was not limited to, Darling-Hammond and McLaughlin (1995), Loucks-Horsley et al (1998), Sparks and Hirsch (200), Little (1993) and Elmore (1997). In addition to these researchers lists, government sponsored list were also examined to develop a common list. Some of the

researchers had compiled commonalities between other lists to create their own lists. These are considered second generation lists. Many of the lists that were examined were found in an article entitled *Analyzing Lists of Characteristics of Effective Professional Development to Promote Visionary Leadership* that was written by Guskey in 2003. The analysis identified 21 common categories that these characteristics fit into. Including with these lists, Dr. Meagher added 10 more lists in conjunction with the lists that Guskey analyzed. After an extensive literature review, Guskey has written the most recent literature on effective professional development in education.

After an extensive analysis of all the lists Dr. Meagher examined, three of the most common characteristics in all the lists were identified. The three characteristics were 1) enhance teacher's content and pedagogic knowledge, 2) provide sufficient time and resources, and 3) promote collegiality and collaboration. Using these three [characteristics] to guide the study that was completed allowed additional analysis of how each of these factors was related to job satisfaction and teacher working conditions. In Dr. Meagher's study he found that all three of these components of effective professional development had moderate positive relationships to job satisfaction and teacher working conditions.

A further review of the literature found no additional studies that looked at this specific relationship. Since Dr. Meagher's study there has been no study that had looked at the relationship of any of the other characteristics identified in the lists and teacher job satisfaction and teacher working conditions. It is important to note this is one of the reasons that the same characteristics were chosen for this study, as well as the reason why the same instrument is being

utilized to investigate the relationships between professional development, teacher working conditions and teacher job satisfaction.

Working Conditions for Teachers

Teacher working conditions are a significant factor in teacher effectiveness, teacher retention, and have even been connected to student achievement (Buckley, Schneider, & Shang; Elfers, Plecki, & Knapp, 2006; Ladd 2009). Meagher in 2011, completed an extensive review of literature related to working conditions. During that review, Meagher found three studies that had definitions of working conditions in addition to the significant factors that impact a teacher's working conditions.

Johnson, Berg, and Donaldson in 2005 completed a comprehensive literature review to examine teacher retention. Most significantly it examined working conditions and the relationship to teacher retention. "Research has shown that the conditions of teacher work affect their ability to teach well and the satisfaction that they derive from their work" (Johnson, Berg, & Donaldson, 2005, pg. 50). They found three factors that affected a teacher's working conditions: physical elements of the school (the space they work in), the type of class they were assigned to teach, including the types of student's they would teach, and the curriculum, assessment and teacher's accountability to the assessments (Meagher, 2011).

The second was done in 2006 by Elfers, Plecki, and Knapp. The study was done in the state of Washington, and they used a survey to investigate the relationship between school factors and teacher retention. Teachers in all grade levels in twenty Washington school districts participated in the study. There were three significant findings that resulted from this study. The first was that "a third of the teachers indicated that as a school failed to provide sufficient time

for professional development, teachers formed moderate to strong reasons to leave their current teaching positions” (Meagher, 2011, pg. 92). The second was the strength of the school leadership affected the teachers working conditions which ultimately impacted the teachers’ decision on whether or not to stay in their current position. The third factor that impacted teacher retention was the proportion of students that were receiving free and reduced lunch that the teacher taught effected the teacher’s job satisfaction. The research in this study shows the relationship between the factors that were chosen to examine as part of a teachers working conditions.

In 2009 Ladd, surveyed over 2500 schools in North Carolina to examine how teacher working conditions impacted a teacher’s effectiveness in the classroom. There were some significant findings that were found in the study. A teachers working condition is a strong predictor of a teachers decision to continue working at the same school. Second, a high teacher turnover rate impacts negatively the instruction that students receive in the classroom. Third, which confirms findings from previous studies, is that a schools leadership was a strong factor that impacted a teachers working condition. The most interesting finding was that there was a statistically significant relationship between a teacher’s working conditions and student achievement (Meagher, 2011). In reviewing the literature, teacher working conditions studies and research is often connected to teacher retention. Most of the studies were done by giving surveys to teachers while trying to link the results to student achievement or teacher retention. Meagher identified three studies in particular that provided definitions and lists of factors that impact teacher working conditions.

Other researchers have also looked into the factors that make up a teacher's working conditions in an effort to gather a stronger understanding on what impacts teacher retention. In 2001, Ingersoll examined teacher turnover and teacher shortages at the national level. Ingersoll used information from the National Center for Educational Statistics School and Staff Survey to gather information about the institutions and a teacher follow up survey to examine the relationship between specific factors and teacher retention. Ingersoll found that there was not a teacher shortage but instead that qualified teachers were leaving the teaching profession. Ingersoll identified organizational conditions that that were related to retaining teachers and ultimately are related to the factors of a teacher's working conditions. "The four conditions include: a compensation structure for teachers, level of administration support, degree of conflict and strife within the school, and the degree of teacher input into school policy (Meagher, 2011, pg. 95).

Buckley, Schneider and Shang (2005) surveyed teachers in Washington D.C. in an effort to investigate the relationship between the quality of a schools facility and teacher decisions to return to their current teaching position. Two factors that had a significant impact on whether a teacher would return the next school year were the conditions of the facility and the teachers' dissatisfaction with their pay.

It was clear in this comprehensive review that teacher working conditions was a major factor that determined teacher retention rates. In addition, factors were identified that significantly impacted teacher working conditions. In Meagher's study and in this study the three that were identified to be the most significant factors were used to further analyze the variable of teacher working conditions.

The three that were chosen for both studies as described by Meagher are as follows:

- 1) The physical elements of the school that describe the condition of the school and the space in which the teacher works.
- 2) The teachers assignments which describe the type of classes the teacher was scheduled to teach and the type of students that were in the classroom.
- 3) The curriculum, assessment, and teacher's accountability to the assessments.

The literature supports that the more schools are able to retain good quality teachers the better the performance of students. As a result of this retention, the researcher was able to state that teacher working conditions can be connected to the quality of the education programs offered by schools.

Teacher Job Satisfaction

It is necessary to provide relevant research on teacher job satisfaction because it is one of the variables identified in this study. The definition that is used for this study is the same that Meagher used in his study completed in 2011. A review of the literature on this topic, since Meagher's study, yielded very little new literature.

Most of the literature that was reviewed followed two theoretical frameworks. The first framework is Maslow's Hierarchy of Needs. Maslow's Hierarchy of Needs was developed by Abraham Maslow in 1954. It has been used in many studies that have revolved around motivation and job satisfaction. Although Maslow's theory is often questioned by researchers, it is still used today. Maslow's theory stated that people's basic need for physical well-being and safety needs to be satisfied first. Once lower needs are met, people begin to move up the pyramid motivated by social belonging. Eventually people reach self-actualization at the top of the pyramid (Bolman & Deal, 2008, pg. 124).

The second theoretical framework found in the literature was Herzberg's Two-Factor Motivational Theory. The theory was developed by Frederick Herzberg, a psychologist, who theorized that job satisfaction and job dissatisfaction act separate from each other. According to Herzberg, people are not fulfilled with the satisfaction of lower order needs at work. Lower order needs are items such as minimum salary levels or safe and pleasant working conditions. Instead people look for the gratification of higher-level psychological needs such as achievement, recognition, responsibility, advancement, and the nature of the work performed. Herzberg's theory did not identify job satisfaction on a continuum; instead he viewed the two as separate conditions that worked independently of each other. Herzberg's theory has also been scrutinized by other researchers but it still remains as one of the most used theoretical frameworks when people examine job satisfaction or dissatisfaction.

One study found in the literature was completed by Huysman in 2007. Huysman identified factors that affected teacher job satisfaction. The study used a survey called the Minnesota Satisfaction Survey in addition to focus groups and interviews. Factors were separated into three categories, intrinsic, extrinsic, and combined. The findings were that extrinsic factors, such as job security, social service, and activity, only moderately impacted job satisfaction. Intrinsic factors showed a strong impact on job dissatisfaction. These factors included, company policies recognition, possibility for growth compensation and relationships with colleagues. Huysman's findings were in line with Herzberg's theory.

In 2007, Oliver did a study that examined the relationship between working on a team with other teachers and job satisfaction. Oliver used questionnaires to examine both job satisfaction and characteristics of effective teams. The findings showed that external support and recognition both were the best predictors of intrinsic and extrinsic job satisfaction. This study allows the researcher to draw connections between professional development opportunities for teachers and how they impact job satisfaction.

Also in 2007, a study was completed by Turner that looked at the relationship between features of school organizations and teacher job satisfaction. Turner used the North Carolina Teacher Working Condition Survey to examine this relationship. There were significant relationships between job satisfaction and the percent of economically disadvantaged students being taught and academic achievement measures in mathematics and reading (Turner, 2007). Due to the nature of this study, it is imperative to examine other research that shows an impact on teacher's job satisfaction. It is also one of the reasons that The North Carolina Teacher Working Conditions survey was chosen to examine the relationship outlined in two of the research questions that are guiding this investigation.

Chapter III

METHODOLOGY

Introduction

This chapter provides an overview of the research design, the participants, the process used to collect the data, and the overall methodology for this study. This chapter will also define the sample, the instrument being used to collect the data, how the data was collected, how the data was analyzed, and the research questions guiding the study.

The purpose of the study was to investigate the relationship between teacher perceptions of the following: teacher professional development in relation to teacher job satisfaction and teacher working conditions while controlling for years of experience of a teacher and the grade level that the teacher is currently teaching. There are four research questions that have been created to guide the study. The research design that was chosen is a non-experimental quantitative study using a survey to gather responses from teachers.

Research Design

“Research design is considered as a "blueprint" for research, dealing with at least four problems: which questions to study, which data are relevant, what data to collect, and how to analyze the results” (Philliber, Schwab & Sloss, 1980, pg. 134). One reason that a non-experimental research design was chosen was that the study did not call for any treatment that was being done to change the experiences or circumstances of the participants. Another reason this type of design was chosen is because the questions were structured in a way to have a correlation study. Correlation studies can be used in experimental designs but are also completed

when researchers are looking to gauge the strength of relationships between one or more variables. The goal of this study is not to draw a relationship of causation, but instead to examine the relationship between variables. The researcher is not trying to draw the conclusion that professional development causes high job satisfaction or positive working conditions for teachers, but instead the researcher is looking to examine the relationship between these variables. Correlation designs are helpful in identifying the relationships of one or more variables which is why this type of design was chosen. The overall purpose of the study is to continue the investigation of characteristics of effective professional development and how those characteristics are associated with job satisfaction and teacher working conditions when taking into account a teacher's years of experience teaching and which grade level they teach. There are four research questions that are investigated through this study:

- 1) To what extent is there a relationship between teacher's satisfaction with their professional development experiences and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education?
- 2) To what extent is there a relationship between teacher's satisfaction with their professional development experiences and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education?
- 3) Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher's Knowledge, which has the strongest relationship with teacher job satisfaction?

- 4) Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and satisfaction with Professional Development, which has the strongest relationship with teacher professional development?

The Population

The Spotswood School district is located in Middlesex County, New Jersey. The Spotswood school district in 2011 had 1873 students. The school district has a district factor grouping (DFG) classification of DE. “District Factor Groups (DFGs) were first developed in 1975 for the purpose of comparing students’ performance on statewide assessments across demographically similar school districts. Although DFG was developed to compare statewide assessments, it has been used in other ways not limited to but including state funding. “The DFGs represent an approximate measure of a community’s relative socioeconomic status (SES). The classification system provides a useful tool for examining student achievement and comparing similarly-situated school districts in other analyses” (NJDOE, Executive Summary, pg. 1). There are 200 certified teachers that work in the Spotswood School District, in teaching positions ranging from preschool through twelfth grade. The survey was distributed to all of the teachers at faculty meetings of each building. The researcher works as a Director of Special Education for the district so the survey was given to teachers by someone other than the researcher to avoid any coercion. Sixty three (63) surveys were returned completed. The faculty mobility rate in the 2011 academic school year was 1.3% as compared to the state average of 5%. Faculty mobility rate is defined by the New Jersey Department of Education as “the rate at which faculty members come and go during the school year”. It is calculated by using the

number of faculty who entered or left employment in the school after October 15 divided by the total number of faculty reported as of that same date” (“New Jersey School,” 2011, pg. 1).

The Milltown School District is also located in Middlesex County in New Jersey. This district is a preschool through eighth grade school district. Milltown has a send/receive relationship with the Spotswood School District and sends their students to Spotswood High School. The Milltown School District has a district factor group (DFG) classification of FG. In 2011 Milltown had 690 students. There are 64 certificated teachers ranging from preschool through eighth grade. Forty two (42) were returned completed. The faculty mobility rate in the 2011 academic school year was 7.2%.

The Pequannock Township School District is located in Morris County in New Jersey. This district is a preschool through twelfth grade school district. Pequannock has a district factor group (DFG) classification of GH. The Pequannock Township School District in 2011 had 2280 students. There were 220 certificated teachers ranging from preschool through twelfth. Twenty (20) surveys were returned completed. The faculty mobility rate in the 2011 academic school year was 4.1%.

The Sample

A convenience sample was drawn from three public school districts from two counties in New Jersey. A convenience sample is a statistical method of drawing representative data by selecting people because of the ease of their volunteering or selecting units because of their availability or easy access. In an effort to access the teachers, a letter of solicitation will be sent to the three chief school administrators for each school district. All teachers in all of the districts will be asked to fill out the survey. The researcher believes that a return rate of 15 percent will

provide over 100 completed survey responses. The researcher received permission from each of the district superintendents to contact all of their teaching staff. Every teacher will have an opportunity to take part in the study. All of the teachers who agree to complete the survey will be included in the analysis of the data. There are many advantages and disadvantages to using this type of sample. One advantage is that using a convenience sample allowed the researcher to expedite the distribution of the surveys, as well as the collection and analysis of the data. In addition, for the scope of this study, to try and obtain a representative sample of public schools in the state of New Jersey would have been beyond the scope of this research and extremely costly. There are also disadvantages to using this type of sample that the reader should be aware of when reviewing this study.

Convenience sampling does not allow the researcher to produce representative results of a whole population. The sample is chosen because of the access that the researcher has to the participants and because of this there are segments of the population that are not represented in the data collection or the results from the analysis of this data. In addition, when using a convenience sample researchers cannot make broad statements of cause and effect or relationships. A convenience sample minimizes the ability to generalize findings to a population. A third drawback is that when using convenience samples, it is extremely hard for other researchers to replicate the study.

The Participants

The sample was made up of public school teachers from preschool to twelfth grade in three school districts in two counties in New Jersey. The following is characteristics of each

school district. All of the statistics used to describe the school districts were acquired from the New Jersey Department of Education report card.

The Instrument

The instrument in this study contains 68 items that have been combined from three sources. Two items were specifically created for this study. These two items measure the two variables. The first variable is grade level taught and the second variable is teacher years of experience teaching. There is a question that the teacher will identify the grade they teach and there will be a question that requests years of experience teaching to be answered. The first variable grade level taught will be one question that the teacher will identify the current grade they are teaching. The second variable will be measured with one question that provides bands of years of experience. For example, in response to how many years have you been teaching the responses will be 1 year, 2 to 5 years, 6-10 years, 10 to 15, 15 to 20, over 20 years teaching. The remaining 66 items were gathered from various versions of the Teacher Working Conditions survey created by the New Teacher Center and Dr. Thomas Meagher for a dissertation completed in 2011 entitled “An Investigation of the Relationship of Teacher Professional Development, Teacher Job Satisfaction, and Teacher Working Conditions” (Meagher, 2011). Sixteen items in the survey were created by Dr. Meagher in his study in 2011, to measure the three categories of characteristics of professional development. The characteristics were chosen based upon an analysis completed by Guskey in 2003 on lists of effective professional development characteristics.

“The analysis discovered that the three most frequently mentioned categories of characteristics of effective professional development in the 23 lists were that professional development experiences: (1) Enhancement of teachers’ content and pedagogical knowledge, (2) Provide sufficient time and other resources, and (3) Promote collegiality and collaboration” (Meagher, 2011, pg. 126). The sixteen items that were developed were completed after an extensive review of the existing research on characteristics of professional development. “There is no universal list of characteristics of effective professional development for teachers” (Meagher, 2011, pg. 127). Meagher analyzed over 23 lists from various authors and organizations.

Most of the items were created by the North Carolina Professional teaching Standards Commission in conjunction with the University of California Santa Cruz and The New Teacher Center (Hirsch et al., 2008; Sioberg & Hirsch, 2006). An initiative was developed in response to the large number of teachers that were leaving the teaching profession in North Carolina. In response to this concern, the North Carolina Working Conditions Survey was developed. In 2007-2008 over 215,000 teachers responded to the survey in eleven states (Hirsch et al., 2008; Sioberg & Hirsch, 2006). “The original five core areas of teacher working conditions that they surveyed measured were (1) Time Factors, (2) Facilities and Resources, (3) Empowerment, (4) School Leadership, and (5) Professional Development. More recent versions of the survey have retained time factors, facilities and resources, school leadership and professional development” (Meagher, 2011, pg. 128). The survey also contains questions that gauge a teachers overall job satisfaction. The instrument was paired down to meet the needs of this research (Hirsch et al., 2008; Sioberg & Hirsch, 2006; Teaching and Learning Conditions, 2004). There are many items

on the survey that gauge other factors that are not the focus of this study and therefore were excluded. The survey was broken up into four sections that are described in Table 1. The first section consists of 16 items that pertain to teacher professional development. The second section contains 24 items that measure the variable of teacher working conditions. The third section contains 20 items that provided a measure of the teacher's job satisfaction. The fourth section of the questionnaire contains demographic items and items that identify the two controlling variables. There is one item that identifies the grade level taught. There are also three items that measure the years of experience a teacher has in teaching. One item measures the number of years in the current district. One item measures the number of years the teacher has in their current building. One item measures the number of total years teaching.

Table 1

Breakdown of Survey Items for Major Variables

Sections	Variables	Features of Variables	Items
Section 1	Teacher Professional Development	Collaboration Resources Enhancing Knowledge	Items 1-16 4 items 6 items 6 items
Section 2	Teacher Working Conditions	Time Facilities and Resources School Leadership Professional Development	Items 17-40 3 items 5 items 7 items 9 items
Section 3	Teacher Job Satisfaction		Items 41-60
Section 4	Demographic	Grade Level Taught Years of Experience Teaching	Items 61-68 1 item 3 items

Data Collection

This section will outline the process that will be completed to collect the necessary data for analysis to answer the four research questions that are guiding this study. The researcher began by seeking permission from each chief school administrator of the three districts to contact teachers. A letter was sent to each administrator including a copy of the survey for their review. The researcher followed up with each chief school administrator with a phone call to answer any questions they might have about the survey or the study. After the follow-up phone call the researcher received permission from three districts to contact teachers.

Two districts, Milltown and Pequannock, completed the survey by hand. The researcher will attend faculty meetings in each of the buildings in each district. The researcher gave a brief explanation of the study and the survey. After the explanation, copies of the survey were left for teachers who wanted to participate to complete. Completed surveys were put in a manila envelope. Later that day, at the conclusion of the faculty meetings the researcher returned to collect the completed surveys the same day.

The researcher works as a Director in the Spotswood School District. To avoid any coercion to complete the survey, the researcher asked another educator from a neighboring district to attend faculty meetings and follow the same procedure that was completed in the other two districts. At the conclusion of the faculty meetings the researcher was given all of the completed surveys by the other educator in the manila envelopes to ensure anonymity.

Data Analysis

This section will describe how the data that was collected was analyzed. In an effort to answer the research questions, descriptive statistics were collected on the major variables of the study.

The initial analysis of the descriptive statistics indicated that there were extreme degrees of skewness and kurtosis. Scores were transformed into rank scores and subsequent analysis was completed on the rank-transformed data. When data are transformed to their ranks, the resulting Pearson product-moment correlation coefficients are identical to Spearman rank-order correlation coefficients. In addition, alpha was calculated for all of the dependent and predictor variables because validity is influenced by the reliability of both predictors and criteria. Alpha was also calculated for each of the components that made up teacher professional development and teacher working conditions.

To answer the first research question, the Teacher Development measure was partitioned into quartiles. "Grade Levels Taught" was recoded into two groups (Primary & Middle School, and High School). The Primary and Middle School consisted of participants that taught preschool through grade eight. High School consisted of participants that taught grades nine through twelve. Examining the data in this fashion, allowed the researcher to complete an analysis of variance on the transformed data. The one-way analysis of variance (ANOVA) is used to determine if there are any significant differences between the means of two or more groups. As mentioned previously, the rank-transformed measure of Teacher Job Satisfaction was the dependent variables.

To answer the second research question, Professional Development ratings were partitioned by quartiles and there were two levels of Grade Taught. Years of Teaching

Experiences was transformed to ranks. For this question, the dependent variable was the rank-transformed measure of Teacher Working Conditions.

In an effort to further analyze some of the results of this analysis a post-hoc Sidak test of mean differences was completed. The post-hoc Sidak test allowed the researcher to identify which pairs of quartiles of professional development are significant.

To answer the third research question, spearman rank-order correlation coefficients were calculated between teacher job satisfaction with the components of professional development.

To answer the fourth research question a Pearson Correlation Coefficient was calculated between the four components of working conditions and teacher professional development.

Human Subjects' Protection

The researcher completed the process of ensuring the participants safety and protection by submitting the research proposed to the Institutional Review Board at Seton Hall University. The institutional review board was provided information on the participants of the study, confidentiality and anonymity, security of data collected, and the survey instrument that is being proposed. In addition to having the research proposal evaluated by the Institutional Review Board, the researcher has completed an online course on protecting human research participants offered by the National Institutes on Health, Office of Extramural Research. Components of the course were a history of human rights protections in research, codes and regulations, respect of persons, beneficence, and Justice.

Chapter IV

ANALYSIS AND PRESENTATION OF DATA

Introduction

The purpose of the study was to investigate the relationship of teacher professional development in relation to teacher job satisfaction and teacher working conditions while controlling for years of teaching experience and the teachers' grade level. The study was a quantitative study that employed data from a 68-question survey containing Likert and multiple-choice items. The responses to the survey were tabulated and were used to examine how the independent variable, professional development, was related to the dependent variables of teacher working conditions and teacher job satisfaction. In addition, the data were analyzed to examine how teacher's years of experience and grade level taught contributed to the variance in teacher job satisfaction and teacher working conditions. Finally, expanding on the research done by Meagher (2011), the researcher examined relationships between each characteristic of professional development to teacher's job satisfaction and four factors of teacher working conditions. The results of the four research questions that guided this study will be presented in this chapter.

Exploratory Statistics

Prior to the analysis related to the research questions, some exploratory statistics and preliminary data analysis were performed. Table 2 presents the means, standard deviations, measures of skewness and sample sizes of all the major variables in the study. As can be seen in the first column of Table 2, the sample (N) for all items was 127 which is the number of

participants in the study. The second column means is “the balance point for the sample, found by dividing the total value of all scores in the sample by the number of scores” (Witte & Witte, 2010, p.548). The third column represents the standard deviation which is “a measure of dispersion in a frequency distribution, equal to the square root of the mean of the squares of the deviations from the arithmetic mean of the distribution” (dictionary.com, 2014). The fourth column represents the measure of skewness which is “a measure of the asymmetry of the probability distribution of a real-valued random variable about its mean”. The fifth column represents the standard error of the mean which is “a rough measure of the average amount by which sample means deviate from the population mean” (Witte & Witte, 2010, p. 548).

Table 2

Descriptive Statistics of the Major Variables in the Study

Measure	N	Mean	Std. Deviation	Skewness	Std. Error of Skewness
Grade	127	6.99	3.26	-0.80	0.22
Total Teaching Experience	127	11.32	7.60	1.49	0.22
Teacher Working Conditions	127	13.05	1.90	-5.25	0.22
Teacher Job satisfaction	127	12.85	3.24	-3.34	0.22
Enhancement of Teacher's Knowledge	127	2.87	0.68	0.00	0.22
Collaboration	127	3.15	0.60	-0.21	0.22
Time and Resources	127	3.21	0.57	-1.52	0.22
Time Factors	127	12.52	1.84	-3.50	0.22
Facilities and resources	127	13.07	1.89	-5.38	0.22
School Leadership	127	13.66	1.88	-6.17	0.22
Professional Development	127	12.67	2.57	-4.00	0.22

The initial analysis of the data in Table 2 indicated that there were extreme degrees of skewness and kurtosis. Kurtosis means that instead of a normal bell-shaped curve, the tails of the distribution are too fat or too thin. The raw data was reviewed to ensure that the data outliers were not errors in coding or entry. Once the data was confirmed as accurate, two different methods were completed in an effort to reduce skewness and non-normality. The first was a logarithmic transformation. The logarithmic transformation did not have the desired effect of reducing skewness of the data. Another method that was used to reduce skewness was transforming the data into ranked transformed data. In this method, the data was ranked in an ordinal fashion. As can be seen in Table 3, the rank transformation has virtually zero skewness. The mean of ranks is $(N+1)/2$ where N is the number of observations. The data have the same length (N) which is why the mean is the same for all ranked variables. The descriptive statistics were calculated based on the transformed data and have been included in Table 3

It was determined that using the ranked transformed data was the better of the two methods to reduce non-normality. Scores were transformed into rank scores and subsequent analysis was completed on the rank-transformed data. When data are transformed to their ranks, the resulting Pearson product-moment correlation coefficients are identical to Spearman rank-order correlation coefficients. “Spearman’s rank correlation coefficient is a nonparametric (distribution-free) rank statistic proposed by Charles Spearman as a measure of the strength of an association between two variables. It is a measure of a monotone association that is used when the distribution of data makes Pearson’s correlation coefficient undesirable or misleading” (Hauke J., Kossowski T, 2011, p. 1).

Table 3

Descriptive Statistic of the Major Variables in the Study After the Data was Transformed into Rank

Measure	N	Mean	Std. Deviation	Skewness	Std. Error of Skewness
Rank of Professional Development	127	64.00	36.76	0.00	0.22
Rank of Time Factors	127	64.00	36.60	-0.01	0.22
Rank of Time and Resources	127	64.00	36.53	-0.01	0.22
Rank of Teacher Working Conditions	127	64.00	36.79	0.00	0.22
Rank of Teacher Professional development	127	64.00	36.76	0.00	0.22
Rank of Teacher job Satisfaction	127	64.00	36.78	0.00	0.22
Rank of Collaboration	127	64.00	36.47	0.00	0.22
Rank of Enhancement of Teachers Knowledge	127	64.00	36.70	0.00	0.22
Rank of Facilities and resources	127	64.00	36.71	0.00	0.22
Rank of School Leadership	127	64.00	36.70	0.00	0.22
Rank of Grade	127	64.00	35.83	-0.10	0.22
Rank of Total Teaching Exp.	127	64.00	36.74	0.00	0.22

Cronbach's Alpha was also calculated for every major variable in the study. Cronbach's Alpha was calculated for all of the dependent and predictor variables because validity is influenced by the reliability of both predictors and criteria. Cronbach's Alpha was also calculated for each of the components that made up teacher professional development and teacher working conditions. Table 4 on the following page presents the alpha level for each and also depicts each question in the survey that was used to measure the variable.

Table 4

Cronbach's Alpha Levels for Major Variables in the Study

Sections	Variables	Features of Variables	Items	Alpha
1	Teacher Professional Development		Items 1-16	0.77
		Collaboration	4 items	0.69
		Resources	6 items	0.63
		Enhancing Knowledge	6 items	0.58
2	Teacher Working Conditions		Items 17-40	0.82
		Time	3 items	0.81
		Facilities and Resources	5 items	0.64
		School Leadership	7 items	0.79
		Professional Development	9 items	0.88
3	Teacher job Satisfaction		Items 41-60	0.65
4	Demographic		Items 61-68	
		Grade Level Taught	1 item	
		Years of experience teaching	3 items	

Research Questions

Research Question 1 - To what extent is there a relationship between teacher's satisfaction with their professional development experiences and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education?

Prior to answering this question, the Teacher Development measure was partitioned into quartiles. "Grade Levels Taught" was recoded into two groups (Primary & Middle School, and High School). The Primary & Middle School consisted of participants that taught preschool through grade eight. High School consisted of participants that taught grades nine through twelve. Examining the data in this fashion allowed the researcher to complete an analysis of variance on the transformed data. The one-way analysis of variance (ANOVA) is used to determine if there are any significant differences between the means of two or more groups. As mentioned previously, the rank-transformed measure of Teacher Job Satisfaction was the dependent variables. The mean ranks of Job Satisfaction are presented in Table 5.

Table 5

Teacher Job Satisfaction by Grade Level and Quartiles of Professional Development with Years of Teaching Experience as a Covariate

Dependent Variable: Rank of Teacher Job Satisfaction

Grade Factor	Quartile Grouping of Professional Development	N	Mean	Std. Deviation
Primary & Middle School	1 st Quartile	12	48.67	40.43
	2 nd Quartile	8	53.69	43.16
	3 rd Quartile	10	63.40	38.28
	4 th Quartile	23	64.63	41.96
	Total	53	59.13	40.52
High School	1 st Quartile	21	66.79	36.62
	2 nd Quartile	19	70.45	25.37
	3 rd Quartile	23	66.65	33.04
	4 th Quartile	11	65.45	45.02
	Total	74	67.49	33.70
Total	1 st Quartile	33	60.20	38.45
	2 nd Quartile	27	65.48	31.75
	3 rd Quartile	33	65.67	34.13
	4 th Quartile	34	64.90	42.29
	Total	127	64.00	36.78

The resulting data were analyzed using multivariate analysis of variance model with two between-group factors: satisfaction with Professional development and Grades Taught. As years of experience is an ordinal variable, it was converted into a rank transformation and used as a covariate. As can be seen in Table 6, there were no significant main effects or interactions effects. Years of teaching experience and grade level were not significantly related to Teacher Job Satisfaction. In an effort to analyze the strength of the relationships between the variable partial eta squared was calculated. A weak relationship would be expressed with a partial eta score between .00 and .09. Effect sizes were (partial eta-squared) were also small as to not even meet the level of a weak relationship. Thus, it cannot be said that any of these factors were related to ratings of teacher Job Satisfaction.

Based upon the data presented, in response to research question 1, there was no significant relationship between teacher satisfaction with professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education.

Table 6

ANOVA of Rank Job Satisfaction as a Function of satisfaction with Professional Development, Grade Levels and Years of Teaching Experience

Dependent Variable: Rank of Teacher Job Satisfaction

Source of Variance	Type III Sum of Square	Df	Mean Square	F	Sig.	Partial Eta Squared
Total Teaching Experience	629.242	1	629.242	.450	.504	.004
Grade Level	3030.238	1	3030.238	2.167	.144	.018
Quartiles of Professional Development	921.205	3	307.068	.220	.883	.006
Grade * Prof Dev	1611.267	3	537.089	.384	.765	.010
Error	164996.080	118	1398.272			
Total	170448.000	126				

Research Question 2 - To what extent is there a relationship between teacher's satisfaction with their professional development experiences and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education?

As in the previous analysis, satisfaction with Professional Development ratings was partitioned by quartiles and there were two levels of Grade Taught. Years of Teaching Experiences was transformed to ranks. For this question, the dependent variable was the rank-transformed measure of Teacher's satisfaction with their Working Conditions.

Table 7 presents the mean ranks for each combination of level of professional development and grade levels.

Table 7

Teacher Working Conditions by Grade Level and Quartiles of satisfaction with Professional Development with Years of Teaching Experience as a Covariate

Dependent Variable: Rank of Teacher Working Conditions

Grade Factor	Quartile Grouping of Professional Development	N	Mean	Std. Deviation
Primary & Middle School	1 st Quartile	12	39.46	33.70
	2 nd Quartile	8	73.13	37.76
	3 rd Quartile	10	49.05	34.14
	4 th Quartile	23	80.41	38.62
	Total	53	64.12	39.74
High School	1 st Quartile	21	49.38	30.46
	2 rd Quartile	19	56.11	32.57
	3 rd Quartile	23	74.41	29.94
	4 th Quartile	11	83.18	43.49
	Total	74	63.91	34.82
Total	1 st Quartile	33	45.77	31.53
	2 nd Quartile	27	61.15	34.36
	3 rd Quartile	33	66.73	32.93
	4 th Quartile	34	81.31	39.61
	Total	127	64.00	36.79

An analysis of variance with years of teaching experience as a covariate is presented in Table 8. As can be seen in this table, there was a significant main effect for quartiles of professional development. Quartiles of professional development is a significant main effect at $F(3,118) = 5.723$ with a p less than or equal to .001. However, there were no additional significant main effects or interactions.

To further probe the Professional Development effect, means of Teacher Work Satisfaction by quartiles of professional development are presented in Table 9. Although quartiles of professional development was a significant effect in relationship to teacher working conditions further analysis needed to be completed to determine which quartiles the significant difference was being attributed. A post-hoc Sidak test of mean differences was completed. The post-hoc Sidak test allowed the researcher to identify which pairs of quartiles of satisfaction with professional development are significant. The results of the post-hoc Sidak tests of mean differences are displayed in Table 10. Thus, it can be seen that those that had the lowest satisfaction with professional development reported significantly poorer working conditions than did those participants in with the highest satisfaction with professional development. However, those in the intermediate levels of professional development were not significantly different from either those in the lowest or highest quartiles.

Based upon the data presented, in response to research question 2, there is a significant relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education.

Table 8

*Tests of Between-Subjects Effect**Dependent Variable: Teacher Rank of Rank of Teacher Working Conditions*

Source of Variance	Type III Sum of Square	Df	Mean Square	F	Sig.	Partial Eta Squared
Total Teaching Experience	678.049	1	678.049	.566	.453	.005
Grade	1049.004	1	1049.004	.876	.351	.007
Quartiles of Prof. Development	20569.455	3	6856.485	5.723	.001*	.127
Grade * Prof. Development	5660.621	3	1886.874	1.575	.199	.038
Error	141370.810	118	1198.058			
Total	170587.000	126				

Table 9

Mean Ranks of Ratings of Teacher Working Conditions by Quartiles of Professional Development

Dependent Variable: Teacher Rank of Teacher Working Conditions

Quartile Grouping of Professional Development	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	44.376 ^a	7.553	29.414	59.338
2	64.399 ^{a, b}	7.349	49.842	78.955
3	60.509 ^a	9.533	41.626	79.392
4	77.505 ^a	7.314	63.016	91.993

a. Covariates appearing in the model are evaluated at the following values: Total Teaching Experience =11.323

b. Based on modified population marginal mean.

Table 10

Pairwise Comparisons of Rank Mean Levels of Teacher Work Satisfaction by Quartiles of Professional Development

Dependent Variable: Teacher Rank of Teacher Working Conditions

(I) Quartile Grouping of Professional Development	(J) Quartile Grouping of Professional Development	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	-20.022 ^a	10.544	.310	-48.250	8.205
	3	-16.133	12.176	.713	-48.730	16.464
	4	-33.128 [*]	10.527	.013 [*]	-61.309	-4.948
2	1	20.022 ^c	10.544	.310	-82.05	48.250
	3	3.889 ^c	12.016	1.000	-28.279	36.057
	4	-13.106 ^c	10.350	.753	-40.814	14.602
3	1	16.133	12.176	.713	-16.464	48.730
	2	-3.889 ^a	12.016	1.000	-36.057	28.279
	4	13.995	11.971	.645	-49.043	15.053
4	1	33.128 [*]	10.527	.013 [*]	4.948	61.309
	2	13.106 ^a	10.350	.753	-14.602	40.814
	3	16.995	11.971	.645	-15.053	49.043

Based on estimated marginal means

^a. An estimate of the modified population marginal mean (J).

^b. Adjustment for multiple comparisons: Sidak.

^{*} The mean difference is significant at the .05 level.

^c. An estimate of the modified population marginal mean (I).

Research Question 3 - Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher's Knowledge, which has the strongest relationship with teacher job satisfaction?

The Spearman rank-order correlation coefficients between teacher job satisfaction and collaboration with components of professional development are presented in Table 11.

A Spearman rank-order correlation coefficient was calculated for each of the three characteristics of effective professional development and teacher job satisfaction. The correlation between teacher job satisfaction and collaboration for professional development was .139 and was not statistically significant ($p = .120$). This means that the variable, collaboration for professional development, had no significant relationship with teacher job satisfaction.

The second characteristic of effective professional development that was examined was time and resources. The Spearman rank-order correlation between teacher job satisfaction and time and resources for professional development was .006 and was not statistically significant ($p = .794$). This means that the variable, resources and time for professional development had no significant relationship with teacher job satisfaction.

The last characteristic examined of effective professional development was enhancement of teacher's knowledge. The correlation between teacher job satisfaction and professional development that enhances teacher's knowledge was .023 and was not statistically significant ($p = .945$). This means that the variable, professional development that enhances teacher's knowledge had no significant relationship with teacher job satisfaction. As a result of this analysis, none of the characteristics of effective professional development that were explored in

this study had a statistically significant relationship with teacher job satisfaction. Based upon the Spearman rank-order correlations that have been calculated, suggests that these three characteristics may not be the components of effective professional development.

Table 11

Spearman Rank-Order Correlation Coefficients Between the Variable Teacher Job Satisfaction and Three Characteristics of Effective Teacher Professional Development From All Schools

N-127

	Pearson Correlation Coefficient	p-value
Teacher Job Satisfaction and Collaboration for Professional Development	.139	.120
Teacher Job Satisfaction and Resources for Professional Development	.006	.794
Teacher Job Satisfaction and Professional Development that Enhances Teachers' Knowledge	.023	.945

Research Question 4 - Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and satisfaction with Professional Development, which has the strongest relationship with teacher professional development?

Table 12 provides the Pearson Correlation Coefficients between the four components of working conditions and teacher professional development.

The first component of teacher working conditions that was examined was time factors. The correlation between teacher professional development and teacher working conditions area of time factors was .538 and was statistically significant ($p = <.001$). This means that the variable, teacher working conditions area of time factors had a moderate to strong relationship with teacher professional development. The results suggest that as teachers have time to plan and collaborate their perceived working conditions are perceived to be positive.

Facilities and resources have been identified in the literature as a key component that influences teachers working conditions. The Pearson correlation between teacher professional development and teacher working conditions area of facilities and resources was .497 and was statistically significant ($p <.001$). The results mean that teachers who have important resources such as instructional materials, technology, access to office equipment, and a clean work environment responded to the survey questions indicated positive working conditions. It should be noted that the variable, teacher working conditions: area of facilities and resources, had a moderate to strong relationship with teacher professional development.

The relationship between school leadership's impact on teacher perceived working conditions was also examined in research question three. The correlation between teacher

professional development teacher working conditions area of school leadership was .505 and was statistically significant ($p < .001$). The variable, teacher working conditions area of school leadership, had a moderate to strong relationship with teacher professional development. Teachers who reported the presence of school leadership that contributed to trusting, supportive, empowering environments and sustained efforts to address teacher concerns, also had a positive opinion of their working conditions.

As the focus of this study has been on the relationship between professional development and teacher working conditions, the fourth component that was examined was professional development. The correlation between teacher professional development and teacher working conditions area of professional development was .355 and was statistically significant ($p < .001$). The variable, teacher working conditions area of professional development, had a moderate to strong relationship with teacher professional development. This means that those who rated positive working conditions also felt that there were resources and opportunities available for teachers to participate in professional development opportunities.

As a result of this analysis, all four factors had moderate to strong relationships and were statistically significant at the $p < .001$ level. The relationship between the area of teacher working conditions, time factors and teacher professional development had the strongest relationship in comparison to the other three areas of teacher working conditions identified in this study.

Table 12		
<i>Pearson Correlation Coefficients Between the Variable Teacher Professional Development and the Four Areas of Teacher Working Conditions From All Schools</i>		
	N-127	
	Pearson Correlation Coefficient	p-value
Teacher Professional Development and Teacher Working Conditions Areas of Time Factors	.538*	<.001
Teacher Professional Development and Teacher Working Conditions Area of Facilities and Resources	.497*	<.001
Teacher Professional Development and Teacher Working Conditions Area of School Leadership	.505*	<.001
Teacher Professional Development and Teacher Working Conditions Area of Professional Development	.355*	<.001

Summary of Results

This chapter reported the results of the data analysis and discussed the findings from the surveys that were distributed to the teachers in three school districts in New Jersey. The researcher examined the relationship between teacher perceptions of the following: teacher professional development in relation to teacher job satisfaction and teacher working conditions while controlling for years of experience of a teacher and the grade level that the teacher is currently teaching. The data was transformed into ranks in order to reduce non-normality. Analyses of covariance and Spearman rank-order correlation coefficient analyses were computed to examine the data to answer all research questions.

The results in this chapter were presented in the following order: Purpose of the study, descriptive statistics of the major variable in the study, descriptive statistics of the major variable in the study after being transformed into rank and an analysis of the transformed data descriptive statistics, alpha levels for the major variables in the study, research question 1, teacher job satisfaction by grade level and quartiles of professional development with years of teaching experience, the analysis of variance of rank job satisfaction as a function of professional development, research question 2, teacher working conditions by grade level and quartiles of professional development with years of teaching experience, tests of between-subjects effects of teacher rank and rank of teacher working conditions, the mean ranks of ratings of teacher working conditions by quartiles of professional development, the pairwise comparisons of rank mean levels of teacher work satisfaction by quartiles of professional development, research question 3, with the correlation coefficients between the variable job satisfaction and the three characteristics of effective teacher professional development from all three districts and the

analysis of the relationship between the variables, research question 4, with the Pearson Correlation Coefficients between the variable teacher professional development and the four areas of teacher working conditions from the three districts and the analysis of the relationship between the variables.

Chapter V will report the summary of the study, findings, conclusions, implications, and recommendations for future research.

Chapter V

CONCLUSIONS AND RECOMMENDATIONS FOR PRACTICE AND POLICY

Introduction

Chapter Five will discuss the findings, conclusions, and implications as a result of completing the study. The chapter will be presented in five sections. The first section will present an overview of the study. The second section will present the findings from the statistical analysis of the data. The third section will contain the conclusions that have been derived from the research questions that guided the study. The fourth section will discuss the implications that have been developed based upon the results. The final section of Chapter Five will be recommendations for future research.

The purpose of the study was to examine the relationship between professional development, teacher working conditions, and teacher job satisfaction taking into consideration the grade taught and years of experience of a teacher. Furthermore the study examined the relationships of the components of teacher professional development and teacher job satisfaction. The study also examined the relationship between teacher professional development and the components of teacher working conditions. The study was guided by four research questions.

- 1) To what extent is there a relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education?

- 2) To what extent is there a relationship between teacher professional development and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education?
- 3) Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher's Knowledge, which has the strongest relationship with teacher job satisfaction?
- 4) Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and Professional Development, which has the strongest relationship with teacher professional development?

The review of the literature was developed by examining the historical perspective of professional development. In addition, there was a review of the literature as it related to effective professional development and current trends in professional development. Finally, the literature was reviewed on each of the major variables of the study which included, characteristics of professional development, working conditions of teachers, and teacher job satisfaction.

The population in which the sample was drawn from was three public school districts in the State of New Jersey. Two of the three school districts are preschool through twelfth grade districts and the remaining district is a preschool through eighth grade district. A questionnaire was administered to teachers working in three public school districts in two counties in New Jersey. One hundred and twenty seven teachers responded to the 68 item questionnaire. The response rate for the study was approximately 25.9%.

Findings

An analysis of the descriptive statistics of all the major variables in the study was completed. The examination resulted in identifying extreme degrees of skewness. In order to reduce non-normality, scores were transformed into rank scores and all analysis was completed using the rank-transformed data. Alpha was also calculated for all the major variables in the study. A one way analysis of variance was completed in an effort to answer the first research question. The one-way analysis of variance (ANOVA) was used to determine if there are any significant differences between the means of two or more groups. The resulting data from this analysis were placed into an analysis of variance with two between-group factors: Professional development and Grades Taught. As years of experience is an ordinal variable, it was converted into a rank transformation and used as a covariate. There were no significant main effects of interactions for grade level or levels of professional development. Additionally, years of teaching experience was not significantly related to Teacher Job Satisfaction. In addition the researcher analyzed the strength of the relationships between the variable by calculating partial eta squared. Ultimately, there was no significant relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education.

The findings in response to research question two were analyzed in the same fashion as the first research question. A one way analysis of variance was completed in an effort to answer the second research question. There was a significant main effect for quartiles of professional development. Quartiles of professional development is a significant main effect at $F(3,118) = 5.723$ with a p less than or equal to .001. However, there were no additional significant main

effects of interactions. Although quartiles of professional development was a significant effect in relationship to teacher working conditions further analysis needed to be completed to determine which quartiles the significant difference was being attributed. A post-hoc Sidak test of mean differences was completed. The results of the post-hoc Sidak tests of mean differences show that those in the first quartile of professional development reported significantly poorer working conditions than did those participants in the highest quartile. However, those in the intermediate levels of professional development were not significantly different from either those in the lowest or highest quartiles. The data and subsequent analysis show there is a significant relationship between teacher professional development and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education.

In an effort to answer the third research question, Spearman rank-order correlation coefficients between teacher job satisfaction and collaboration with components of professional development were calculated and analyzed. The variables, collaboration for professional development, resources for professional development and professional development that enhances teacher's knowledge had no significant relationship with teacher job satisfaction. As a result of this analysis, none of the characteristics of effective professional development that were explored in this study had a statistically significant relationship with teacher job satisfaction.

In an effort to answer research question four Pearson Correlation Coefficients between the four components of working conditions and teacher professional development were calculated and analyzed. The correlation between teacher professional development and teacher working conditions area of time factors was .538 and was statistically significant ($p = <.001$).

This means that the variable, teacher working conditions area of time factors had a moderate to strong relationship with teacher professional development.

The correlation between teacher professional development and teacher working conditions area of facilities and resources was .497 and was statistically significant ($p < .001$). This means that the variable, teacher working conditions: area of facilities and resources, had a moderate to strong relationship with teacher professional development.

The correlation between teacher professional development teacher working conditions area of school leadership was .505 and was statistically significant ($p < .001$). This means that the variable, teacher working conditions area of school leadership had a moderate to strong relationship with teacher professional development.

The correlation between teacher professional development teacher working conditions area of professional development was .355 and was statistically significant ($p < .001$). This means that the variable, teacher working conditions area of professional development had a moderate to strong relationship with teacher professional development.

As a result of this analysis, all four factors of teacher professional development had moderate to strong relationships and were statistically significant. The relationship between the area of teacher working conditions, time factors and teacher professional development had the strongest relationship in comparison to the other three areas of teacher working conditions identified in this study.

Conclusions

Conclusions that are drawn from the analysis of the data collected in this study are only based upon this study. Caution should be made about drawing wide ranging conclusions based on the limited data collected by the researcher. The first research question was: To what extent is there a relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education? Based on this study there was no statistically significant relationship found between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education. The findings reinforce the findings that were found by Thomas Meagher's study in 2011. The results of the analysis of data found no statistically significant association between teacher professional development and teacher job satisfaction. The current research, expanded on Meagher's study by examining teachers from preschool to twelfth grade. Ultimately the findings were the same as Meagher's study which was limited to math teachers in one large district.

The second research question: To what extent is there a relationship between teacher professional development and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education? The analysis of the data in this study showed there was a significant relationship between teacher professional development and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education. The results of this study support that there is a relationship between professional development and teacher perceived working conditions. In the context of the current literature on teacher working conditions the findings are significant. Teacher working

conditions are a significant factor in teacher effectiveness, teacher retention, and have even been connected to student achievement (Buckley, Schneider, & Shang; Elfers, Plecki, & Knapp, 2006; Ladd 2009). If teacher working conditions can be impacted by the professional development they are provided than it is fair to assume that this would improve their effectiveness as teachers and in turn improve student achievement. In 2009 Ladd, surveyed over 2500 schools in North Carolina and found that there was a statistically significant relationship between a teacher's working conditions and student achievement (Meagher, 2011). The findings from this study support the findings in the current literature.

The third research question: Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher's Knowledge, which has the strongest relationship with teacher job satisfaction? Based on the results, none of the characteristics of effective professional development that were explored in this study had a statistically significant relationship with teacher job satisfaction. The findings from this study are different than Meagher's results in 2011. Meagher's study in 2011 found that there was a relationship between collaboration and teacher job satisfaction. I believe that this may be an anomaly to this studies population. It also may mean that the characteristics of effective professional development that were identified are not the characteristics that impact a teacher's job satisfaction.

The fourth research question: Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and Professional Development, which has the strongest relationship with teacher professional development? All four factors of teacher professional development had moderate to strong relationships and were statistically significant.

The relationship between the area of teacher working conditions, time factors and teacher professional development had the strongest relationship in comparison to the other three areas of teacher working conditions identified in this study. These findings would support the concept that professional development can impact teachers' perceived working conditions even more than the facilities and resources available for a teacher and the school leadership in their schools. In context, a teacher's perceived working conditions ultimately impact the effectiveness of the teaching and the instruction provided for students. In addition, from an organizational perspective, research supports that investing in current employees provides an organization with a superior workforce. Cascio and Boudreau, 2008; Lawler, 1996; Lawler and Worley, 2006; Pfeffer, 1994, 1998, 2007; and Waterman, 1994 have supported the idea that a skilled, motivated workforce provides a strategic advantage for an organization." As a result, organizations attract better people who are motivated to do a superior job" (Bolman & Deal, 2008). The results of the study have implications for future practice in education and will be discussed in the implications.

Implications

There are two specific things impacting the educational landscape not only in New Jersey but across the nation. The first is the economic status of the nation. Specifically in New Jersey, funding for education and schools has been significantly impacted by the downturn in the economy. Financial resources are becoming scarce. Superintendents and Boards of Education are often forced to reduce opportunities for students as well as reduce opportunities for professional development for teachers. The second major impact is related to the current educational reform environment, which includes unfunded mandates that have been added over the recent years. There have been a great deal of mandated changes from the New Jersey Department of Education, including

but not limited to the Anti-Bullying Law of 2011 as well as major teacher and principal evaluation reform outlined in TEACH NJ that was passed into law in 2012. These two major shifts require superintendents to make tough decisions for two major resources in education time and money.

It is imperative that professional development providers and decision makers on professional development identify professional development that enhances pedagogical knowledge as well as content knowledge. If meaningful professional development is identified and put in place it will impact teacher's perceptions of their working conditions. As a result, this will enhance the overall well-being of the organization. If teachers feel that they are working in a good environment it will provide for superior teachers which will also provide for excellent instruction that should translate into increases in student achievement.

Another implication for superintendents and school leaders that can be seen by the results of the study is that time is important to teachers. School leaders should take into time factors when developing teacher's schedules and responsibilities. School leaders should develop schedules that allow uninterrupted time to prepare for classes during the school day. Although this is provided in most public school settings the amount of time to prepare varies widely from district to district. School leaders should also provide time for teachers and students to meet outside of the daily instruction. Instructional time is important but to have time to work with students with material they may be struggling with allows for students to gain a deeper understanding of material without having to wait to receive remediation. School leaders should also provide time for teacher collaboration. It is imperative for teachers to share best practice with each other as well as each other's struggles in the classroom. The middle school model of

teams of teachers by grade or by block allows time during the day for teachers to discuss students as well as teaching practice. School leaders should investigate adopting this model across all school and all grades.

One final implication for educational practitioners that can be gleaned from the study is that grade level being taught should be taken into consideration when developing professional development opportunities. Teachers in primary and middle school had the most negative opinion of their working conditions related to professional development. School leaders should work collaboratively with staff in the primary and middle schools to develop meaningful professional development. The results would indicate that if this is done it could positively impact teachers' perceived working conditions.

Future Research

After analyzing the literature surrounding this research and the data from this study there are many areas for future research. Understanding that this research was limited by the population that was used for this study, research should be done that expands upon the population which was only three school districts in New Jersey. Future research should be done expanding the population to more districts in the state of New Jersey or even beyond the borders of the state. A larger population could allow for more direct relationships between the variables to be determined as well as support or dispute the results found from this limited study. In addition, research could be done examining a population outside of public schools such as religious schools or charter schools. An examination could be done on the differences between the different educational settings to see if there are common themes or differences in the results

that could inform practice for school leaders. As there are more charter schools being opened in New Jersey it would be beneficial to know how these factors could impact educators and students in this type of educational setting.

Although the intent of this study was not to draw the relationship of professional development and its impact on student achievement, after reviewing the literature there is a lack of research in this area. After completing the literature review it was clear that there were many definitions of student achievement. Equally there were just as many definitions of effective professional development. More research should be done to identify a clear and concise definition of both as well as the components that make up both student achievement and effective professional development. Once that is established research should be done to identify if professional development of teachers truly impacts student achievement. Great deals of resources are funneled into professional development without really knowing how it is impacting the students. Research should be done not only to define effective professional development but then how it impacts student achievement to ensure that these limited resources are being utilized for things that truly have a positive impact on students.

As part of this research an examination was done to see how professional development impacted teachers job satisfaction and teacher working conditions. Further research should be done to examine what other factors could impact teacher job satisfaction and teacher working conditions. One in particular could be teacher salary to teacher job satisfaction and teacher working conditions. Researchers can look at a number of factors that are controlled by schools or school districts, but additional research should be done on external factors that impact public education. In particular most recently there have been some initiatives or policies that seem to

have negatively affected teacher's perceptions of their profession. As external factors are impacting more than ever what happens within the schools it could be beneficial to understand how these have impacted teacher job satisfaction and teacher working conditions.

Summary

The overall purpose of the study was to continue the investigation of characteristics of professional development and how those characteristics are associated with job satisfaction and teacher working conditions, when taking into account a teacher's years of experience teaching and which grade level they teach. The problem statement for this study is; what is the relationship between professional development, teacher working conditions, and teacher job satisfaction taking into consideration the grade taught and years of experience of a teacher? There are four research questions that are investigated through this study:

- 1) To what extent is there a relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education?
- 2) To what extent is there a relationship between teacher professional development and teacher working conditions while controlling for grade level taught and teacher's years of experience working in education?
- 3) Of the three characteristics of effective professional development: Collaboration, Time and Resources, and Enhancement of Teacher's Knowledge, which has the strongest relationship with teacher job satisfaction?

4) Of the four areas of teacher working conditions: Time Factors, Facilities and Resources, School Leadership and Professional Development, which has the strongest relationship with teacher professional development?

The findings after analyzing the data answered the research questions based on the population that was used for this study. There was no significant relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years of experience working in education. In relationship to the second research question, there was a significant main effect for quartiles of professional development and teacher working conditions while controlling for grade level taught and years of working in education. In response to research question three, the results showed that none of the characteristics of effective professional development that were explored in this study had a statistically significant relationship with teacher job satisfaction. The findings for research question four were that all four factors (Time Factors, Facilities and Resources, School Leadership and Professional Development) of teacher professional development had moderate to strong relationships and were statistically significant. It should be noted that the relationship between the area of teacher working conditions, time factors and teacher professional development had the strongest relationship in comparison to the other three areas of teacher working conditions identified in this study.

Conclusions that can be drawn from this study begin with the results expanding and supporting the findings of Thomas Meagher's study in 2011. Meagher's study also found that there was no significant relationship between teacher professional development and the magnitude of teacher job satisfaction while controlling for grade level taught and teacher's years

of experience working in education. These results expand on his research because Meagher's study examined only secondary math teachers while this study examined preschool to twelfth grade teachers in all disciplines. The results of this study support that there is a relationship between professional development and teacher perceived working conditions. In the context of the current literature on teacher working conditions the findings are significant. As stated earlier in the chapter, Teacher working conditions are a significant factor in teacher effectiveness, teacher retention, and have even been connected to student achievement (Buckley, Schneider, & Shang; Elfers, Plecki, & Knapp, 2006; Ladd 2009). Based on the results, none of the characteristics of effective professional development that were explored in this study had a statistically significant relationship with teacher job satisfaction. Further examination should be done to determine if the characteristics examined in this study are the components of effective professional development. All four factors of teacher professional development had moderate to strong relationships and were statistically significant. The relationship between the area of teacher working conditions, time factors and teacher professional development had the strongest relationship in comparison to the other three areas of teacher working conditions identified in this study.

Appendix A Letter to Teachers

Dear Teacher,

My name is Daniel William Silvia and I am a doctoral student in the Graduate School of Education at Seton Hall University. I am asking if you would like to participate in research that I am doing for a dissertation under the supervision of Dr. Elaine Walker from the Graduate School of Education at Seton Hall University.

The purpose of my research is to examine the relationship between professional development and teacher's job satisfaction and working conditions. I will also be investigating if the grade a teacher teaches or the teacher's years of experience has any impact on their job satisfaction or working conditions.

If you decide to participate it should only take twenty minutes to complete a survey. The completed survey can be placed in the manila envelope provided and I will pick them up in the main office one week after you have received the survey in your mailbox.

The survey instrument being used is based on a survey developed by the North Carolina New Teacher Center entitled "Teacher Working Conditions Survey". There are some additional items added to this survey that are specific to this study. Almost all items on the survey are multiple choice.

Participation in the survey is completely voluntary. If you refuse to participate or discontinue participation at any time there will be no penalty or negative impact on the participant.

There will be no identifying information about the participants collected or recorded so that a participant's answer can never be linked to any individual.

All participants' data will be securely stored to maintain confidentiality. All data collected as part of the research will be kept on a USB memory key which will be stored in a locked filing cabinet.

Thank you in advance for your time considering participation in my research.

Sincerely,

Daniel William Silvia

Appendix B Approval from Superintendents to contact Teachers

MILLTOWN SCHOOL DISTRICT

Milltown, New Jersey 08850 - 1643

www.milltownps.org

Linda A. Madison, Ed. D.
Superintendent of Schools
Principal, Parkview School
80 Violet Terrace
(732) 214-2365
(732) 214-2360
FAX: (732) 214-2376

Vincent S. Marasco
Business Administrator/Board Secretary
Milltown Board of Education
21 West Church Street
(732) 214-2365
FAX: (732) 828-0501

Dr. Elaine Walker
Seton Hall University
400 South Orange Ave.
South Orange, NJ 07079

Janet S. Farlazzo
Principal, Joyce Kilmer School
21 West Church Street
(732) 214-2370
FAX: (732) 214-2378

Margaret V. Casazar
Director of Student Support Services
Joyce Kilmer School
21 West Church Street
(732) 214-2365
FAX: (732) 214-2377

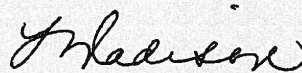
September 24, 2012

Dear Dr. Walker,

I am writing to grant permission to Mr. Daniel W. Silvia to conduct a survey of the teaching staff of the Milltown School District for the purpose of data collection for his doctoral dissertation. I understand that the data will be used to study teacher working conditions, professional development experiences, and teacher job satisfaction. The Milltown Board of Education has been advised of this project and my recommendation for participation.

If you require anything further to authorize this survey, please feel free to contact me via email lmadison@milltownps.org or phone (732) 214-2360.

Sincerely,



Dr. Linda A. Madison
Chief School Administrator

Cc: Mr. Daniel W. Silvia

Believe They Will Achieve



Spotswood Public Schools

ADMINISTRATIVE OFFICES • 105 SUMMERHILL ROAD • SPOTSWOOD, NEW JERSEY 08884 • (732) 723-2236 • FAX: (732) 251-7666

DR. ANTHONY E. VAZ, SUPERINTENDENT EMERITUS
E-MAIL: AVAZ@SPOTSWOOD.K12.NJ.US

October 1, 2012

Dr. Elaine Walker
Seton Hall University
400 South Orange Avenue
South Orange NJ 07079

Dear Dr. Walker:

I am writing to grant permission to Mr. Daniel W. Silvia to conduct a survey of the teaching staff of the Spotswood School District for the purpose of data collection for his doctoral dissertation. I understand that the data will be used to study teacher working conditions, professional development experiences, and teacher job satisfaction. The Spotswood Board of Education has been advised of this project and my recommendation for participation. If you require anything further to authorize this survey please feel free to contact me via email at avaz@spotswood.k12.nj.us or telephone at 732-723-2236.

Sincerely,

Dr. Anthony E. Vaz
Interim Superintendent of Schools

WWW.SPOTSWOOD.K12.NJ.US



~~Pequannock Township Public Schools~~
OFFICE OF THE SUPERINTENDENT
538 Newark-Pompton Turnpike
Pompton Plains, New Jersey 07444

Victor P. Hayek
Superintendent of Schools

(Tel) 973-616-6040 (FAX) 973-616-6045
Victor.Hayek@pequannock.org

Daniel W. Silvia
Seton Hall University
School of Education
400 South Orange Avenue
South Orange, NJ 07079

Re: Professional Development Survey

Dear Daniel:

Congratulations on your candidacy for the doctoral program at Seton Hall University, it takes character and dedication to accomplish such a goal. I am granting you permission to contact the Pequannock Township School District teachers to complete the Professional Development Survey for your course study program.

Please contact me if you need any further information.

Again, Congratulations!

Sincerely,

A handwritten signature in black ink, appearing to read "V. Hayek", is written over the word "Sincerely,".

Victor P. Hayek
Superintendent of Schools

VPH/dlc

Appendix C Survey Instrument

Please choose the choice that best reflects your answer to the following questions

1. My professional development activities are scheduled exclusively with teachers who work in my subject area.

Never Seldom Sometimes Frequently Always

2. I am part of a team of teachers during my professional development experiences.

Never Seldom Sometimes Frequently Always

3. I believe that teachers that work with in my professional development activities share a common goal and vocabulary related to our work with students.

Never Seldom Sometimes Frequently Always

4. My professional development activities allow me to be an active member of a peer study group.

Never Seldom Sometimes Frequently Always

5. I do not work on a daily basis with the teachers who attend the professional development activities I attend.

Never Seldom Sometimes Frequently Always

6. During my professional development activities, teachers in my subject area review and discuss student work of our subject area.

Never Seldom Sometimes Frequently Always

7. During my professional development activities, I am provided with data on student achievement related to my subject area.

Never Seldom Sometimes Frequently Always

8. During my professional development experiences, I discuss and review teaching materials that are appropriate for my classroom.

Never Seldom Sometimes Frequently Always

9. My professional development activities are scheduled during regular school hours.

Never Seldom Sometimes Frequently Always

10. My professional development activities occur regularly throughout the school year.

Never Seldom Sometimes Frequently Always

11. My professional development activities occur in a location that is convenient for me to attend.

Never	Seldom	Sometimes	Frequently	Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. My professional development activities occur at a location outside of my school.

Never	Seldom	Sometimes	Frequently	Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. My professional development activities occur after regular school hours.

Never	Seldom	Sometimes	Frequently	Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. During my professional development experiences, I have access to teaching materials that potentially could be used in my classroom.

Never	Seldom	Sometimes	Frequently	Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. My professional development activities enhance my content knowledge for the courses I teach.

Never	Seldom	Sometimes	Frequently	Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. My professional development activities enhance my pedagogical knowledge for the courses I teach.

Never	Seldom	Sometimes	Frequently	Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please choose the circle that best represents your experience

17. Teachers have sufficient time to meet the educational needs of all students.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

18. Teachers have time available to collaborate with their colleagues.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly Agree

19. The non instructional time provided for teachers in my school is sufficient.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

20. Teachers have sufficient access to appropriate instructional materials and resources.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

21. Teachers have sufficient access to instructional technology, including computers, printing, software and internet access.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

22. Teachers have adequate professional space to work productively.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

23. Teachers must supplement instructional materials and supplies with their own resources.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

24. Teachers have sufficient access to certified support personnel.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

25. There is an atmosphere of trust and mutual respect within the school.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

26. Teachers feel comfortable raising important issues and concerns to school leadership.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

27. The faculty is committed to helping every student learn.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

28. The faculty and staff and have a shared vision.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

29. The procedures for teacher performance evaluations are consistent.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

30. Teachers recieve feedback from school leadership that can help them improve teaching.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

31. Overall, the school leadership in my school is effective.

Strongly Disagree Somewhat disagree Neither disagree nor agree somewhat agree Strongly agree

Please choose the circle that best represents your experience

32. Professional development provides teachers with the knowledge and skills most needed to teach effectively.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

33. Enhancing teacher knowledge and skills receives priority as a strategy to improve students achievement.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

34. Professional development offerings are data driven.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

35. Teachers receive follow up from professional development opportunities that help them improve their teaching.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

36. Teachers are provided opportunities to learn from one another.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

37. School leadership makes a sustained effort to provide quality professional development at school.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

38. Adequate time is provided for professional development.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

39. Professional development provides teachers with strategies that they can incorporate into their instructional delivery methods.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

40. Professional development has proven useful to teachers in their efforts to improve student achievement.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

41. Which best describes your future intentions for your professional career?

- Continue working at my current school as I am able
- Continue working at my current school until a better opportunity comes along
- Continue working in education but leave this school as soon as I can
- Continue working in the district only until I can leave education altogether

Please rate how strongly you agree or disagree that the following factors influence your decision making about your future intentions for your professional career.

42. Adequate facilities and/or resources

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

43. Adequate support from school leadership

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

44. Collegial atmosphere amongst the staff

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45. Teaching assignment (Subject, Students)

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

46. Time during the work day

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

47. Empowerment to make decisions that affect my school and/or classroom

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

48. Effectiveness with the students I teach

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

49. Salary

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

50. Cost of living of the community in which my school is located

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

51. Student Behavior

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

52. Degree of testing and accountability

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

53. The community environment where I live

Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

54. Retirement options

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

55. Personal Reasons (health, family, etc.)

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

56. Overall, my school is a good place to work and learn

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

57. I am satisfied working in my current school.

Strongly disagree Somewhat disagree Neither disagree nor agree Somewhat agree Strongly agree

58. Which aspect of your work environment most affects your willingness to keep teaching at your school?

- Time during the work day
- School facilities and resources
- School leadership
- Professional development

59. Which aspect of your work environment most affect teacher's willingness to keep teaching at your school?

- Time during the work day
- School facilities and rsources
- School leadership
- Professional development

60. Which aspect of your working conditions is most important to you in enhancing student learning?

- Time during the work day
- School facilities and rsources
- School leadership
- Professional development

61. Please indicate the district that you work for:

62. What grade do you teach

- preschool
- 1st grade
- 2nd grade
- 3rd grade
- 4th grade
- 5th grade
- 6th grade
- 7th grade
- 8th grade
- multiple grades
- high school

63. Indcate your gender

- Male
- Female

64. What is the highest degree you have attained?

- Bachelors Degree
- Masters Degree
- Doctorate

65. Please indicate your ethnicity. (Select One)

- American Indian or Alaskan native
- Asian or Pacific Islander
- Black or African American
- Hispanic
- White
- Mixed or Multiple ethnicity
- Some other race or ethnicity

66. How Many years have you worked as a teacher?

Appendix D Email Granting Permission from Dr. Eric Hirsch and Dr. Thomas Meagher

Daniel

Not a problem at all. Feel free to use the North Carolina Teacher Working Conditions Survey as whole or any items in your studies. The instrument is available at www.ncteachingconditions.org under preview the survey and only ask that you provide some attribution to NTC in the survey's development. We have validity and reliability information on our core survey questions (we do similar work in other states and vary our constructs and items slightly in cooperation with stakeholder groups. See www.tellkentucky.org, www.telltennessee.org, www.tellcolorado.org, www.tellmaryland.org, www.tellmass.org, etc.) if you need as you progress in your research

Good luck with your research and let us know if you have any findings that you think can inform our items or our work utilizing the data.

Eric

From: Daniel Silvia [mailto:DSilvia@Spotswood.k12.nj.us]
Sent: Tuesday, August 14, 2012 2:22 PM
To: ehirsch@newteachercenter.org
Subject: TWCS permission

Dr. Hirsch,

My name is Daniel Silvia and I am currently a doctoral candidate at Seton Hall University in New Jersey. I recently contacted Dr. Meagher, who completed a study in Illinois that used portions of the North Carolina Working Conditions Survey to obtain permission to use the instrument that he utilized in his study for a study that I am doing in New Jersey. I am reaching out to you in hopes that I can obtain permission from you to use portions of the TWCS for my study which is looking at the relationship

between professional development and teacher job satisfaction and working conditions. An email response providing permission is all that I require to move forward with my study.

I thank you in advance for your consideration.

Daniel Silvia, Director of Special Services/Programs
Spotswood Public Schools
105 Summerhill Road, Spotswood, NJ 08884

Ph:732-723-2247 ◆ Fax732-251-7666 ◆ Email:dsilvia@spotswood.k12.nj.us

Great! Just keep on working. Be persistent. You will finish.

-----Original Message-----

From: Daniel Silvia [<mailto:DSilvia@Spotswood.k12.nj.us>]

Sent: Wednesday, August 15, 2012 6:35 AM

To: Tom Meagher

Subject: RE: Assistance contacting Thomas Meagher

Dr. Meagher,

Thank you for granting me permission. I reached out to Dr. Hirsch from the North Carolina Teacher Center who also gave me permission to use the instrument.

Once the study is complete I will share my results with you.

Thank you again

Daniel Silvia, Director of Special Services/Programs Spotswood Public Schools

105 Summerhill Road, Spotswood, NJ 08884

Ph:732-723-2247*Fax732-251-7666*Email:dsilvia@spotswood.k12.nj.us

-----Original Message-----

From: Tom Meagher [<mailto:tmeagher@lfschools.net>]

Sent: Tuesday, August 14, 2012 1:52 PM

To: Daniel Silvia

Subject: RE: Assistance contacting Thomas Meagher

Daniel, you certainly can use the instrument from my study. You should be advised that some of the items used were collected from a researcher located in North Carolina. The author and the name of the survey slip my mind right now, but if you look at the methodology chapter you will find it. I strongly suggest contacting that author. Also, the permission I received from him is in the appendix of my work.

I would like to speak with you to hear more about your proposed study.

Good Luck,

Tom

-----Original Message-----

From: Daniel Silvia [<mailto:DSilvia@Spotswood.k12.nj.us>]

Sent: Tuesday, August 14, 2012 9:20 AM

To: Tom Meagher

Subject: RE: Assistance contacting Thomas Meagher

Dr. Meagher,

Thank you for responding. I hope your travels were for enjoyment and not related to work. I recently read your dissertation and was intrigued by your findings. I am currently a Doctoral candidate at Seton Hall University and would like to replicate your study in New Jersey. After reviewing your findings and some of the limitations, I wanted to administer the survey that you used to preschool to twelfth grade teachers in 3 counties in New Jersey. I am asking for your permission to use the survey instrument that you used in your study.

I believe an e-mail response giving me permission is all that I need to use the survey.

I will certainly share with you my findings when the study is completed.

I thank you advance for your consideration.

Daniel Silvia, Director of Special Services/Programs Spotswood Public Schools
105 Summerhill Road, Spotswood, NJ 08884

Ph:732-723-2247*Fax732-251-7666*Email:dsilvia@spotswood.k12.nj.us

-----Original Message-----

From: Tom Meagher [<mailto:tmeagher@lfschools.net>]

Sent: Tuesday, August 14, 2012 9:13 AM

To: Daniel Silvia

Subject: RE: Assistance contacting Thomas Meagher

Dan, Sorry for this late reply. I have been traveling the last week.

Feel free to contact me at tmeagher@lfschools.net for any questions about the dissertation.

Tom Meagher

-----Original Message-----

From: Brigid Schultz [<mailto:bschul1@luc.edu>]

Sent: Monday, August 06, 2012 3:55 PM

To: Tom Meagher

Subject: Fwd: Assistance contacting Thomas Meagher

Tom,

I hope this note finds you well and enjoying the summer. I received the attached email concerning your dissertation. It wasn't that long ago that you were in his shoes. Nice to be on the other side, heh?

Brigid

Dr. Brigid Schultz

Clinical Assistant Professor

School of Education

Loyola University Chicago

820 N. Michigan Ave.

Chicago, IL 60611

312/915-7089

Any communication sent or received by District 67 and/or District 115 is a public record and may be subject to inspection or copying under the Illinois Freedom of Information Act (FOIA).

Any communication sent or received by District 67 and/or District 115 is a public record and may be subject to inspection or copying under the Illinois Freedom of Information Act (FOIA).

Any communication sent or received by District 67 and/or District 115 is a public record and may be subject to inspection or copying under the Illinois Freedom of Information Act (FOIA).

References

- Anderson Steeves, K., Evan Bernhardt, P., Burns, J., & Lombard, M. (2009). Transforming American educational identity after Sputnik. *American Educational History Journal*, 36(1), 71-87.
- Angus, D. L. (2001). *Professionalism and the public good: A brief history of teacher certification*. Washington DC: Thomas B. Fordham Foundation.
- Bolman, L.G., & Deal, T.E. (2008). *Reframing organizations*. San Francisco, CA: Jossey-Bass.
- Banchero, S. (2006, June 6). Study: Student achievement linked to teacher quality. *News Leader*, p. 10A.
- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. (2000). Designing professional development that works. *Educational Leadership*, (May), 28-33. Retrieved from http://exitportfolio-robertson.wiki.westga.edu/file/view/designing_professional_development_that_works.pdf
- Broughman, S.P., "[Teacher Professional Development in 1999–2000](#)," National Center for Education Statistics, 2006.
- Buckley, J., Schneider, M., & Shang, Y. (2005). Fix it and they might stay: School facility quality and teacher retention in Washington, DC. *Teachers College Record*, 107(5), 1107-1123.
- Darling-Hammond, L., & Milbrey, W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, (April), Retrieved from <http://www.questia.com/read/1G1-16834863/policies-that-support-professional-development-in>
- Darling, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1-49.
- Department of Education, (2011). *New Jersey School Report Card*. Retrieved from website: <http://www.state.nj.us/education/finance/sf/dfg.shtml>
- Desimone, L., & Long, D. A. (2010). Teacher Effects and the Achievement Gap: Do Teacher and Teaching Quality Influence the Achievement Gap between Black and White and High- and Low-SES Students in the Early Grades?. *Teachers College Record*, 112(12), 3024-3073.
- Dufour, R., Dufour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work*. (2nd ed., p. 11). Bloomington, IN.: Solution Tree Press.

Duncan, A. United States Department of Education, (2011). *Our future, our teachers the obama administration's plan for teacher education reform and improvement*. Retrieved from website: <http://www.2ed.gov/inits/ed/index/html>

Elfers, A. M., Plecki, M. L., & Knapp, M. S. (2006). Teacher mobility: Looking more closely at "the movers" within a state system. *Peabody Journal of Education*, 81(3), 94-127.

Elmore, R. F. (1997). *Investing in teacher learning: Staff development and instructional improvement in Community School District #2* (Report). New York: National Commission on Teaching & America's Future.

Elmore, R. F., Peterson, P. L., & McCarthy, S. J. (1996). *Restructuring in the classroom: Teaching, learning, and school organization* (1st ed.). San Francisco, CA: Jossey-Bass Publishers.

Gouwens, J. (2009). *Education in crisis: A reference handbook*. Santa Barbara, CA: ABC-CLIO.

Guskey, T., & Sparks, D. (1991). What to consider when evaluating staff development. *Educational Leadership*, 73-76.

Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher*, 15(5), 5-12.

Guskey, T. R. (1999, April). New perspectives on evaluating professional development. Paper presented at the Annual Meeting of American Research Association. Retrieved July 2008 from EBSCOhost.

Guskey, T. R. (2003). Analyzing lists of the characteristics of effective professional development to promote visionary leadership. *National Association of Secondary School Principals Bulletin*, 87(637), 4-21. 214

Guskey, T. R., & Sparks, D. (2002, April). Linking professional development to improvements in student learning. Paper presented at the Annual Meeting of American Research Association. Retrieved July 2008 from EBSCOhost, academic achievement, 1996.

Guskey, R., Thomas and Yoon, Suk, Kwang, What Works in Professional Development?, *Phi Delta Kappan*, Vol. 90, No. 07, March 2009, pp. 495-500.

Hanushek, Kain, O'Brien, & Rivkin, The Market for Teacher Quality, 2005. NBER Working Paper No. 11154 Issued in February 2005.

Hinkle, D., Jurs, S., & Wiersma, W. (2003). *Applied statistics for the behavioral sciences*. (5th ed., p. 122). Belmont, CA: Wadsworth, Cengage Learning.

Hirsch, E., Emerick, S., Church, K., & Fuller, E. (2006). *Teacher working conditions are student learning conditions*. Chapel Hill, NC: Center for Teaching Quality.

Hirsch, E., Freitas, C., Church, K., & Villar, A. (2008). *Illinois teaching, leading and learning survey*. Santa Cruz, CA: Illinois Tell.

Huysman, J. T. (2007). *Rural teacher satisfaction: An analysis of beliefs and attitudes of rural teachers' job satisfaction*. Orlando, FL: University of Central Florida.

Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). Who stays in teaching and why: A review of the literature on teacher retention. Report completed through The Project on the Next Generation of Teachers of the Harvard Graduate School of Education. Retrieved on January 4, 2010.

Jordan, H., R. Mendroe, and D. Weerasinghe. 1997. "Teacher Effects on Longitudinal Student Achievement." Washington, D.C.: U.S. Department of Education.

Kedzior, M., & Fifield, S. (2004). *Teacher professional development*. (Master's thesis, University of Delaware) Retrieved from http://biohealth.deanza.edu/dare/resources/professional_development.pdf

Klassen, R., & Chiu, M. (2010). Effects on teachers' self efficacy and job satisfaction: Teacher gender, years of experience and job stress. *Journal of Education Psychology*, 102(3), 741-756. Retrieved from https://umdrive.memphis.edu/yxu/public/Hamlet_and_McConnell.pdf

Ladd, H. F. (2009). *Teachers' perception of their working conditions: How predictive of policy-relevant outcomes?* Durham, NC: Duke University.

Loucks-Horsley, S., Hewson, P. W., Love, N., Stiles, K. E., Dyasi, H. M., & Friel, S. N. (1998). *Designing professional development for teachers of science and Mathematics*. Thousand Oaks, CA: Corwin Press.

Meagher, T. (2011). *An investigation of the relationships of teacher professional development, teacher job satisfaction, and teacher working conditions*. (Doctoral dissertation), Available from Proquest. (3456080).

National Center for Educational Statistics. (1994). Data compendium for the NAEP 1992 reading assessment of the nation and the states: 1992 NAEP trial state assessment. Washington, D.C: U.S. Department of Education.

National Center for Education Statistics, (2006). *Teacher professional development in 1999 2000: What teachers, principals, and district staff report.*. Retrieved from ED Pubs website: <http://eric.ed.gov/PDFS/ED489422.pdf>

National Center for Educational Statistics. *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2005-06 (Fiscal Year 2006)*. Washington, D.C.: Institute for Education Sciences, U.S. Department of Education, 2008. <http://nces.ed.gov/pubs2008/expenditures>.

No Child Left Behind Act of 2001, United States Congress, 107th Congress of the United States of America Sess. (2001).

Oliver, R. E. (2007). Relationship between teacher job satisfaction and teaming structure at the middle school level. Unpublished Dissertation, University of Kansas, Lawrence, KS.

Parsons, J., & Harding, K. (2011). Making Schools Work Better. *Online Submission*,

Philliber, S., Schwab, M., & Sloss, G. (1980). *Social research*. Itasca, IL.: F E Peacock Publisher, Inc. Retrieved from <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=67080>

Phillips, K. R. (2010). What Does "Highly Qualified" Mean for Student Achievement? Evaluating the Relationships between Teacher Quality Indicators and At-Risk Students' Mathematics and Reading Achievement Gains in First Grade. *Elementary School Journal*, 110(4), 464-493.

Reeves, T. D., & Pedulla, J. J. (2011). Predictors of teacher satisfaction with online professional development: evidence from the USA's

Richey, H. G. (1957). Growth of the modern conception of in-service education. In N. B. Henry (Ed.), *Inservice education for teachers, supervisors, and administrators*. *Fifty-Sixth yearbook of the National Society for the Study of Education*. Chicago, IL: University of Chicago Press.

Rockoff, J. *The American Economic Review* Vol. 94, No. 2, Papers and Proceedings of the One Hundred Sixteenth Annual Meeting of the American Economic Association San Diego, CA, January 3-5, 2004 (May, 2004), pp. 247-252

Sawchuk, S. (2010, November 10). Professional Development for Teachers at Crossroads. *EducationWeek*. Retrieved April 9, 2013, from http://www.edweek.org/ew/articles/2010/11/10/11pd_overview.h30.html

Schmoker, M. (2002, May). The real causes of higher achievement. *Southwest Educational Development Laboratory Newsletter*, XIV, pp. 1-6.

Schugurensky, D., & Aguirre, N. (2005, June 23). The Progressive Education Association is founded. *Selected Moments of the 20th Century*. Retrieved March 22, 2009 from http://fcis.oise.utoronto.ca/~daniel_schugurensky/assignment1/1919pea.html

Sioberg, A., & Hirsch, E. (2006). *North Carolina Teacher Working Conditions Survey*. Santa Cruz, CA: New Teacher Center.

Turner, H. C. (2007). Predictors of teachers' job satisfaction in urban middle schools. Unpublished Dissertation, University of North Carolina, Chapel Hill, NC.

Tyack, D. B. (1967). *Turning points in American educational history*. Waltham, MA: Blaisdell Pub. Co.

Valentine, P. F. (1946). *Twentieth century education: Recent developments in American education*. New York: Philosophical Library.

Wei, R.C., Darling-Hammond, L., Andree, A., Richardson, N., Orphanos, S., ["Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad,"](#) National Staff Development Council, 2009.

Yoon, Kwang Suk, Teresa Duncan, Silvia Wen-Yu Lee, Beth Scarloss, and Kathy L. Shapley. *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement*. Issues and Answers Report, REL 2007 – No. 033. Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest, 2007. <http://ies.ed.gov/ncee/edlabs>.