A Longitudinal Analysis of New Jersey School Superintendents, their Professional Profiles and Career Paths

By

M. Kersti Kolu

A Dissertation submitted to the

Graduate School-New Brunswick

Rutgers, The State University of New Jersey,

in partial fulfillment of the requirements

for the degree of

Doctor of Education

Graduate Program in Education Administration

written under the direction of

Bruce Baker, Ed. D.

Catherine Lugg, Ph. D.

Thomas Tramaglini, Ed. D.

New Brunswick, New Jersey

May, 2014

Copyright © 2013

by

M. Kersti Kolu

ABSTRACT

This longitudinal study highlights changes to the demographics of the superintendency for the 15 year period from 1996 through 2011 and career paths of those New Jersey superintendents in position in 2011. The findings are for all districts in New Jersey as well as contextually based on the districts' geographic locations, socioeconomic standings, and school configurations. The purpose of the study is to provide thought provoking findings and stimulate research of administrative leadership in education.

Demographically, the most significant change during the 15 year period is the number of female superintendents. From 1996 until 2011, the percentage of female superintendents rises from 13% of all New Jersey superintendents to 28%. Socioeconomically, the largest increases in female superintendents occur in the two highest socioeconomic groupings.

Average annual salaries rise from \$100, 912 in 1996 to \$167,905 in 2011 for New Jersey superintendents. When separated by gender, in 1996, the average salary for women is 6% less than the average male salary. In 2011 female superintendents earn 7% less. Racial/ethnic minority superintendents earn more than the average annual income for all superintendents for the entire length of the study, from a 9% differential in 1996 to 12% in 2011.

While the career paths for the New Jersey superintendency typically move through the education system, from teacher to principal to assistant superintendent. A second career path appears to be emerging with 18% of the 2011 superintendents recruited from outside the New Jersey educational system.

Superintendent movement between districts and out of the system impacts districts through high turnover rates. While statewide tenure for superintendents averages at five years, in the context of district grade configurations, the average tenure for superintendents in k-12 and k-8 districts drops to 2.7 years and increase to 7.5 years for superintendents in special school districts. Socioeconomically, average tenure for the poorest and two wealthiest socioeconomic groups (DFG A, I, J) is at 2.7 years.

TABLE OF CONTENTS

	PAGE
ABSTRACT	iii
LIST OF TABLES.	xii
LIST OF FIGURES.	xiii
CHAPTER 1 – INTRODUCTION.	1
Background	1
Purpose of Study	. 3
Research Questions	. 5
Challenges and Limitations	. 6
CHAPTER 2 – LITERATURE REVIEW.	8
Longitudinal Studies	8
The Superintendent	9
Background	. 9
Role of the Superintendent.	. 10
Female Superintendents	12
Racial/ethnic Minority Superintendents	. 12

Superintendent's Age	13
Superintendent in Context.	14
Superintendent's Compensation.	15
Principal Demographics	17
Career Pathways	18
Superintendent Mobility	18
Career Development Theory	18
Superintendent Turnover	20
The Interim Superintendent	22
Literature's Response to Study Questions	22
CHAPTER 3 – METHODOLOGY.	26
Data Analysis	27
Data Processing.	29
Limitations	30
CHAPTER 4 – RESULTS.	32
Research Questions	32
2010-2011 New Jersey School District Superintendents	33

Comparison of 2010-2011 Superintendents and Principals	34
Longitudinal Study of New Jersey Superintendents – 1996-2011	35
An Overview of All School District Superintendents in New Jersey	35
New Jersey Superintendent Population	35
Superintendents by Gender	36
Racial/ethnic Minority Superintendents	37
Education Levels of Superintendents	39
New Jersey Superintendents' Ages	41
The Level of Experience of New Jersey Superintendents	42
New Jersey Superintendents' Salaries	44
Contextual Overview of New Jersey Superintendents	48
New Jersey Superintendents by District Configurations	48
School District Configurations in New Jersey	48
Superintendents' Gender by District Configurations	50
Racial/ethnic Minority Superintendents by District	
Configurations	50
Superintendents' Educational Levels by District	

Configurations	51
Superintendents' Salaries by District Configurations	53
New Jersey Superintendents by Districts' Socioeconomic Levels	54
Socioeconomic District Groupings	54
Gender of New Jersey Superintendents by DFG	55
Racial/ethnic Minority Superintendents by DFG	56
Educational Levels by DFG	57
Superintendents' Salaries by DFG	57
New Jersey Superintendents by Geographic Location	58
New Jersey Geographic Divisions	58
Gender of New Jersey Superintendents by Location	58
Racial/ethnic Minority Superintendents by Location	59
Superintendents' Salaries by Location	61
Educational Levels by Location	63
Superintendents' Career Paths	64
Superintendents' Movements	64
Movement into and out of the Superintendent Position	64
Movement from other Certificated Positions into the	

Superintendency	66
Superintendents' Movements between New Jersey Districts	67
Superintendents' Movements to other Positions in New Jersey	
School Districts	68
Career Moves of 2010-2011New Jersey Superintendents	69
Annual Movement into the Superintendent Position	69
2010-2011 Superintendents in 1996-1997	70
Movement into the Superintendency	70
Positions Held Prior to the Superintendency	70
Changes in Educational Attainment	71
Movement into Initial Superintendent Position	72
Movement into Initial Superintendent Position by	
District Configuration and Socioeconomic Groupings	72
New Jersey Superintendent Turnover	77
Turnover Rate Tracking	77
Superintendent Turnover Statewide	77
Superintendent Turnover by District Configuration	78

Superintendent Turnover by Socioeconomic Group	79
Superintendent Turnover by Geographic Location	80
Superintendent Turnover by Region	80
Superintendent Turnover by Population Density	80
Superintendent Turnover by Median Incomes	81
Superintendent Turnover by Recorded Incidences of	
Violence	81
Final Thoughts	82
CHAPTER 5 – DISCUSSION.	83
Superintendent Demographics Discussion	83
Gender	83
Racial/ethnic Minorities	84
Superintendents' Ages	85
Superintendents' Years of Experience	86
Superintendents' Salaries	86
Superintendents' Career Paths Discussion	87
Superintendents' Movement Between and Out of Districts	87

Last Position Held Prior to Superintendent	89
Where Does Career Path Lead	89
Turnover Discussion.	90
Conclusions.	91
Limitations.	93
REFERENCES	94

LIST OF TABLES

Pa	AGE
Table 1. Alignment of Research Questions, Data, and Analysis Approaches	27
Table 2. Comparison of New Jersey Superintendent and Principal Profile	
Characteristics for the 2010-2011 School Year.	34
Table 3. The Comparison of Superintendent and Principal Characteristics	
Pertaining to Age, Experience and Salary for the 2010-2011 School Year	35
Table 4. Comparison of Male and Female Superintendent Populations for	
1996-1997 and 2010-2011 by District Configuration.	50
Table 5. Changes in the Minority Superintendent Populations for	
1996-1997 and 2010-2011 by District Configuration.	51
Table 6. New Jersey District Factor Groupings and the Number of	
Districts in Each	55

LIST OF FIGURES

P	AGE
Figure 1. Number of New Jersey superintendents, interims	
superintendents/shared superintendents and vacancies, 1996-1997	36
Figure 2. Distribution of New Jersey superintendents by gender, 1996-2011	37
Figure 3. Distribution of New Jersey superintendents based on	
racial/ethnic delineations, 1996-2011	38
Figure 4. Distribution of New Jersey racial/ethnic minority	
superintendents, 1996-2011	38
Figure 5. Distribution of New Jersey superintendents based on	
educational attainment, 1996-2011	39
Figure 6. Distribution of New Jersey male superintendents by	
educational attainment, 1996-2011	39
Figure 7. Distribution of New Jersey female superintendents by	
educational attainment, 1996-2011	40
Figure 8. Distribution of New Jersey racial/ethnic minority superintendents	
by educational attainment, 1996-2011	40
Figure 9. Distribution of New Jersey superintendents by age, 1996-2011	41
Figure 10. Distribution of New Jersey superintendents' years of experience	
in education, in the New Jersey educational system in a certificated	
positions, 1996-2011	42
Figure 11. Distributions of New Jersey male and female superintendents' years	
of experience in education, in the New Jersey educational system in a	

	certificated position and in his/her current district, 1996-2011	43
Figure	12. Distribution of New Jersey racial/ethnic minority superintendents'	
	experience in education, in a New Jersey certificated staff position	
	and in his/her current district, 1996-2011	44
Figure	13. Distribution of New Jersey superintendents' average annual	
	salaries, 1996-2011	45
Figure	14. Comparison of average annual salaries for male and	
	female superintendents, 1996-2011	45
Figure	15. Comparison on annual salary levels according to racial/ethnic	
	categories of White and racial/ethnic minorities, 1996-2011	46
Figure	16. Comparison of New Jersey superintendents annual salaries based	
	on educational attainment, 1996-2011	47
Figure	17. Comparison of New Jersey superintendents annual salaries based	
	on level of educational experience, 1996-2011	47
Figure	18. Comparison of New Jersey superintendents' educational attainment	
	based on district configuration of those regular districts that provide	
	regular education from kindergarten to grade 6, grade 8 or	
	grade 12, 1996-2011	52
Figure	19. Comparison of New Jersey superintendent's education attainment	
	for districts that contain grades 7-12, and 9-12 for both regular education	
	and vocational education.	53
Figure	20. Comparison of New Jersey superintendents' educational attainment	
	for special districts that provide services for regular	

education districts, 1996-2011	53
Figure 21. Comparison of New Jersey superintendents' average annual	
salaries and annual salary increases based on school district	
configurations, 1996-2011	54
Figure 22. Comparison of increases in New Jersey female superintendents	
according to socioeconomic groupings (DFG), 1996-2011	56
Figure 23. Comparison of the distribution of New Jersey racial/ethnic	
minority superintendents by DFG, 1996-2011	56
Figure 24. Comparison of New Jersey superintendents' educational	
attainment by DFG, 1996-2011	57
Figure 25. Comparison of New Jersey superintendent annual salaries	
based on DFG, 1996-2011	58
Figure 26. Distribution of New Jersey male superintendents by	
geographic region, 1996-2011	59
Figure 27. Distribution of New Jersey racial/ethnic minority	
superintendents by region, 1996-2011	60
Figure 28. Comparison of New Jersey White superintendents in the	
Philadelphia and New York metro areas, 1996-2011	61
Figure 29. Comparison of New Jersey superintendents' annual salaries	
based on geographic region, 1996-2011	62
Figure 30. Comparison of New Jersey metro area superintendents' annual	
salaries, 1996-2011	63
Figure 31. Comparison of New Jersey superintendents' educational	

attainment based on geographic region, 1996-2011	63
Figure 32. Comparison of New Jersey metro areas superintendents'	
educational attainment, 1996-2011	64
Figure 33. Movement into and out of New Jersey superintendent	
positions, 1996-2011	65
Figure 34. Movement from other New Jersey certificated positions to	
superintendents' position, 1996-2011	66
Figure 35. Distribution of New Jersey superintendents that move to	
other districts, 1996-2011.	67
Figure 36. Distribution of New Jersey superintendents who change districts	
without any salary increases 1996-2011	68
Figure 37. Comparison of annual salary increases for all New Jersey	
superintendents and salary increases for those New Jersey superintendents	
who changed districts and received salary increases, 1996-2011	68
Figure 38. Distribution of New Jersey superintendents who returned to other	
certificated positions, 1996-2011.	69
Figure 39. Movement of 2010-2011 New Jersey superintendents into the	
superintendent positions, 1996-2011	69
Figure 40. Comparison of 2010-2011 New Jersey superintendents' career path	
movement prior to assuming the superintendent position, 1996-2011	71
Figure 41. 2020-2011 New Jersey superintendents' educational attainments,	
1996-2011	71
Figure 42. New Jersey 2010-2011 superintendents' movement from certificated	

positions of principal or administrator to superintendent, 1996-2011	72
Figure 43. Annual movement of 2010-2011 New Jersey superintendents from	
outside of the New Jersey educational certificated positions to	
superintendent, 1996-2011	73
Figure 44. Initial districts for 2010-2011 New Jersey superintendents according	
to their previous certificated positions, 1996-2011	73
Figure 45. Movement from administrative positions to superintendent by	
district configuration, 1996-2011	74
Figure 46. Distribution of New Jersey principals when they become	
superintendent by district configuration, 1996-2011	75
Figure 47. Distribution of 2011 New Jersey superintendent prior positions	
by socioeconomic grouping, 1996-2011	76
Figure 48. Initial superintendent positions for those individuals that were	
not certificated staff members in New Jersey in their previous position	
by district configuration and socioeconomic grouping, 1996-2011	77
Figure 49. Turnover rates for all New Jersey districts, 1996-2011	78
Figure 50. Superintendent turnover rates for New Jersey school districts by	
district configuration, 1996-2011	79
Figure 51. Superintendent Turnovers by socioeconomic grouping, 1996-2011	80
Figure 52. New Jersey superintendent turnover rates by geographic region,	
1996-2011	81

INTRODUCTION

Background

During the past two decades, educational research scholars have devoted their attention to examining every aspect of the school environment to discover the positive influences on student achievement. Investigations into teacher quality and school level educational leadership have revealed strong relationships between teacher and principle qualities and the improvement of student achievement (Darling-Hammond & Loewenberg-Ball, 1997; Leithwood & Mascall, 2008; Nettles & Herrington, 2007; Witzers, Bosker & Kunger, 2003). Based on the compelling results of these studies, state legislators and administrators are enacting strategies to strengthen certification requirements and improve professional development programs for both teachers and school principals (Darling-Hammond, 2000; Fuhrman, 1999).

With the primary focus at the school level, little attention has been devoted to school district administration. While state and local governments and public education advocacy groups have scrutinized administrative costs, little empirical data has been examined to identify the characteristics, organization and functioning of school district administrators and the influence these administrators may have on district operations and ultimately on student achievement. States have been gathering administrative data for more than a decade but little is known empirically about district staff members of whom the superintendent is the one consistent member. S/he plays a major role in the launching and sustaining initiatives for instructional improvement in the district (Bjork, Glass & Brunner, 2005).

The structure of the district administration is typically the product of a number of environmental and educational considerations. Every district has some level of centralized

administration, the extent of which depends on district size and demographics (Kowalski (2003)). In New Jersey, large districts district offices consist of several administrators, supervisors, directors and support staff. In small districts the district staff may consist of the superintendent, business administrator and one or two support staff personnel.

While the compositions of district staffs fluctuate, the one consistent position is that of the superintendent. In 2010, superintendents led 12,600 school districts in the United States (Kowalski, McCord, Petersen, Young & Ellerson, 2011). Their responsibilities include instructional leadership, operational management, board relations, and community interaction. They are perceived as key players in the success of educational reform (Glass & Franceschini, 2007).

By implementing a longitudinal study of all school superintendents in a given state, national trends are compared and contrasted. Superintendents are studied from both the individual and district perspective. The characteristics of the superintendents in terms of age, gender, and race/ethnicity provide information as to who the New Jersey school district superintendent population is. Career paths identify pools of candidates by position for future vacancies. Tracing career changes of existing superintendents assists in the prediction of motivators that encourage individuals to enter the field and move from one position to another. An analysis of superintendent turnover for the past 15 years may uncover some insight to the stability of the position. It may also identify districts by socioeconomics, configuration or geographic regions that might be more volatile than others in the turnover of superintendents.

Recent studies have already begun to investigate the responsibilities of the school district superintendent in relation to No Child Left Behind (2001) and the role the superintendent plays in student achievement. The majority of these studies have been qualitative. In response to the

perceived shortage of qualified leader at both the school and district levels, empirical research has been conducted on a state by state basis at the school level, with concentration on career paths and upward mobility in the educational community(Clifford, Brown, & Baker, 2010; Gates, Ringel, Santibanez, Guarino, Ghosh-Dastidar & Brown, 2006; Ringle, Gates, Chung, Brown & Ghosh-Dastidar, 2004; Baker, Punswick & Belt, 2010).

Purpose of Study

This study examines the superintendent population in New Jersey over the 15 year period of 1996-2011 and documents any changes. It also examines any anomalies in the superintendent profile based on school districts' school configuration, socioeconomic standing and geographic location. It will follow the position of superintendent for the 15 years of the study, movement in and out of the position and movement from district to district. It will also track the all of superintendents in 2011 from the time they entered the New Jersey Public School System, record the positions they held and their movement in the superintendency. From a district perspective, superintendent turnover is examined by school district configuration, socioeconomic standing, and geographic location.

The state of New Jersey, with its diverse population of districts and students will provide a spectrum of educational scenarios upon which to examine the characteristics of the superintendent and his/her movement into and out of superintendent positions within the state. There are 590 operating school districts in New Jersey with either a full or part time superintendents. District sizes vary with over 50 districts with less than 300 students and approximately the same number with over 9000 students. Socioeconomically, district free lunch populations vary from 2% of total population to over 45%. Minority enrollments vary from 8 % to over 70% of all district students.

In New Jersey, all operating districts must employ a superintendent or an administrative principal, a business administrator and treasurer according to statute (NJ18A). Superintendents and business administrators may be shared. According to the New Jersey Department of Education (2008) as of January 1, 2008, there were 559.2 full time equivalent superintendents employed in 594 districts in New Jersey. Their average salary was \$153,149.00, with benefits valued at an additional 25% of their annual salary (Urban Indicator, 2008). This equals an average approximate cost of \$ 192,000 per full time superintendent or a statewide cost of \$ 120,000,000 per year.

With the large number of districts in New Jersey, this study provides state legislators and administrators with a long term look at how New Jersey superintendents have changed, identifies motivators that propel individuals to enter the field, and further identifies possible causes for movement to another district or to exit the field entirely.

The American Association of School Administrators (AASA) has periodically surveyed members for the past 90 years to provide an accurate picture of the superintendent. Typically, these surveys are conducted every 10 years. But due to the mandated state and national accountability programs, a mid-decade study was conducted in 2006 with 1,338 superintendents of the 14,063 or less than 10% nationally participating. Amongst the items surveyed were tenure, turnover, career paths, characteristics, and career preparation (Glass & Franceschini, 2007). If the study reveals that superintendents in New Jersey are a microcosm of superintendents nationally then perhaps some of the findings will have application in other states.

As Punswick, Baker and Belt (2009) analyzed the relationship between principals' backgrounds and school level factors associated with leadership stability; this study conducts a similar analysis of superintendents in New Jersey. It addresses the following questions. Who is

the New Jersey school superintendent in terms of age, sex, and race? Who was he/she 15 years ago and how has the position changed in the 15 years of the study? In terms of professional characteristics, what are the typical superintendent's career path, tenure, and turnover? Are they different according to district size, location or socioeconomic status? What is the relationship between their compensation and professional characteristics or is compensation dependent on district size, location or socioeconomic status?

This study may identify opportunities for the New Jersey state official for further analysis of the role of the superintendent in New Jersey and the budgetary and intrinsic cost of superintendent turnover and its effect on student achievement. The anomalies or the lack of them may provide researchers with an interesting question or an irksome insight that requires and inspires further inquiry into the role of the superintendent in New Jersey. It may also peak a researchers curiosity as to the superintendency in their region.

Research Questions

This study addresses three research questions, each with a series of sub-questions.

Research Question 1 – Superintendent Profile: What are the characteristics of school district superintendents in New Jersey?

- 1.1 Demographics and Experience: Who are the school district superintendents in New Jersey in terms of age, sex, and race/ethnicity? How many years of educational experience do they have and what is their educational level?
- 1.2 Demographic changes: Have the demographics and experience level changed in the past 15 years and if so how?

• 1.3 Superintendent versus principal demographics and experience: How do they compare?

Research Question 2 – Career Pathways: What is the typical career pathway for New Jersey superintendents?

- 2.1 Movement between districts: What is the typical movement between districts for a superintendent in New Jersey during the past 15 years? Are there school district characteristics in terms of size, socioeconomic status or grade configuration that change as a superintendent moves from one district to another? What is the change in compensation when a superintendent moves from district to district?
- 2.2 Who are the 2011 superintendents? What are their career pathways?
- 2.3 Are there contextual differences that establish different career paths for different types of districts?
- 2.4 Who is the exiting superintendent? Does he or she remain in public education and in what capacity?

Research Question 3 – Superintendent Turnover: What is the typical turnover of New Jersey superintendents?

- 3.1 What is the average turnover for superintendents in New Jersey for the years 1996-2011?
- 3.2 Are there differences in turnover rates based on contextual differences?

Challenges and Limitations

This study has two limitations. Accuracy of data is a significant limitation of the study. Since the Annual Certificated Staff reporting is done on the district level and submitted to the State annually, there may be some cause for concern as to the validity of the data. The data is scanned for outliers and verified to the extent possible and documented in the study.

The final limitation of the study is the unknown. Very little empirical research has been done on the superintendency and the study will have to rely on empirical studies of principals and teachers to substantiate the processes used in this study. Also, there will be no comfort zone in the analysis of data. There will be no other results to compare and contrast.

CHAPTER 2 - LITERATURE REVIEW

Longitudinal Studies

In research, when describing a theory, the variables and the interaction of these variables are described in dynamic terms. Cross-sectional research design variables and their interaction are examined in a static form (Pitariu & Ployhart, 2010). According to Singer & Willett (2003), a static observation does not indicate change. There are many reasons or circumstances that may facilitate change in variables other than the causal one proposed in the research theory. True examination of theories as they relate to causal relationships of variables necessitates the use of a longitudinal research design.

Longitudinal research is used to study change or continuity of characteristics of a population or a sample population over a period of time. Longitudinal studies primarily are divided into three research designs: trend, cohort and panel. A trend study is one where the population changes constantly during the study. In cohort studies, the population remains constant but different sample populations are selected. The panel study follows the same individuals at each data-collection point (Gall et al, 1996).

While panel studies identify changes in individuals, which trend and cohort studies cannot, there may be difficulties with data collection. Repeat measurement using the same instrument may elicit rote responses or perceived proper responses. The decrease in panel participants over the duration of the study is also problematic, causing panel studies to be shorter in length than trend or cohort studies. Despite the disadvantages, panel studies are more sensitive to changes and can associate the change to the individual at a specific data-collection point and tie the change and occurrence to an event or change in characteristics (Gall et al, 1996).

9

An additional element of longitudinal research is the purpose of the research.

Longitudinal studies can be either descriptive or explanatory. Descriptive longitudinal research attempts to illustrate the form of change over time. Explanatory longevity studies seek to explain why a variable changes over time. Both descriptive and explanatory longitudinal studies have their purposes in research. It is essential to have an accurate picture of the change trend prior to investigating the reason for the change. Therefore, conceptualization of the form of change when studying variables of interest should precede the formulization of theories as to why the change occurred (Ployhart & Vandenberg, 2010).

There are many advantages to longitudinal studies when theorizing about change and time. Longitudinal studies tend to have smaller residual terms than cross-sectional designs (Keppel, 1991). With more repeated measurement, reliability increases (Willett, 1989). Longitudinal studies also provide strong inferences for causality (Antonakis, et al. 2010).

There are also concerns implementing longitudinal studies, specifically in the area of design and methodology. Frequency and timing of the repeated measures (Mitchel & James, 2001) must be carefully determined to enable the detection of meaningful forms of change.

Attrition in longitudinal studies raises concern as to continuity of representation of respondents over the period of the study (Chan, 1998). Missing data and its effect on study results (Goodman & Blum, 1996) is also a concern. The issue of longitudinal validity and that the identical construct is used throughout the study (Bollen & Curran, 2006) must be dealt with. Finally, longitudinal studies are costly, difficult to conduct and time consuming (Rocconi & Ethington' 2009).

The Superintendent

Background

Although the term superintendent was used in the mid eighteen hundreds, school superintendency was first recognized by the educational historians as a profession distinct from teaching in the early 1900's (Callahan, 1962). Universities had courses and programs in place for school administrators. By 1918, the movement to recognize school administrators as educational experts was firmly established and superintendents held authoritarian management positions in school districts.

Callahan (1966) described the critical role of school superintendent as follow;

"This is so because he, more than any other single individual, is in a position to influence the quality of education that each child receives. He either appoints or promotes teachers directly or he chooses the person who does. He is usually the only professional educator who sits with the school board and he represents the schools before the public. Within the school system he more than anyone else, influences the climate in which teaching and learning must go on. The principal of a school has, of course, a great dealt to do with the quality of work done in a particular school and this is true especially if he has the power to hire teachers. Still, he is always subordinate to the superintendent and the school board. So if a community has an able, well-qualified person in this key job and if it has the financial resources, it has a good chance of having excellent schools. On the other hand, if a school district has an incompetent, or just as bad, a mediocre superintendent, it is almost impossible, regardless of the financial situation, to have excellent schools."

The above may be said of today's superintendent as well. What may have changed are the demands placed on the position and the priorities that establish the goals and objectives of the district. Glass and Franceschini (2007) state that modern superintendency consists of "instructional leadership, fiscal management, community relations, board relations, personnel management, and operations management (xiii)." They further describe modern superintendents as the major factors for the success of all mandated reforms.

Role of the Superintendent

Many new operational philosophies are emerging that alter the role of the superintendent. Researchers are finding that increased autonomy and instructional leadership decisions should rest with the school rather than the district (Fink & Brayman, 2006, Heck & Hallinger, 2009,

Leithwood & Mascall, 2008, Youngs, 2007). Studies in distributed leadership have indicated that student achievement improves as principals and teachers collaborate on instructional innovation (Marks & Printy, 2003, Mayrowitz, 2008, Marks & Nance, 2007).

While the superintendent's role is shifting from the traditional instructional leader/teacher to manager and communicator, her/his role as instructional leader now focuses on providing the resources for schools to operate at their instructional capacities to produce worthwhile and substantive learning (Cohan & Ball, 1998). This is done by providing the district with a mission and strategic plan, fostering the necessary organizational relationships, and providing the resources to accomplish these district goals (Grogan & Sherman, 2005). Resources in this context encompass not only fiscal resources but also human resources. As Fuller, Young and Baker (2009) findings suggest that principal and teacher quality are significantly related, the importance of the selection of quality staff becomes a key responsibility of the modern superintendent.

With the implementation of No Child Left Behind (2001), the role of the superintendent shifts from traditional instructional leader to an instructional leader with educational accountability. The district superintendent is expected to respond to the pressures of public measurement of student achievement based on state and national standards. Additionally, s/he is expected to implement performance improvement strategies while the economic uncertainties are translating into fluctuations in school funding (Farkas et al, 2001; Feurstein & Dietrichm 2003; Lecker, 2002; Sherman & Grogan, 2003).

This quest for improving student achievement has moved the role of the superintendent from bureaucratic model to a transitional one. No longer is the superintendent's primary responsibility one of compliance and control. It has shifted to one of innovation, data driven

decision making and sustaining learning environments for both staff and students that will enhance the educational experience of both and improve student achievement (Schlechty, 2006). In reality, today's superintendent's role exists somewhere between the empowering school level leadership and scrutiny and control (Sullivan & Shuster, 2005). The empowerment consists of developing the leadership abilities of principals and teachers. The control and scrutiny involves the hiring and firing of qualified personnel who will develop into school level leaders. Waters & Marzano (2006) concur that goal setting, providing staff with professional development and selection of principals and teachers as significant responsibilities for superintendents.

Female Superintendents

The underrepresentation of women in district superintendent positions is well documented in research literature (Bjork, 2000; Blout, 1998: Brunner, 2000; Edson, 1995; Grogan, 1996: Logan, 1999; Young & McLeod, 2001). Blout (1998) and Tallerico & Blout (2004) collected longitudinal data pertaining to women superintendents in the 20th Century in the United States. Their studies reveal that the percentage of female superintendents began at 8.9% in 1910, fell in 1970 to 3.4% and has increased to 10.0% in 1998. According to Grogran & Brunner (2003) percentage jumped to 18% in 2003. In 2006 the number had increased again to 21.7% (Glass & Franceschini, 2007). By 2010, 24.1 % of all superintendents are female (Kowalski et al., 2011).

Racial/ethnic Minority Superintendents

To date, there is very little historic date about non-black superintendents due to the very low numbers of superintendents in these minority groups (Simmons, 2005). The first Black superintendent was John W. Alvord appointed in 1865 at the national superintendent for the Freedmen's Bureau (Anderson, 1988). In the first half of the 20th century, most racial/ethnic

superintendents were employed in southern districts with large minority populations (Glass et al. 2000). In 2001, the National Alliance of Black School Educators reported that 1.8% (or 292) of superintendents nationwide were Black (NABSE, 2001). In 2004 that number had decreased to 271 (NABSE, 2004). By 2006, that number had declined to 1.4% (Glass & Franceschini, 2007). In 2010, Kowalski et al. (2011) reported that Black or African American superintendent population rose to 2%. Additionally the Hispanic or Latino superintendent population rose to 2%.

Superintendent's Age

The AASA has been tracking the median age of superintendents since 1923 when the median age for superintendents was 43 years. In 2006, this figure rose to 54. This has not been a steady climb. Between 1923 and 1960, the median age of superintendents rose by 8 years to 51 years of age. In 1970 the median age dropped to 48 and has been steadily increasing for 36 years to the 2006 level of 54 years of age (Glass & Franceschini, 2007).

By separating superintendents into age groups, Bjork, Keedy, & Gurley (2003) discovered that the distribution of superintendents by district size shifted in a 30 year period from 1971 to 2000. The number of superintendents over 60 declined in all district groups by size. What is interesting to note is that there is an increase of superintendents over 60 from 1982 until 2000 in every size group. The under 40 superintendents have all declined significantly in the 30 year period.

In 2006, the number of superintendents over age 60 increase in every district size group, with 15% of all superintendents over 60. Only 4% of the superintendents were under the age of 40, with no superintendents under 40 in the largest districts with more than 25,000 students.

Superintendents over the age of 55 were heads of 74% of these largest districts. In addition, 70%

of the smallest districts (less than 1000 students) had superintendents over the age of 55 (Glass & Franceschini, 2007). Kowalski et al. (2011) reported that in 2010 that 18.1% of the superintendents in their study were over the age of 60, a jump from 8 % in 2000. There was an increase in the number of superintendents younger than 46 from 9.8 % to 14.6%. This shift in age reduced the 46 through 60 year old age group from 82.2% to 67.3 %

Superintendent in Context

Since districts come in a variety of sizes and configurations, researchers have documented the relationship between the superintendent and the context in which s/he functions (Gronn & Ribbons, 1996). District context is defined by location, configuration and size.

Location can be divided into rural, suburban and urban. Configuration is the grade levels serviced by the district. District size can be either the number of schools or the number of pupils (Leithwood, et al., 2004). Glass & Franceschini (2007) separated districts into six groups when reporting the results of their national survey of superintendents based on student populations. Socioeconomic standing can also be used within the concept of context (Hannaway & Kimball, 1998).

Researchers are realizing that one size does not fit all in systemic reform but rather that they use context in order to identify limitations to determine the extent of a theory's applicability (Whettten, 1989). Rorrer, Skrla, & Scheurllich (2008) encourage future studies of district reform to "capture the social, political and economic context of districts." Meyer (2002) discusses the development of hybrid models for educational organizations to adapt to fit their context. Bredeson, Klar, & Johansson (2008) advocate a view of superintendents' leadership styles from a more of a context-responsive perspective and encourage context-responsive leadership strategies to provide a positive district environment in which to achieve.

Additionally, context allows for make distinctions in expectations of the superintendents role and responsibilities (Kowalski, 2005).

Context may also blur quantitative studies. Alsbury (2003) studied the Dissatisfaction Theory (Iannaccone & Lutz, 1070) as it related to superintendents. He concluded that due to the uniqueness of school districts and different pressures exerted on the superintendent that both quantitative and qualitative measures should be used when studying the theory.

Superintendent Compensation

In the private sector CEO pay is determined by strategic factors such as revenues and value added. Other influences on executive pay are risk and interaction between the CEO and other stake holders (Pandher &Currie, 2013). Three additional components are social influence tactics, interlocking networking, and ingratiation by the CEO also lead to increased salaries (Westphal & Stern, 2006). In the private sector executives have the power not only to influence their own pay (Bebchuk et al., 2002) but also to affect the salaries of their subordinates (Wade, O;Reilly, & Pollock, 2006). In the public sector, compensation must be fair, reasonable and transparent (Perego, 2012). Fair compensation is established by the governing body by developing a basis of comparison with other comparable agencies or governing bodies. All decisions on compensation and benefits must be decided in a public meeting. County managers', local managers', and district superintendents' salary increases are determined the same way. In some cases, specifically superintendents, there may be multiple year contracts specifying annual salary increases (Glass & Frnceschini, 2007).

Corporate executive salaries in 2004 in corporations with average revenues of \$72,000,000 earned an average of \$332,000 in salary (Huang & Chen,2013). In 2012, the median salary of county and local managers was \$103,000 with an observable correlation

between salary and size of the jurisdiction based on population (Moulder & Carlee, 2013).

Nationally, district superintendents earned a mean salary of \$40,000 in 1992 (Glass, 1992). By 1997, the contracted salaries of district superintendents had risen to an average of \$98,106 according to the 1998 Statistical Abstract of the United States. In 2006, the national average rose again to \$116,244 (Glass & Franceschini, 2007).

When dividing the Nation's school districts by student enrollment, average salaries for superintendents in 2006, superintendents in the largest districts with a student population of 25,000 or more earned an average of \$184,928,while while superintendents in districts with less than 2,500 students earned an average of \$103,388. When addressing the same superintendents' salaries by location, superintendents earned an average of \$186,924 in large urban districts, while those in rural districts earned an average of \$91,606 (Glass & Franceschini, 2007). Glass & Franceschini (2007) also calculated average salaries for 2003-2004 school year based on district expenditure per pupil. Those superintendents whose districts expenditures per student are more than \$9,000 earn an average of \$132,589. Superintendents in districts were the expenditure per student are less than \$6,000 earned an average of \$122,895.

Bozza (2010) debunks the myth that New Jersey superintendents are paid more than superintendents in other states. In 2008, New Jersey superintendents' salaries were \$ 4000 lower than those in the Mideast region. When compared with other executive position with comparable work forces in New Jersey, he found that these executives were paid considerably more. Higher education presidents received twice more, hospital CEOs earn four times more and corporate CEOs collect six times as much.

According to Kerr & Neuse (2000) not much progress had been made in shrinking the gender wage gap since biblical times when women were valued at 60% of men's worth. In 1963,

a year after the passing of the federal Equal Pay Act, women's pay rates were at 59% of men's pay rate (National Women's Law Center, 2009). In 2010, pay rate gap has decreased and women now earn 78% of what men earn (Reese & Warner, 2012). Reese & Warner (2012) studied gender pay gaps in the public sector. While a gender pay gap does exist, it is smaller in the public sector than in the private sector. Female to male pay spread in the public sector is 15 cents per dollar earned while in the private sector it is 22 cents.

Very little has been published about race/ethnicity pay gaps. The Council of the Great City School published a survey in 2008. This survey of 66 large urban school districts that serve 15% of the nation's students included salary by gender and racial/ethnic minority. Black superintendents were the only racial/ethnic minority participating due to the extremely small sample size of other racial/ethnic minority groups. The survey revealed that black and white superintendents both earned an average of \$236,000 annually. What was interesting to note was that female superintendents in this survey earned \$213,000 annually or \$23,000 less.

Principal Demographics

In Illinois, principals in 2000 are 48.9 years of age. In North Carolina they are 48.3 years old. Racial/ethnic minority principals are 18.5% and females principals are 46.6% of all principals in Illinois. In North Carolina, 47.7% of all principals are female and 23.9% are racial/ethnic minorities. Educational attainment amongst principals consists of 86.9% have master's degrees and 8.6% have doctorates in Illinois while 99.7% have master's degrees and 9.8% have doctorates in North Carolina (Gates, Ringel, Santibanez, Guarino, Ghosh-Dastidar, & Brown, 2005).

In Wisconsin, in 2009, 42.6% of the principals are female and 7.3% belong to a racial/ethnic minority group. The average age for all principals in Wisconsin is 48.1 years in

2009 and of this group 87% hold master's degrees (Clifford, Condon, Greenberg, Baker, Williams, Gerdeman & Fetters, 2012).

Career Pathways

Superintendent Mobility

According to research pertaining to superintendent mobility there appears to be two reasons that superintendents move from one district to another. Some superintendents move from smaller districts to larger ones with larger salaries and more prestige. Others move because of conflict in the district. Typically these are small rural districts where the school board members wield power in the community. Both groups agree that conditions that precipitated their moves had nothing to do with educational issues but rather with personalities (Parker, 1996).

Glass, Bjork, & Brunner (2000) found that most superintendents served in two to three districts in their 15-20 year careers as superintendents. 88% of the superintendents were superintendents in one state. 68% were hired from other districts. In 1992, 17% of superintendents started in small district and move up to larger and wealthier districts (Glass, 1992). Of the superintendents when surveyed in 2006 50% were in their first position and 23% had spent less than 5 years at their previous superintendency, 24% had been in two districts, 13% in 3 districts, 6% in four district and 5% in 5 or more districts (Glass & Franceschini, 2007).

Career Development Theory

Career development theory contains multi-faceted and dynamic theoretical perspectives (Chen, 2003). There have been several attempts to converge these perspectives into one multi-level model (Savickas, 2001). The original focus was personal control and internal satisfaction (Chen, 2006). This is overlaid by external and non-volitional components that limit personal control (Lent, Brown & Hackett, 2000). Bloch (2005) adds complexity, nonlinear dynamics and

chaos as additional components of career development theory. This divergence of theories indicates that there are more external factors that dictate career choices rather than youthful aspiration.

Conrad and Rosser (2007) take some elements of this theory and apply it to school administrators. They studied the intent of these administrators to advance in administration. They found that while school administrators are satisfied in their present positions, demographics and personal issues control whether or not they pursue advancement. They concluded that those individuals secure in their present upper level position are least likely to seek a higher level position.

When dividing the group by gender, Conrad and Rosser (2007) found that women were less likely to pursue higher level positions in administration. Traditional barriers such as stereotyping, personal issues and "glass ceiling" perceptions keep women from advancing in educational administration (Grogan & Brunner, 2005). Racial/ethnic minorities who have been able to persist through the barriers caused chiefly by discrimination, are more likely than Whites to pursue higher positions in administration (Conrad & Rosser, 2007). Studies in New York, Illinois and North Carolina also found that racial/ethnic minorities were more likely to pursue career advancement in education and that women were less likely to do so (Rand, 2004).

The traditional career path to the superintendency starts with teaching, advancing to building principal and then to superintendent (Kowalski et al., 2011). Bjork et al. (2005) contend that there are two career paths to the superintendency. One is from teacher to principal to district administrator to superintendent. This path is typically followed to attain superintendent positions in larger district. The traditional path from teacher to principal to superintendent is taken by superintendents in smaller districts.

Career paths for women differ from men. Women are more likely to become elementary school principals, district supervisors and assistant superintendents prior to becoming superintendents (Brunner, 2000). Glass (2000) contended that women proceeded from teaching to district positions were less likely to gain administrative, financial and community relations experience. They tended to move into positions that centered around curriculum and instruction.

Racial/ethnic minority candidates for superintendent positions were shown to follow yet again a different path. Bjork et al. (2005) found that the majority of candidates followed the same path as women. However, a significant number began their careers in administration as program directors for categorically funded programs in school districts and not as teachers.

Superintendent Turnover

In the early 1990's average tenure was reported at 2.5 years in large urban districts (Rist, 1991). Bjork et al. (2003) found that the mean tenure of superintendents ranged from a low of 5.6 years to just less than seven years in the period between 1970 and 2000. Kowalski (2003b) demonstrated that superintendent tenure has increased in the past 30 years rather than declined. Natkin, Cooper, Alborano, Padilla, & Ghosh (2003) also found that superintendent tenure has been relatively constant since 1975 averaging 6-7 years. Glass and Franceschiti (2007) agree that turnover rates traditionally average at 6 years. When examining the tenure figures for 2006, the mean tenure was 5.5 years with 42.2% of superintendents with tenures of 3 years or less (Glass and Franceschiti, 2007). In 2010, there appeared to be longer tenures for superintendents. There were 59.3% of superintendents surveyed serving in their first district and 59.3% had between 1 through 8 years of experience in the superintendency (Kowaliski et al., 2011).

While there is CEO stability in in the private sector as experienced by General Electric, Federal Express and Microsoft, large urban districts have not experienced the same stability

21

(Waters & Marzano, 2006). One of the suspected reasons that there is an unusually high turnover amongst superintendents is attributed to the professional victim syndrome (Polka & Letchka. 2008). This syndrome is described as a condition where superintendents are faced with career crisis where their reputations are being tarnished (Polka & Letchka. 2007). Sharp (1994) found that Illinois superintendents left their districts primarily to retire and secondly because of problems with the school board. According to a survey conducted in 2006 of superintendents in Georgia and New York, 140 of the 496 respondents had left a superintendent position or sought legal assistance in regard to their employment status (Polka & Letchka. 2008). Grissom & Anderson (2012) framed superintendent turnover as a function of complex factors such as age, educational attainment and job performance.

The majority of studies concerning the impact of administrative turnover on student achievement center around school level administrators (Baker et al. 2009; Baker et al. 2007; Baker & Cooper, 2005, Bista & Glassman, 1998; Hallinger & Hect, 1998; Herman et al., 2008; Leithwood et al., 2004). Recent research of the effect of executive replacement across both the private and public sectors show that the organizations that are high-performing suffer from changes in top management while low-performing organizations benefit (Boyne, James, John, & Petrovsky, 2011).

Villadsen (2012) contends that in public administration turnover benefits are the implementation of new ideas and more radical change when the new administrator is hired externally but that the results may be evident in the long term. Waters and Marzano (2006) discovered that the longer a superintendent stayed in his or her position the greater the positive effect on academic achievement. Further they found that the effect manifested itself as early as the third year of the superintendent's tenure. In a recent teacher survey, one of the top requests

was for strong, stable, long-term leaders reinforcing past studies that showed that real school reform takes a sustained leadership focus of at least five years to be successful (Sunderman, Traacey, Kim, & Orfield, 2004).

The Interim Superintendent

Interim superintendents are placeholders. They maintain district operations and conduct daily business and are in high demand. School boards readily appoint interim superintendents while searching for a permanent replacement. Although there is an estimated 17% turnover rate annually, the exact number of interim superintendents is difficult to calculate. Some may be temporary internal appointments while others may be replacing existing interim superintendents (Black, 2009).

Corporations also employ interim CEOs but have found this practice to be harmful.

Ballinger and Marcel (2010) studied the impact of interim CEOs on corporate both short term and long term. They discovered that during the tenure of the interim CEO, the firm experienced lower performance. Long term, the use on an interim CEO places the firm at a competitive disadvantage. They concluded that the use of interim is an inferior succession process.

Interim superintendents are needed, according to Bigham (2011). The use of interim superintendents allows school boards the time to make a permanent appointment. It insures that daily operations are completed. Also it positions the permanent superintendent for success by preparing the school district for the new superintendent and making unpopular decisions prior to his/her arrival.

Literature's Responses to Study Questions

Based on a review of the literature, the study questions would be answered as follows:

- 1.1 Demographics and Experience: Who are the school district superintendents in New Jersey in terms of age, sex, and race/ethnicity? How many years of educational experience do they have and what is their educational level?
 - o Kowalski et al.(2011) in their 2010 survey of 1,867 of the approximate 12,600 superintendents nationwide found that the average superintendent was a White male, whose age was between 56-60. He followed the traditional path to becoming superintendent of teacher, school principal to superintendent.
- 1.2 Demographic changes: Have the demographics and experience level changed in the past 15 years and if so how?
 - The percentage of female superintendents is at 10.0% in 1998 (Blout, 1998;
 Tallerico & Blout, 2004). The percentage jumps to 18% in 2003 (Grogran & Brunner, 2003). In 2006 the number increases again to 21.7% (Glass & Franceschini, 2007). By 2010, 24.1 % of all superintendents are female (Kowalski et al., 2011).
 - In 2001, 1.8% (or 292) of superintendents nationwide were Black (NABSE, 2001). In 2004 that number had decreased to 1.7% (NABSE, 2004). By 2006, that number had declined to 1.4% (Glass & Franceschini, 2007). In 2010, Kowalski et al. (2011) reported that Black or African American superintendent population rose to 2%. Additionally, the Hispanic or Latino superintendent population rose to 2%.
 - o In 1970 the superintendent's median age is 48 and steadily increases for 36 years to the 2006 level of 54 years of age (Glass & Franceschini, 2007).

- District superintendents earn a mean salary of \$40,000 in 1992 (Glass, 1992). By 1997, the contracted salaries of district superintendents had risen to an average of \$98,106 according to the 1998 Statistical Abstract of the United States. In 2006, the national average rose again to \$116,244 (Glass & Franceschini, 2007).
- o In 2010, women earn 78% of what men earn (Reese & Warner, 2012). Female to male pay spread in the public sector is 15%.
- 1.3 Superintendent versus principal demographics and experience: How do they compare?
 - Other demographic studies in Wisconsin, Illinois and North Carolina place principals between 48 and 49 years old. Racial/ethnic minority principals range from 7.6 to 23.9% of the principal population Females principals compose from 42.6% to 47.7% of all principals. Educational attainment amongst principals consists of 86.9% to 99.7 % have master's degrees and up to 9.8% have doctorates (Gates, Ringel, Santibanez, Guarino, Ghosh-Dastidar, & Brown, 2005; Clifford, Condon, Greenberg, Baker, Williams, Gerdeman & Fetters, 2012)

Research Question 2 – Career Pathways: What is the typical career pathway for New Jersey superintendents?

• 2.1 Movement between districts: What is the typical movement between districts for a superintendent in New Jersey during the last 15 years? Are there school district characteristics in terms of size, socioeconomic status or grade configuration that change as a superintendent moves from one district to another? What is the change in compensation when a superintendent moves from district to district?

- There appears to be two reasons that superintendents move from one district to another. Movement may be from smaller districts to larger ones with larger salaries and more prestige or motivated by conflict in the district (Parker, 1996).
- o In 2006, 24% of the superintendents surveyed have been in two districts, 13% in 3 districts, 6% in four district and 5% in 5 or more districts. Glass & Franceschini (2007).
- 2.2 Who are the 2011 superintendents? What are their career pathways?
 - The traditional career path to the superintendency starts with teaching, advancing to building principal and then to superintendent (Kowalski et al., 2011).
 - 2.3 Are there contextual differences that establish different career paths for different types of districts?
 - A second pathway from teacher to principal to district administrator to superintendent when attempting to attain superintendent positions in larger district (Bjork et al., 2005).

Research Question 3 – Superintendent Turnover: What is the typical turnover of New Jersey superintendents?

- 3.1 What is the average turnover for superintendents in New Jersey for the years 1996-2011?
 - o For 2006, the mean tenure was 5.5 years with 42.2% of superintendents with tenures of 3 years or less (Glass and Franceschiti, 2007).
- 3.2 Are there differences in turnover rates based on contextual differences?
 - Superintendent turnover is a function of complex factors such as age, educational attainment and job performance (Grissom & Anderson, 2012).

CHAPTER 3 - METHODOLOGY

Descriptive longitudinal research is used to study change or continuity of characteristics of the superintendent population in New Jersey over a period of 15 school years from 1996 through 2011. Three different longitudinal research designs were used for different areas of the study. A trend study is used to track the annual changes in demographic characteristics of all superintendents in New Jersey for the length of the study. A cohort research design is used to track movement into, out of and between superintendent positions. A panel study follows the existing superintendents in 2011 from the time they entered the New Jersey educational system to 2011in order to examine their career paths.

The analysis of demographic and career path characteristics of New Jersey school district superintendents is based on Certificated Staff Report data and other demographic data supplied by the New Jersey Department of Education (NJDOE). Certificated Staff data contain employment information for all positions in the educational system in New Jersey that require certification. These reports are filed with NJDOE annually by each district and contain demographic data by individual as well as position information. Although the original data contain each individual's social security number as the linking identifier, this information is not distributed to researchers.

Since 1996 is the first year the data are collected electronically and made available to researchers, the data used in this study include all personnel information for the school years from 1996 through 2011. The personnel information includes individual records for each certificated employee. The descriptives include age, gender, racial/ethnic information, educational attainment, experience in education. Positional information consists of position held,

salary, district, school and county. Other position information is not consistently collected for the 15 years of the study and is not included.

For the annual summarization of superintendent characteristics linking identifiers were not required. However for tracking turnover, movement from position to position and career path identification, linking identifiers are established for all superintendents. These identifiers consist of full name and date of birth. Once these are established, they are examined visually to insure that no anomalies exist. Additionally, all interim superintendents are deleted from the data. For the purpose of this study, any superintendent that is in position in the district for no more than one year is considered an interim superintendent.

Data Analysis

Table 1

Alignment of Research Questions, Data, and Analysis Approaches

Research	Data	Analysis
Question		
Who are the school district	New Jersey annual Certificated Staff	Descriptive statistics for the
superintendents in New Jersey in	Report (CSR)data identify each	superintendent and principal
terms of age, sex, and	certificated staff member, his/her	workforce for the past 15 years
race/ethnicity? How many years	demographics, career path information,	(CSR)
of educational experience do	and level of education	
they have, what do they earn and		Comparison of New Jersey
what is their educational level?	New Jersey School Report Card	superintendents (CSR) based on
Demographic changes: Have the	(Report Card) data identify school	district size, configuration
demographics and experience	district grade configurations and	(Report Card), socioeconomic
level changed in the past 15	district type	classification (DFG) and
years and if so how?		geographic regions including
		New York and Philadelphia
Superintendent versus principal	New Jersey District Factor Group	New Jersey metro areas
demographics and experience:	(DFG) data identify each district in	(USCD)
How do they compare?	New Jersey by approximate measure of	
	a community's relative socioeconomic	Comparison of superintendent
New Jersey superintendent	status (SES) in New Jersey.	and principal demographic
demographics versus national		characteristics (CSR)
superintendent demographics	US Census Data (USCD) for 2010	
and experience: How do they		Comparison of state
compare in 2000, 2006 and	AASA national superintendent survey	superintendent workforce
2010?	results for1992,2000,2006and	statistics with national averages
	2010(AASA)	(AASA)

What was the average turnover for superintendents in New Jersey for the years 1996-2011? Were there differences in turnover rates based on contextual characteristics of the districts?	New Jersey annual Certificated Staff Report (CSR)data identify each certificated staff member, his/her demographics, career path information, and level of education New Jersey School Report Card (Report Card) data identify school district grade configurations and district type	CRS data are reorganized by district and movements into and out of the superintendent's position are tabulated These data are then tabulated based on district school configurations (Report Card), socioeconomic grouping (DFG), and geographic regions and characteristics
	New Jersey District Factor Group (DFG) data identify each district in New Jersey by approximate measure of a community's relative socioeconomic status (SES) in New Jersey. US Census Data (USCD) for 2010	
What is the typical movement between districts for a superintendent in New Jersey during the last 15 years? Are there school district characteristics in terms of size, socioeconomic status or grade configuration that change as a superintendent moves from one district to another? What is the change in compensation when a superintendent moves from district to district? Who are the 2011 superintendents? What are their career pathways? Are there contextual differences that establish different career paths for different types of districts? Who is the exiting superintendent? Does he or she remain in public education and in what capacity?	New Jersey 2011 School Administrator Data (NJSAD) New Jersey annual certificated staff data identifies each certificated staff member, his/her demographics, career path information, and level of education. The District Factor Groups (DFGs) represent an approximate measure of a community's relative socioeconomic status (SES) in New Jersey. New Jersey Report Card data identify school district size and configuration (Report Card)	Identification of school superintendents to be included in study of career pathways (NJSAD) Movement of state superintendents (CSR) between districts based on district size, configuration (Report Card) and socioeconomic classification (DFG). Identification of movement of superintendents into and out of positions in the New Jersey Education system from school years 1996 through 2011(CSR)

As Table 1 indicates, replies to the research questions are formulated by accessing four sets of data. For those questions that pertain to superintendents in New Jersey, the annual CSR

data for 1996-2011 are used. Districts are grouped by Report Card configuration and DFG for in state comparisons.

Research question 1 will require the analysis of personnel information contained in the annual CSR databases for the fifteen-year period from 1996/1997 to 2010/2011 school years. These data are used to develop annual descriptive statistics for all superintendents in New Jersey as a group, and in context by district configuration, socioeconomic classification and geographic region. These data are used to determine if any significant changes occur in the superintendents' profiles over the fifteen-year period.

Elements of the profile are sex, race, degree, experience in district, experience in New Jersey, total experience, age, salary, if the position is full or part time, and what other positions superintendents hold in the district. For the 2010-2011 school year, similar elements for principals in New Jersey are compiled for comparison.

For question 2 further analysis of personnel information contained in the annual CSR databases for the 15 year period from September, 1996 to June, 2011 is conducted from a career path perspective, studying the movement of the superintendents in position in 2011 backwards in time to develop career pathways for this group of existing superintendents

Data Processing

Each research question requires several different types of analysis and requires the creation of new databases of pertinent information extracted from existing data. In response to research question 1, data are organized by school year to develop an annual mean profile of all superintendents in the state. From the fifteen years of CSR data, all superintendent records are extracted and district type by configuration identifiers and district DFG are attached to each record. For each year means are calculated where appropriate and reported annually. In order to

view the superintendents in context, the data are then grouped by DFG, configuration and geographic indicators and means are calculated.

The data base used in question 1 will be reorganized by district to determine superintendent turnover rates by calculating the number of different superintendents in each district for length of the study. Turnover is then analyzed in context of DFG, configuration and geographic characteristics.

Superintendent movement will be tracked by context of the districts involved in the movement of superintendents from district to district. Superintendent moves are categorized by the configurations, DFGs of the districts and salary changes to gain insight as to the reasoning for the move and to categorize the moves as advantageous to the superintendents involved in terms of moving to a larger or richer district or for increased salary.

Question 2 requires the creation of a data base which will contain all data for the certificated staff members as identified in the 2011 School Administrative file as superintendents for 1996-2011 school years. It will also attach linking identifiers for each superintendent, district qualifiers at to size, configuration, and socioeconomic status for each position held by the identified superintendents. All positions in the New Jersey educational system as included in the CSR data are tracked for the identified superintendents to outline career paths typically taken. These data are further analyzed in socioeconomic, configuration, and geographic context to reveal different career paths based by district context.

Limitations

The annual Certificated Staff Report is used to track individuals in the New Jersey educational system. Certifications, social security numbers are tracked and verified. Other information is not. Accuracy of data depends on the individual in the district assigned to input

data. Problems with identification of interim superintendents and their years of experience were common when visually verifying the data. To minimize the effect of including interim superintendents on the study results, all superintendents that were in a district superintendent position for a year or less were deleted from the data bases used.

CHAPTER 4 - RESULTS

Research Questions

This study addresses two research questions. What are the characteristics of school district superintendents in New Jersey and what is the typical career pathway for New Jersey superintendents? Each question is subdivided into several sub-questions. Additionally, other related questions emerge while analyzing the data and are also investigated.

The initial four sub-questions relate to the characteristics of school district superintendents in New Jersey. The first part consists of identifying 2011 school district superintendents in New Jersey in terms of age, sex, and race/ethnicity, years of experience in educational, compensation, and educational level. These New Jersey superintendents are compared to 2011 school year principals in terms of demographics, compensation and experience.

The New Jersey superintendents are next studied longitudinally, identifying changes in superintendent profiles during the past 15 years. In order to accommodate contextual differences superintendent subgroups are also compared. Since New Jersey school districts differ in terms of school configurations, socioeconomics, and location, superintendents are grouped accordingly. Longitudinal comparisons are made in terms of demographics, experience and education.

The second research question concerning career pathways is divided into six subquestions. The questions begin with profiles of superintendents as they enter the position during the 15 year study and what districts are typically the initial positions for these new superintendents. Next, how long do superintendents stay in their entry positions and where do they go from there? By studying their movements, what are the possible motivators for movement? Finally, who leaves the position?

While addressing this second question it becomes apparent that in order to respond to this question fully, that an additional inquiry is necessary. This is to ask the questions; who are the present day superintendents, when did they enter the educational profession and what their career paths are.

To ground this study and provide purpose, the issue of turnover is addressed. Again, this is investigated from the perspective of the entire population of superintendents as well as subgroups based on demographics. CSR data are organized in district order showing all superintendents by district for the 15 year period of the study. From this data, turnover rates for the state as a whole and subsequently in context by school configurations, socioeconomics, and location are calculated.

2010-2011 New Jersey School District Superintendents

According to the New Jersey Department of Education 2010-2011Certificated Staff
Report, there are 507 full time superintendents in New Jersey. 72% are male and 28% female.

In terms of racial/ethnic distribution, 93% are White while 7% are racial/ethnic minorities. The largest minority group at 5% is Black superintendents, while the remaining minorities combined equal 2% of all New Jersey superintendents. The average age is 56 and average annual salary is \$ 167,905. Master degrees are held by 53% of the superintendents and the remaining 47% hold doctorate degrees. Experience in the education field averages at 28 years. Experience in the New Jersey educational system is an average of 25 years and average in district experience is 10 years. Of the 507 superintendents in New Jersey, 9% hold 2 certificated positions in their respective districts.

Comparison of 2010-2011 Superintendents and Principals

Again using the New Jersey Department of Education 2010-2011Certificated Staff
Report data, Table 2 compares all 507 full time New Jersey school district superintendents and all 2206 full time New Jersey school principals. While the principals are equally divided between the genders, there are 2.4 times as many male superintendents than female superintendents. Racial/ethnic minorities make up 22% of the principals in New Jersey and among the New Jersey school district superintendent population, 7% are racial/ethnic minorities.

Table 2

Comparison of New Jersey Superintendent and Principal Profile Characteristics for the 2010-2011 School Year

Characteristic	Superintendent	Superintendent	Principal	Principal	
	n	%	n	%	
Gender					
Male	363	72%	1113	50%	
Female	144	28%	1093	50%	
Race					
White	474	93%	1725	78%	
Black	23	5%	342	16%	
Hispanic	7	1%	136	6%	
Asian	3	1%	0		
Native American	1	0%	0		
Educational Level					
BA	0	0%	50	2%	
MA	267	53%	1876	85%	
DR	239	47%	253	11%	
DR+	1	0%	27	2%	

Table 3 displays the means for additional characteristics for both superintendents and principals in New Jersey. There are differences in age and salary. Superintendent salaries are 34% higher than Principal salaries, while the Superintendents are only 10% older. Both Superintendents' experience in education and in the New Jersey educational system are 27% and 19% greater, however the principals' in-district experience is 40% greater.

Table 3

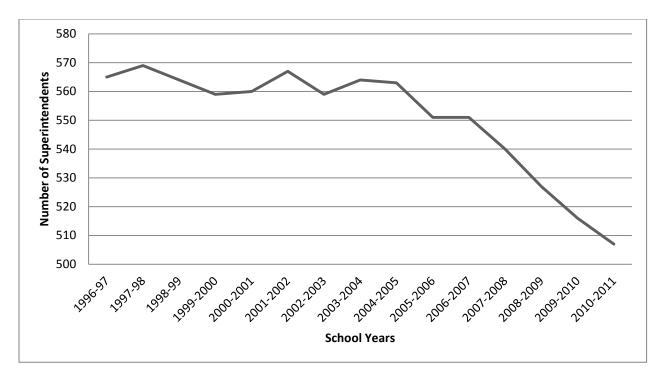
The Comparison of Superintendent and Principal Characteristics Pertaining to Age, Experience and Salary for the 2010-2011 School year.

Characteristic	Superintendents M	Principals M	
Age	56 yrs.	51 yrs.	
Salary	\$167,905	\$125,397	
Experience			
In education	28 yrs.	22 yrs.	
In New Jersey education	25 yrs.	21 yrs.	
In present school district	10 yrs.	14 yrs.	

Longitudinal Study of New Jersey District Superintendents - 1996 through 2011 An Overview of All School District Superintendents in New Jersey

New Jersey Superintendent Population

The number of operating districts in New Jersey has declined from 602 in 1996 to 590 in 2011 or 2%. The number of full time superintendents declines by 11%. In the 1996-1997 School Year, 6% of the positions were not filled with full time superintendent, while in 2011 this figure rose to 14%. Figure 1 illustrates the decline in number of superintendents. In 2007 the number of districts were closed and the annual number of fulltime superintendents declines steadily from the 2007-2008. Figure 1 further illustrates that for unfilled superintendent positions, districts either hire interims, share superintendents or the position remains unfilled.



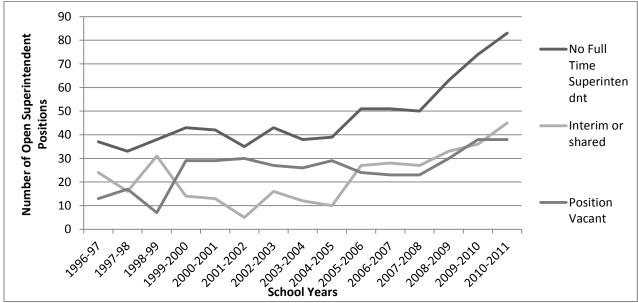


Figure 1. Number of New Jersey superintendents, interims superintendents/shared superintendents and vacancies, 1996-1997.

Superintendents by Gender

Gender comparisons (Figure 2) for the 15 year period show that female superintendents increase their representation by 52% and the male superintendent population declines by 30%.

In the 1996-1997 school year, the superintendent population is 87% male and 13% female. In 2010-2011 school year, it is 72% male and 28% female. The greatest increase in the number of female superintendents occurs between 1998 and 2006. The largest declines in the number of male superintendents occur later between 2008 and 2011. As indicated by Figure 2 there are 107 less male superintendents in 2011 and 49 more female superintendents than there were in 1996.

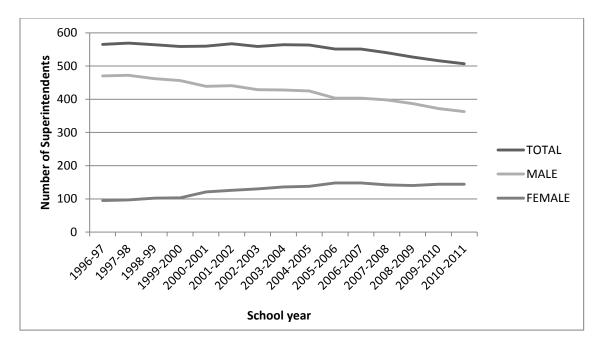


Figure 2. Distribution of New Jersey superintendents by gender, 1996-2011.

Racial/ethnic Minority Superintendents

As the number of female superintendents increased during the past 15 years so did the number of racial/ethnic minority superintendents (Figure 3). During the 1996-1997 school year in New Jersey, 5% of the superintendent population are racial/ethnic minorities. In 2010-2011 this percentage increases to 7% of all New Jersey superintendents. There is a dip in the racial/ethnic minority population during period from 2004-2005 to 2005-2006 to 4.5% of the superintendent population. In 2011 there is an increase of 4 racial/ethnic minority superintendents from 1996 while White superintendents decreased by 61 during the same time period.

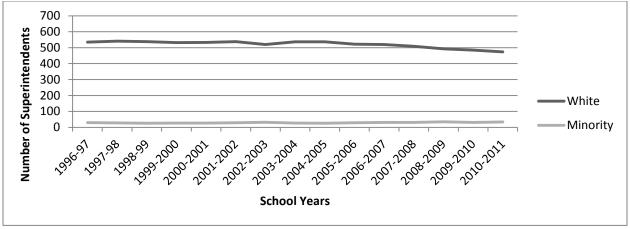


Figure 3. Distribution of New Jersey superintendents based on racial/ethnic delineations, 1996-2011.

When looking at the composition of the racial/ethnic minority groups (Figure 4) over the study period there is a 21% increase in Black superintendents in New Jersey. Since the remaining five minority categories have so few members they are grouped together to provide a more meaningful distribution. These categories are Hispanic, Native American, Asian, Pacific and those individuals who belong in two or more minority categories. In the 1996-1997 school year, all other racial/ethnic minorities (excluding Black superintendents) were 1.9% of the total population of superintendents in New Jersey and now they are 2.2 % of the population.

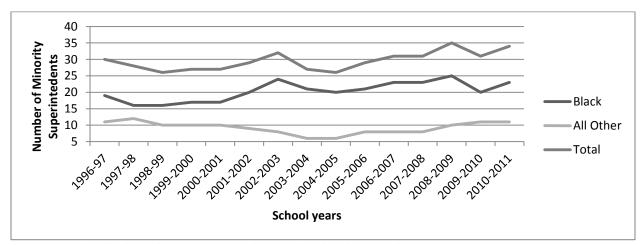


Figure 4. Distribution of New Jersey racial/ethnic minority superintendents, 1996-2011.

Educational Levels of New Jersey Superintendents.

In year one of the study (Figure 5), the percentage of superintendents with doctorate degrees is at 47% and those with the master level is at 52%. At the end of the study, the percentages are the same. The 2003-2004 school-year is the only year when there are more superintendents with doctorate degrees than master degrees.

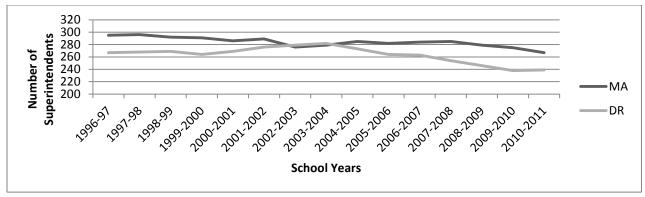


Figure 5. Distribution of New Jersey superintendents based on educational attainment, 1996-2011.

The male population of superintendents shows a decline in the number of doctorates from 46% to 44% during the study period (Figure 6). At no point did the number of male superintendents with doctorates exceed the number of male superintendents with masters.

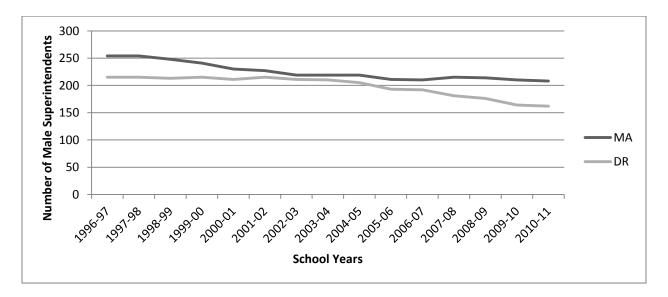


Figure 6. Distribution of New Jersey male superintendents by educational attainment, 1996-2011.

The plotting of the educational attainment of female superintendents in New Jersey reveals the opposite (Figure 7). The percentage of female superintendents with doctorates exceeds the number of female superintendents with master degrees. At the beginning of the study 55% of the female superintendents have doctorate degrees. The percentage is the same at the end of the study. However the number of female superintendents with doctorates increased by 50%. For only two years, 2001-2002 and 2006-2007, the number of female superintendents with doctorates.

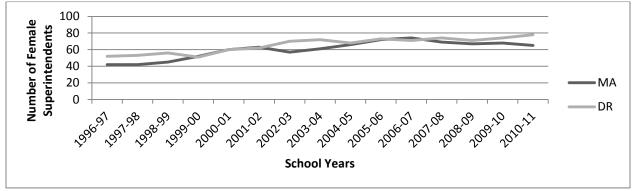


Figure 7. Distribution of New Jersey female superintendents by educational attainment, 1996-2011.

In tracking the educational levels of racial/ethnic minority superintendents in New Jersey (Figure 8), there is a change in the number of doctorates among this group of superintendents. In the beginning of the study 73% of racial/ethnic minority superintendents hold doctorates. Now only 59% of the racial/ethnic minority superintendents hold doctorates.

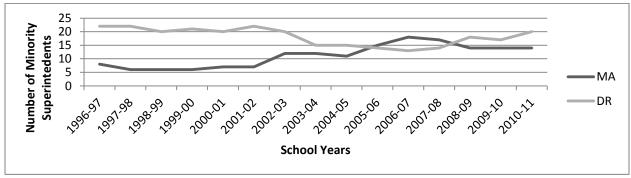
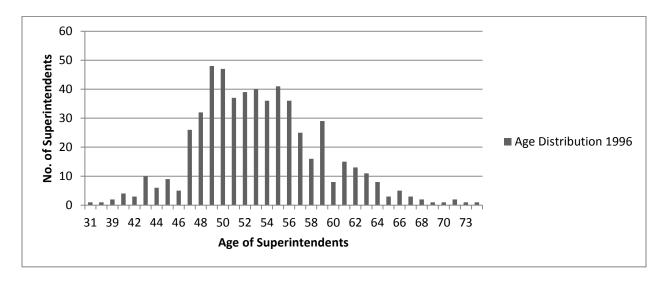


Figure 8. Distribution of New Jersey racial/ethnic minority superintendents by educational attainment, 1996-2011.

New Jersey Superintendents' Ages

The average age has change for all superintendents (Figure 9). The male superintendents in New Jersey aged by two years to 56, female superintendents by four years to 56 and racial/ethnic minority superintendents by two years to 55. When comparing the age of the superintendents in 1996 to the ages of superintendents in 2011, the distribution of superintendents has changed. Where the 1996 distribution implies a normal distribution with a standard deviation of 5.8, in 2011 the curve spreads and is not as uniform with a standard deviation of 8.6.



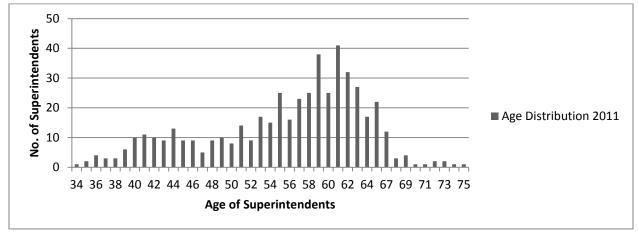


Figure 9. Distribution of New Jersey superintendents by age, 1996-2011.

The Level of Experience of New Jersey Superintendents

Experience data are displayed in 3 categories (Figure 10). The first is the experience level in the field of education. The second is the years of experience in the New Jersey educational system and finally experience in the present district. There is only a change of one year in each of the categories, with superintendents in New Jersey having an additional year of experience in both the field of education and in New Jersey while having one less year experience in the district. For each of the years studied superintendents average three additional years of experience outside of New Jersey.

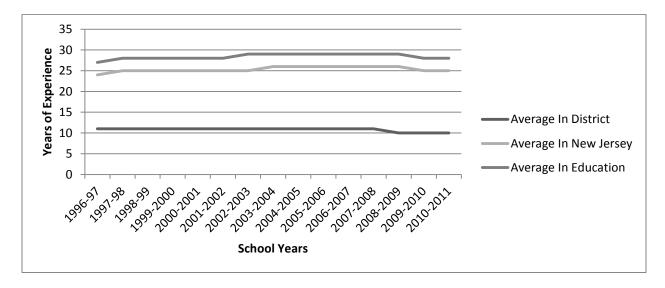
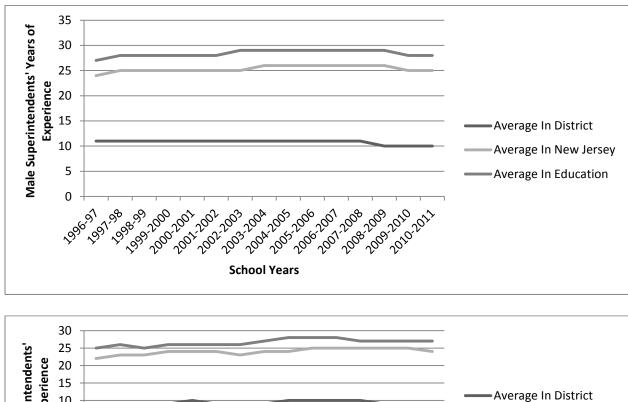


Figure 10. Distribution of New Jersey superintendents' years of experience in education, in the New Jersey educational system, 1996-2011.

When examining the experience level by gender (Figure 11), male superintendents are more experienced than female superintendents for the entire length of the study. This is consistent in all three areas of experience. Male superintendents average a consistent 11 years of experience in district for 12 of the 15 years studied. Female superintendents' average experience in district fluctuated from year to year for nine of the years in the study. Male superintendents

consistently displayed more experience in both the field of education and the New Jersey educational system.



Average In District

Average In New Jersey

Average In Education

School Year

Figure 11. Distributions of New Jersey male and female superintendents' years of experience in education, in the New Jersey educational system in a certificated position and in his/her current district, 1996-2011.

Racial/ethnic minority superintendents in New Jersey display less experience (Figure 12) in all three categories than both male and female superintendents for the 15 years of the study.

There is much more fluctuation in each of the levels of experience. It must be noted that since

the minority population is the smallest of all sub-populations studied and that the variations may be driven by turnover in these positions.

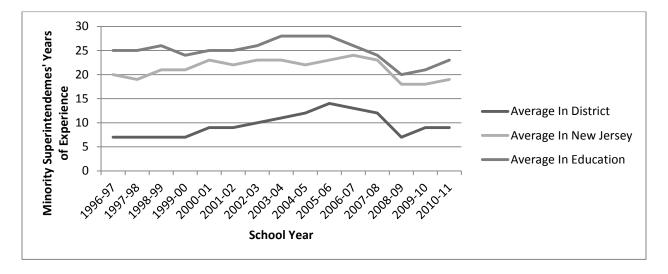


Figure 12. Distribution of New Jersey racial/ethnic minority superintendents' experience in education, in a New Jersey certificated staff position and in his/her current district, 1996-2011.

New Jersey Superintendents' Salaries

Salaries for superintendents rise consistently for the past 15 years (Figure 13). Using the United States Bureau of Labor Statistics' Consumer Price Index (CPI) inflation calculator, the 1996-1997 average salary for New Jersey school district superintendents of \$100,902, adjusted to 2011 dollars equals \$ 141,435. Superintendent's present average salary is19% higher than the CPI inflation calculated number. Annual average increases range from 3% to 5% for all school years except for 2010-2011, where the average annual increase falls to 1%.

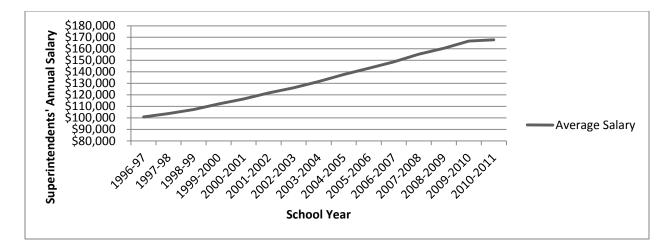


Figure 13. Distribution of New Jersey superintendents' average annual salaries, 1996-2011.

Male superintendents earn more than female superintendents in New Jersey (Figure 14). For the 1996-1997 school year, the salary differential between genders is 6%. By 2010-2011 male superintendents are making 7% more than their female counterparts. In all years of the study male superintendents earn more than female superintendents. While the average wage differential for the 15 year is 7%, during the 2001-2002 and 2003-2004 school years the salary differentials rose to 9%. Using the CPI inflation calculator, male salaries rose 17% more than inflation and female salaries rose 16% above than their salaries in 1996-1997 which were 6% less than their male counterparts.

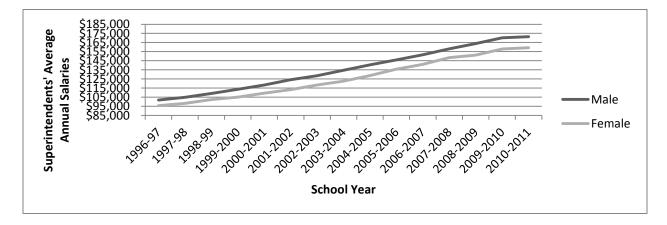


Figure 14. Comparison of average annual salaries for male and female superintendents, 1996-2011.

The racial/ethnic minority superintendents' average salary is higher (Figure 15) than White superintendents' average salary for the entire length of the study. The racial/ethnic minority superintendent's average salaries is higher than male average salary by 8% in the 1996-1997 school year and racial/ethnic minority superintendents' average salaries rise to 10% higher than male salaries in 2010-2011. Racial/ethnic minority salaries are 15% and 18% higher than female superintendents' salaries for the same years.

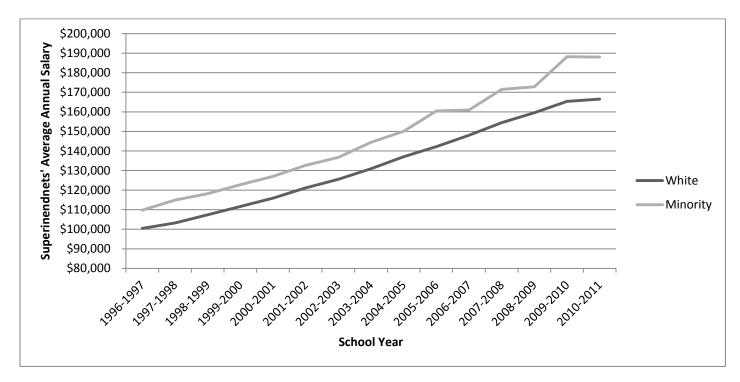


Figure 15. Comparison on annual salary levels according to racial/ethnic categories of White and racial/ethnic minorities, 1996-2011.

When comparing salaries of New Jersey school district superintendents according to educational level (Figure 16), superintendents with doctorates earn more than those with masters. The average differential over the 15 year period of the study is 12%. In the school years of 1997-1998 and 1998-1999 this differential rises to 14%. In the last year of the study it drops to 10%. In 2010-2011, the average salary for superintendents with doctorates drops \$ 865 while the average annual salary for superintendents with master degrees increases by \$2,635 or 2%.

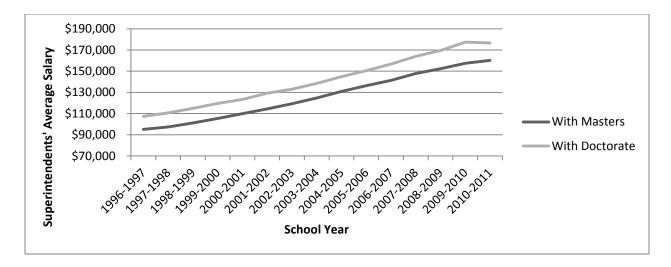


Figure 16. Comparison of New Jersey superintendents annual salaries based on educational attainment, 1996-2011.

Experience in New Jersey (Figure 17) is used as the parameter to determine superintendents' salary differentials based on years of experience. Since average experience in New Jersey is 25 years, the population is divided into two groups those with 25 or less years of experience in New Jersey and those with more than 25 years of experience. As anticipated those superintendents with more experience earn more, an average of 12% annually. What is interesting to note that in year 2010-2011, the increase in annual salary for the more experienced is at 2% while there was no increase for the less experienced group of superintendents.

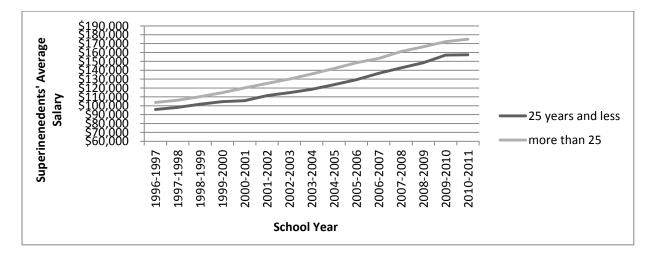


Figure 17. Comparison of New Jersey superintendents annual salaries based on level of educational experience, 1996-2011.

Contextual Overviews of New Jersey Superintendents

New Jersey Superintendents by District Configuration

School District Configurations in New Jersey

There are eight basic school district configurations in New Jersey. These are grouped into two categories, regular school district and special districts. Regular districts provide appropriate educational facilities for a specific geographic location and a portion of whose funding is provided by municipalities in that geographic location. Special school district provide educational facilities and services within counties or statewide. These districts are not directly funded by municipalities.

Regular school districts are in the largest group with a population of 556 New Jersey school districts. These are divided into 6 sub-groups:

- 1. Districts responsible for educating children from kindergarten to grade 12 (k-12). This is the largest subgroup with 229 districts.
- Districts responsible for educating children from kindergarten to grade 8 (k-8). At grade 9, responsibility is transferred to a regional school district. This subgroup consists of 125 school districts.
- Districts responsible for educating children from kindergarten to grade 6 (k-6). At grade 7, responsibility is transferred to a regional school district. This subgroup consists of 52 school districts.
- 4. Districts responsible for educating students from grades 9 to 12 for a group of municipalities in the area (9-12). There are 31 districts in this subgroup.
- 5. Districts responsible for educating students from grades 7 to 12 for a group of municipalities in the area (7-12). There are 16 districts in this subgroup.
- 6. Districts responsible for educating students from kindergarten to grade12 for a municipality (k-12 Send). They provide education within the district for children in kindergarten through either

grade 6 or grade 8. For students in either grades 7 to 12 or grades 9 to 12 these districts enter into a send-receive relationship with a nearby school district where the sending district pays an annual per student tuition and provides transportation to the receiving district. There are 102 districts in this sub category. These districts are separated from other kindergarten to either grade 6 or grade 8 school districts since they are still responsible for all students in the district budgetarily and provide the educational and transportation services their grade 7 through 12 or grade 9 through 12 students may require.

There are four subgroups in the special district category. Again, these district provide educational facilities and services within counties or statewide. These subgroups are:

- Vocational/Technical school districts (VOTEC). These districts provide alternative curriculums to grade 9 to 12 students within a county and are funded by that county.
 There are 21 districts in this subgroup.
- 2. County special services districts (CSSD) provide special education services to county public school in the form of schools for special education with programs geared for specific learning disabilities. These districts receive tuitions from districts that send students to their programs. There are 8 districts in this subgroup.
- 3. County educational services districts (CESD) provide schooling for children with special needs or other services such as transportation to districts within their county. These districts were created to provide local districts with services that could be provided more effectively on the county level. They receive tuitions and service fees from the districts that use their services. There are 10 county educational services districts in New Jersey. Since functions overlap this group will be merged with the county special services districts and use the abbreviation CSESD.
- 4. Jointure commission districts are the final subgroup in this category (Jointure). When a group of districts form a jointure to meet specific needs or to share services amongst

themselves a jointure commission district is formed. It is funded by tuitions, service fees and membership dues. There are three districts in this sub-group.

Superintendents' Gender by District Configurations

The reorganization of the data by district type locates where the increases in female superintendent population occur during the longitudinal study. Table 4 contains the percentages of male versus female superintendents by the 9 district types. What they are at the beginning of the study and what they are during the last year of the study. Largest increases (20% and over) of female superintendents occur in jointures with a population of 2 superintendents, the grade 9-12 configuration district group with 31 districts, the 21vocational districts, 52 grade k through 6 districts and the 108 grade k through 12 districts that send their students to other districts. These district groups represent 20% of all districts in New Jersey.

Table 4

Comparison of Male and Female Superintendent Populations for 1996-1997 and 2010-2011 by District Configuration

District type	1996-1997		2010-2011		Increase in
	Male	Female	Male	Female	Female %
k-12	84%	16%	80%	20%	4%
k-8	80%	20%	69%	31%	11%
k-6	83%	18%	61%	39%	21%
k-12 send	83%	17%	60%	40%	23%
9-12	96%	4%	71%	29%	25%
7-12	94%	6%	88%	12%	6%
VOTEC	95%	5%	71%	29%	24%
County services	73%	27%	73%	27%	0%
Jointures	100%	0%	50%	50%	50%

Racial/ethnic Minority Superintendents by District Configuration

From the findings based on the entire population of New Jersey superintendents, there is

a slight increase in the number of racial/ethnic minority superintendents over the past 15 years. When organizing the superintendent population by district configurations, there is movement in many of the sub-populations. Table 5 indicates where movement occurs and to what magnitude. Three district groups show increases of 3% or greater. The largest district group k-12 with 229 districts has a 3% increase in minority superintendents for the study period.

Table 5

Changes in the Minority Superintendent Populations for 1996-1997 and 2010-2011 by District Type

District Configuration By type	1996-1997 Minority superintendents	2010-2011 Minority superintendents	Change
1.40	100/	1204	201
k-12	10%	13%	3%
k-8	2%	2%	0
k-6	3%	2%	-1%
k-12 send	2%	2%	0
9-12	4%	7%	3%
7-12	0	0	0
VOTEC	0	6%	6%
CSEC	7%	9%	2%
Jointures	0	0	0

Superintendents' Educational Levels by District Configurations

For the sake of clarity, the charts in Figure 18 compare related configuration types and then contrast those with similar outcomes. K-12 districts have the highest percentage of superintendents with doctorates 58% of those regular districts with kindergartens. K-8 districts have 42% of their superintendents with doctorates while k-12 send have 30%.

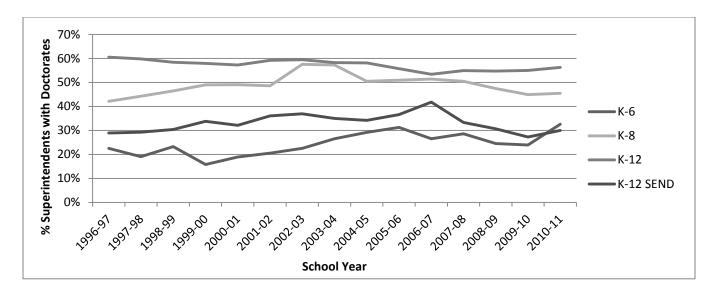


Figure 18. Comparison of New Jersey superintendents' educational attainment based on district configuration of those regular districts that provide regular education from kindergarten to grade 6, grade 8 or grade 12, 1996-2011.

Of those districts that are not responsible for elementary education, 9-12 districts have the highest percentage of superintendents with doctoral degrees (Figure 19) and also experience the largest drop in the number of superintendents with doctorates, from 90% to 64%. The two regular district groups with the highest percentage of doctorates are k-12 and 9-12. In 1996-1997 there was a 30% gap between the two groups today there is 6% gap. Jointure superintendents have the highest percentage of doctorates, the county special service and education services districts have the lowest (Figure 20).

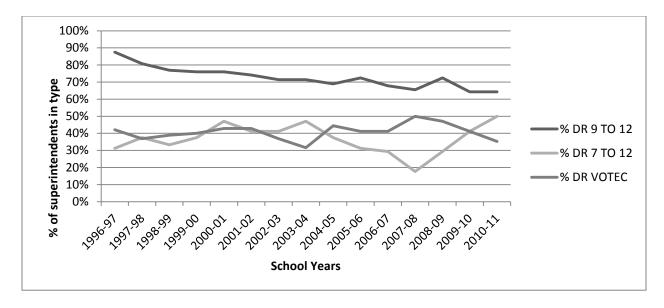


Figure 19. Comparison of New Jersey superintendent's education attainment for districts that contain grades 7-12, and 9-12 for both regular education and vocational education.

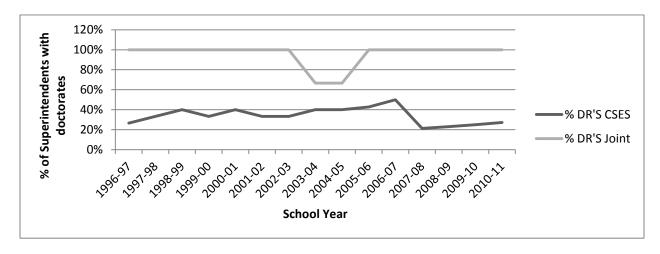
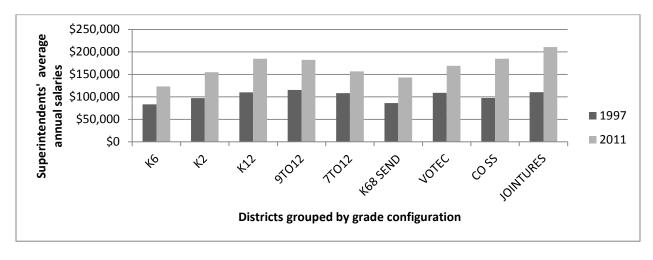


Figure 20. Comparison of New Jersey superintendents' educational attainment for special districts that provide services for regular education districts, 1996-2011.

Superintendents' Salaries by District Configurations

Organizing the longitudinal data into district subgroups based on configuration provides insight to how district groups compensate their superintendents (Figure 21). Superintendents in Jointures and county special and educational services districts are the best compensated and receive the largest increases. Over the past 15 years, jointure and county services district

superintendents' average salaries increased by 91% and 89%. The next highest 15 year annual average salary increase occurs in k-12 configuration districts.



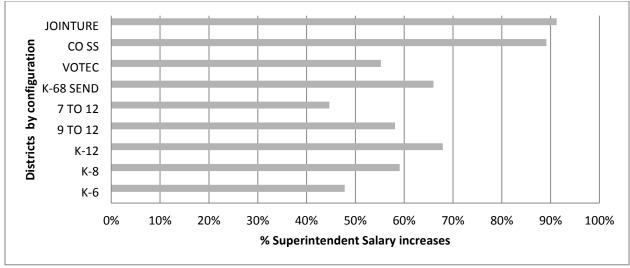


Figure 21. Comparison of New Jersey superintendents' average annual salaries and annual salary increases based on school district configurations, 1996-2011.

New Jersey Superintendents Based on the Districts' Socioeconomic Levels

Socioeconomic Districts Groupings

New Jersey school districts are divided into 7 socioeconomic groups know as District Factor Groups (DFG). This grouping is determined by the New Jersey Department of Education, based on a series of calculations which determine the relative wealth of the district. The groups

are identified by alphabetic characters, A being the lowest wealth group and J the highest wealth group. Table 6 lists the socioeconomic groups and the number of districts in each DFG. The districts are not evenly distributed amongst the 7 groups. Vocational technical school districts, county special and educational services districts and jointure commission districts do not have a DFG assigned to them since they do not service a specific municipality or group of municipalities. This group will be omitted from this overview.

Table 6

New Jersey District Factor Groupings and the Number of Districts in Each

DFG	# of Districts	
A	39	
В	67	
CD	67	
DE	83	
FG	89	
GH	76	
I	103	
J	25	

Gender Groupings of New Jersey Superintendents by DFG

Grouping superintendents by their districts' DFG (Figure 22) reveals that in the 1996-1997 school year in three DFGs, A, I and J, more than 20% of the superintendents are female. Now, in 2010-2011, I and J DFGs have the highest percentage of female superintendents of the all DFGs, increasing their female superintendent population by 46% and 80%. DFG A which has the one of the highest percentage of female superintendents in 1996-1997 at 23%, is now at 28%, an increase of 20%.

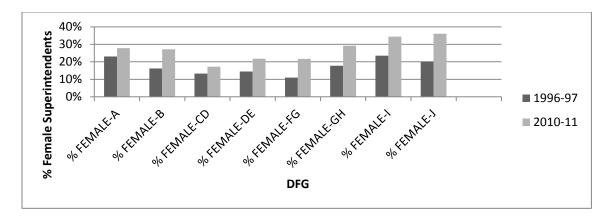


Figure 22. Comparison of increases in New Jersey female superintendents according to socioeconomic groupings (DFG), 1996-2011.

Racial/Ethnic Minority Superintendents by DFGs

The distribution of racial/ethnic minority superintendents (Figure 23) shows that most racial/ethnic minority superintendents are in the less wealthy DFGs. DFG I has the largest number of districts and its percentage of minority superintendents, at 2% has not changed in 15 years. DFG J's percentage of racial/ethnic minority superintendents drops from 8% to 4%.

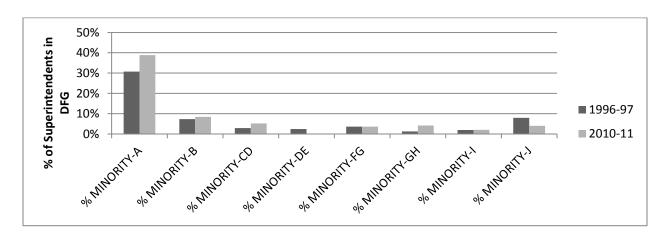


Figure 23. Comparison of the distribution of New Jersey racial/ethnic minority superintendents by DFG, 1996-2011.

Educational Levels of Superintendents by DFGs

While addressing the total population of superintendents in New Jersey, the study reveals that superintendents with doctorates equal 47% of the superintendent population for both 1996-1997 and 2010-2011. When grouped by DFG (Figure 24), the wealthiest DFGs have a higher percentage of superintendents with doctorates, in the 60% range. The DFG with the largest decline, from 51% to 42%, in superintendents with doctorates occurs in the lowest DFG – A, while the largest increase in the number of superintendents from 29% to 44% occurs in the next to lowest DFG – B.

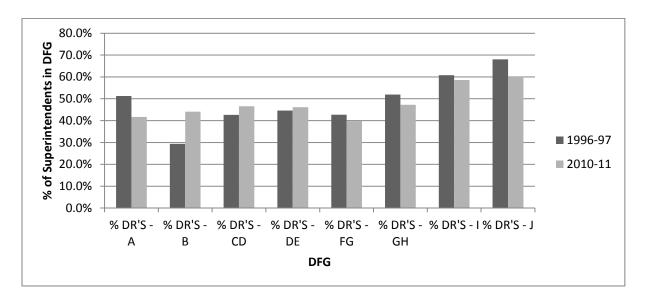


Figure 24. Comparison of New Jersey superintendents' educational attainment by DFG, 1996-2011.

Superintendents' Salaries by DFGs

In 1996-1997 superintendent salaries by DFG are on a similar level (Figure 25) with the differential between the highest and lowest average salary being \$ 15,000. In 2010-2011 the differential is larger at \$34,000. The highest paying DFG is J, the wealthiest DFG, with an average salary of \$184,000. The next is I, at \$173,000. The third highest is DFG A at \$ 170,000, the poorest DFG. DFG –DE has the lowest average superintendent salary at \$150,000.

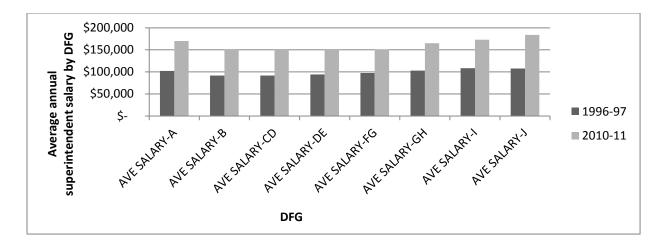


Figure 25. Comparison of New Jersey superintendent annual salaries based on DFG, 1996-2011.

New Jersey Superintendents by Geographic Location

New Jersey Geographic Divisions

New Jersey is divided into 21 counties. The New Jersey Department of Education groups these counties into three regional groups - northern, southern and central. The 2010 Census provides further county information as to income, population density, and ethnic/racial minority populations, to enable further study of counties. For these groupings, the counties are ordered from the lowest to the highest and then divided into 3 groups based on this order – low, middle and high. For example, all counties are ordered based on median incomes for each county. The seven counties that had the lowest median incomes are assigned to the Low group, the next seven counties are assigned to the Middle group and the seven counties with the highest median incomes are in the High group. The Census further provides geographic definitions of two major metro areas in New Jersey, the counties that surround New York City and Philadelphia.

Superintendent Gender Comparisons by Location

All county groupings in New Jersey show a drop in male superintendents (Figure 26). In the regional analysis, in the southern region the population of male superintendents declines the most, by 11 percentage points from 84% of the superintendents in the southern region to 73%.

When grouping the counties by income levels, the high median income group experiences a decline in the male superintendent population to 70% in 2011 from a high of 81% in 1996. The largest drop in the male superintendent population over the period of the study was in the middle group of counties based on racial/ethnic minority percentage. This group has a drop of 17% in the male superintendent population from 85% to 68%. The low group when ranking counties by population density shows the largest decline in male superintendents of 12%. When comparing the two metro area counties, the New York City metro counties have a larger decline in male superintendents of 10%, while the Philadelphia metro counties have a 7% decline.

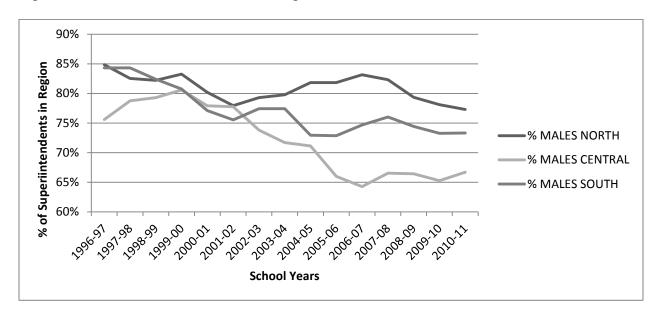


Figure 26. Distribution of New Jersey male superintendents by geographic region, 1996-2011.

Racial/Ethnic Minority Population by Location

For the 15 years of the study, the southern region doubles their racial/ethnic minority superintendent population from 4% to 8% while the other two regions increase theirs by 1%. When grouping counties by median income, the 7 counties with the highest median incomes have the lowest percentage of racial/ethnic minority superintendents while the 7 counties with the lowest median income had the highest percentage of racial/ethnic minority superintendents.

In 1996-1997 school-year, the 7 counties with the highest median incomes employ an average of 2% racial/ethnic minority superintendents. This figure rises to 5% in the 2010-2011 school-year. In the lowest median income counties, racial/ethnic minority superintendents increase to 14% from 10% during the length of the study and the middle 7 counties maintain a 6% racial/ethnic minority superintendent group.

Grouping the counties by % of racial/ethnic minorities yields similar results. The seven counties with the highest racial/ethnic minority populations have an average of 12% racial/ethnic minority superintendents in year one of the study and 13% racial/ethnic minority superintendents in the last year of the study. During the same time period, the middle seven counties increase their racial/ethnic minority superintendents from 5% to 8% and the group with the lowest racial/ethnic minority populations increased their percentage of racial/ethnic minority superintendent from 1% to 4%.

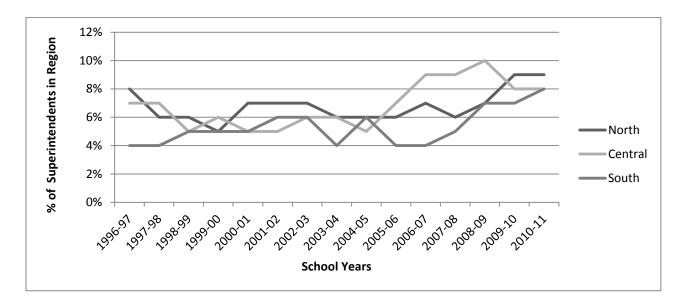


Figure 27. Distribution of New Jersey racial/ethnic minority superintendents by region, 1996-2011.

When comparing metro area counties (Figure 28), the Philadelphia metro area has a much higher percentage of White superintendents at 97% of all metro area superintendents in 1996-1997. The New York metro area has during the same year 93% White superintendents. In the 2010-2011 school-year, the percent of White superintendents has declined by 2% in the New York metro group of New Jersey counties while in the Philadelphia metro group of counties the percentage of White superintendents has declined by 5% to 92%.

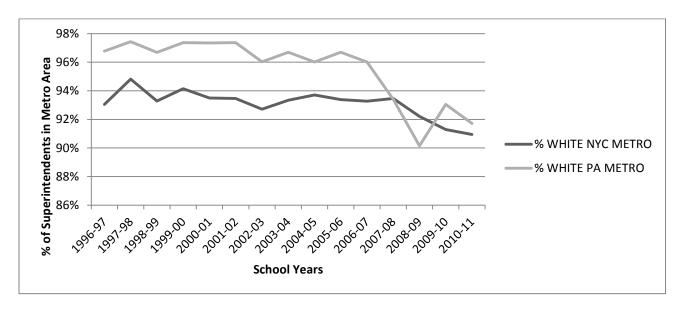


Figure 28. Comparison of New Jersey White superintendents in the Philadelphia and New York metro areas, 1996-2011.

Superintendents' Salaries by Location

Regionally (Figure 29), superintendent salaries in northern and central regions are the same for the duration of the study. In year one the average salary for the superintendents in the northern region is \$104,000.00 and the average salary for central region superintendents is \$104,500. In year 15 of the study superintendent salaries average \$170,800 in the northern region and \$171,800 in the central region. The southern region however lags behind with annual

superintendent salaries at 86% of the salaries of the other two regions at in 1996-1997 and in 2010-2011 at 77% of the salaries of the northern and central regions.

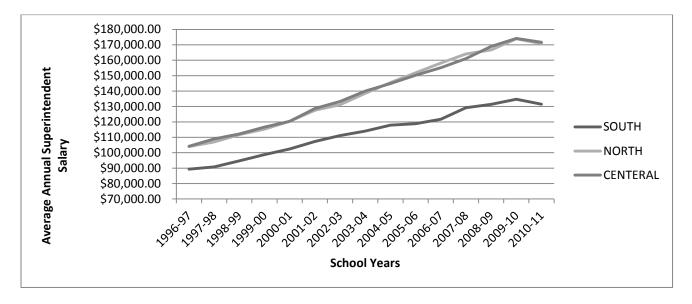


Figure 29. Comparison of New Jersey superintendents' annual salaries based on geographic region, 1996-2011.

Grouping counties by mean salary reveals that the \$3000 gap in the average superintendent salary in 1996-1997 between the highest median income counties and lowest median income counties to a \$19,000 gap in 2010-2011. A superintendent employed in a lowest median income counties district earns an average of \$148,000, his/her counterparts in the middle median income counties district earns an average of \$152,000 and in the highest median income counties a district superintendent earns on the average of \$167,000.

In New Jersey the gap between New York City metro counties superintendent average annual salaries and the Philadelphia metro counties superintendent average annual salaries widens during the 15 year study period (Figure 30). In year one, there was an 18% differential with superintendents in the NYC metro counties earning more. In year 15, the gap widens to 28%.

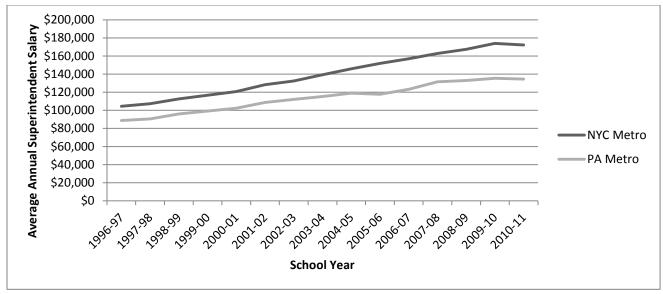


Figure 30. Comparison of New Jersey metro area superintendents' annual salaries, 1996-2011.

Educational Attainment by Location

There is a 25% difference in the number of superintendents with doctorates in 1996-1997 between the northern and southern regions (Figure 31). This gap narrows to 5% in 2010-2011 with an increase of 7% in the number of doctorates in the southern region and 12 % decline in the number of superintendents with doctorates in the northern region. During the same time frame in the central region there was a 2% decline in the number of superintendents with doctorates.

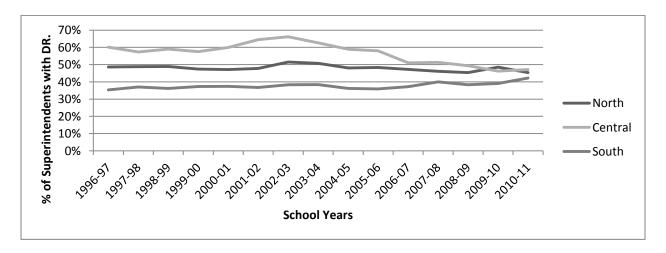


Figure 31. Comparison of New Jersey superintendents' educational attainment based on geographic region, 1996-2011.

When comparing the educational attainment of superintendents in the two New Jersey metro counties (Figure 32), the gap between the doctorates in the two metro areas narrows over the 15 years of the study. In 1996 the New York metro counties in New Jersey, 53% of the superintendents have doctorates. By 2011 that percentage declines by 9% to 49% of the superintendents in the metro area. The Philadelphia metro counties in New Jersey experience an increase in the number of superintendents with doctorates during the same time period of 37%.

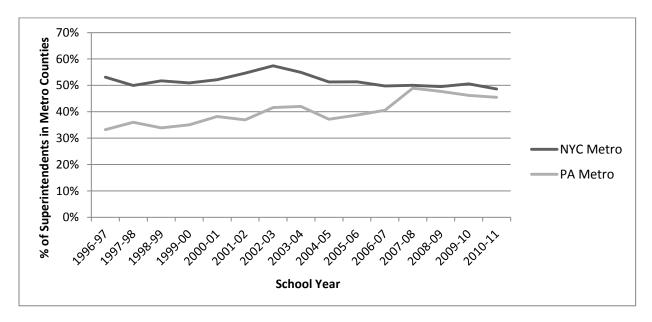


Figure 32. Comparison of New Jersey metro areas superintendents' educational attainment, 1996-2011.

Superintendents' Career Paths

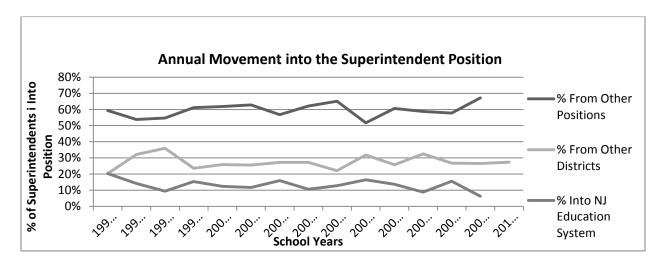
Superintendents' Movements

Movement Into and Out of the Superintendent Position

Tracking movement into and out of the superintendent position in New Jersey reveals, as expected, that the movement into the position is almost the reverse of the movement out of the position (Figure 33).

An average of 60% of the movement into the superintendent position over the 15 years of the study is from other position in the New Jersey educational system, only 7% of the movement out of the superintendent position is into other positions in the New Jersey educational system.

While only an average of 13% of the movement into the superintendent position is from outside of the New Jersey educational system, 66% of the movement out of the position is outside of the New Jersey educational system. Movement into the position from other superintendent position in New Jersey and out of the position to other superintendent positions is at 27%.



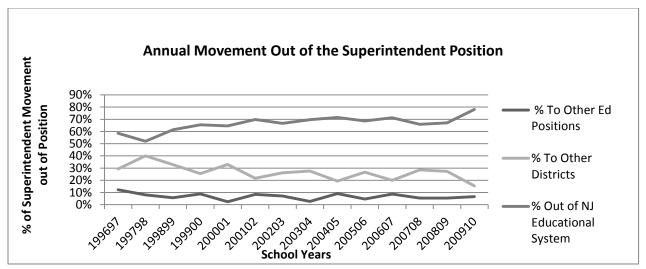


Figure 33. Movement into and out of New Jersey superintendent positions, 1996-2011.

Movement from Other Certificated Positions into the Superintendency

During the study period 604 superintendents move from other New Jersey educational positions into the superintendent positions. 39% move from other district administrative positions, while 51% move from principal positions and the remaining 10% come from supervisory and director positions. The administrative positions are either assistant superintendents or school business administrators. The principal group consists of principals and assistant principals of all different school configurations. Supervisory and director positions are in charge of curricular subject areas either at the district level as supervisors or at the high school level as directors. There is no movement from teacher to superintendents during the study period.

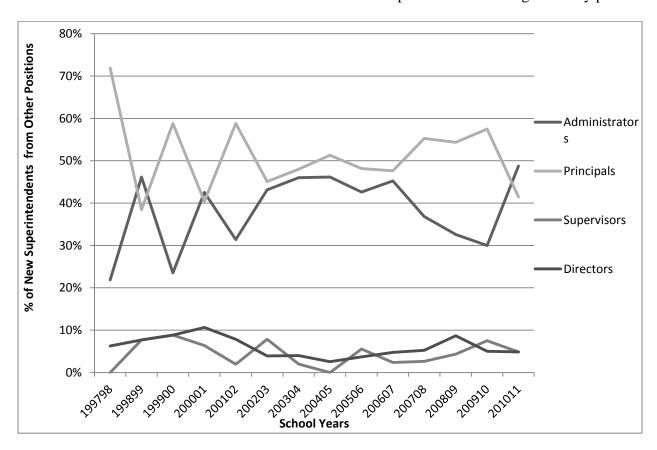


Figure 34. Movement from other New Jersey certificated positions to superintendents' position, 1996-2011.

Superintendents' Movements between New Jersey Districts

Superintendent moves (Figure 35) from one district to another are tracked and categorized into three groups. The first group consists of those superintendents who moved to larger districts. The second group is superintendents who moved to district with higher socioeconomic standing and the third group consists of those superintendents who did neither. During the study period, 292 superintendents change districts. Of these moves, 33% move to larger districts, 26 % to districts with higher DFG and 41% are lateral moves.

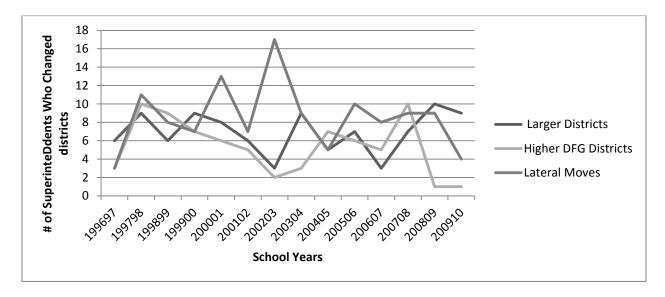


Figure 35. Distribution of New Jersey superintendents that move to other districts, 1996-2011.

The high number of lateral moves motivates a review of salary increases associated with superintendent moves (Figure 36). There are no salary increases associated with 15% of the superintendent moves during the study period. Of the 45 moves with no salary increase, 38% occur during the last 3 years of the study. Those superintendents who receive salary increases with moves to other districts receive average increases from 6% to 22% higher than annual increases for all superintendents (Figure 37).

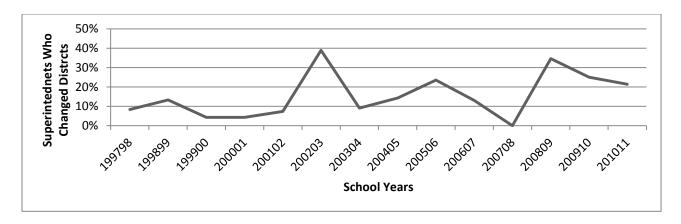


Figure 36. Distribution of New Jersey superintendents who change districts without any salary increases, 1996-2011.

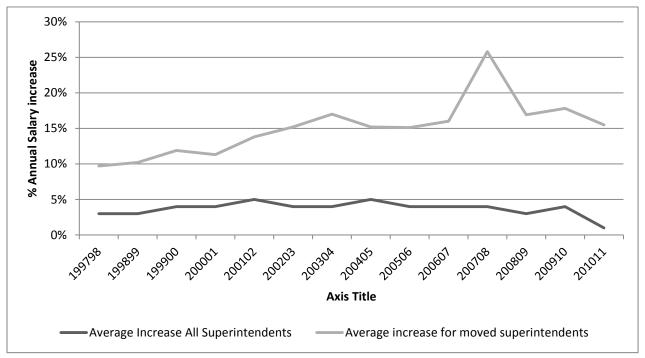


Figure 37. Comparison of annual salary increases for all New Jersey superintendents and salary increases for those New Jersey superintendents who changed districts and received salary increases, 1996-2011.

Superintendents' Movements to Other Positions in New Jersey School Districts

74 superintendents move to other certificated positions in New Jersey during the study (Figure 38). The largest group (31%) of superintendents become principals. 27% take other

administrative positions, 20% become supervisors, 8% are directors and 14% return to teaching positions.

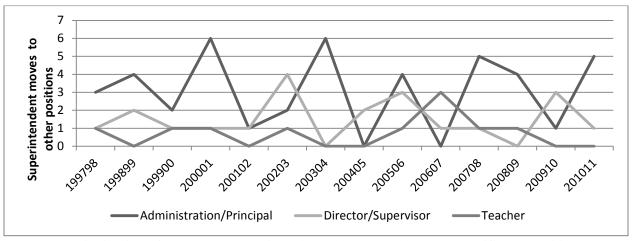


Figure 38. Distribution of New Jersey superintendents who returned to other certificated positions, 1996-2011.

Career Moves of 2010-2011 New Jersey Superintendents

Annual Movement into the Superintendent Position

The study tracks the careers of the 2010-2011 superintendents from the time they enter the New Jersey public education system as certificated employees. In the 1996-97 school-year (Figure 39), 66 superintendents are already in position. In years two through four only 6% of today's superintendents are added to the existing 66. During the last 3 years of the study, 30% of the 2010-2011 superintendents became superintendents.

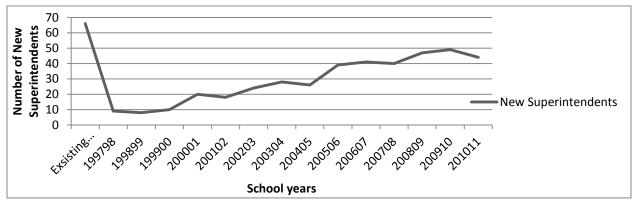


Figure 39. Movement of 2010-2011 New Jersey superintendents into the superintendent position, 2010-2011.

2010-2011Superintendents in 1996-1997

In 1996, of the 2010-2011 superintendents that that are in the New Jersey educational system as certificated staff members, 25 are in other administrative positions, 107 are principals, 22 supervisors, 17 directors and 83 are teachers. The remaining 133 2010-2011 NJ superintendents are not in the New Jersey educational system as certificated staff. In 2009-2010 school-year, 9 of the 2010-2011 superintendents are not in the New Jersey educational system.

Of those 2010-2011 superintendents who are in the New Jersey education system prior to 2010-2011, principals are the largest group for the length of the study. Initially the second largest group is teachers, with 26% of the 2010-2011 superintendents in the teaching group. By year six, 6% are teachers and by year 10, less than 1% are teachers.

Movement into the Superintendency

Positions Held Prior to the Superintendency

When comparing principals and supervisors/ directors (Figure 40), in year one, the supervisory group is at 14% while the principals are at 32%. At year six the principals are at 33% while the supervisory group is at 10%. In year 10 the supervisor group is at 6% and the principals at 24%. But the following year principals drop to 13% while the supervisory group remains at 6%.

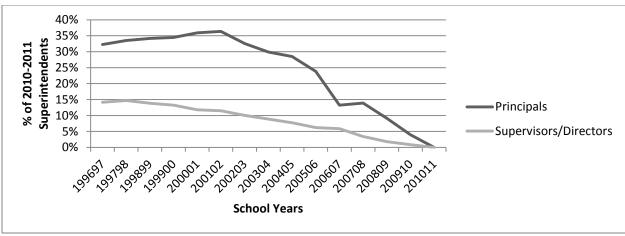


Figure 40. Comparison of 2010-2011 New Jersey superintendents' career path movement prior to assuming the superintendent position, 1996-2011.

Changes in Educational Attainment

As expected, educationally as the number of doctorates increase during the study (Figure 41), the number of bachelor degrees disappear, and the number of masters degrees decrease.

The master degrees hover around 67% for the first 8 years of the study. During the same time period, doctorates increase from 19% to 31% and the bachelor degrees decline from 14% to 4%.

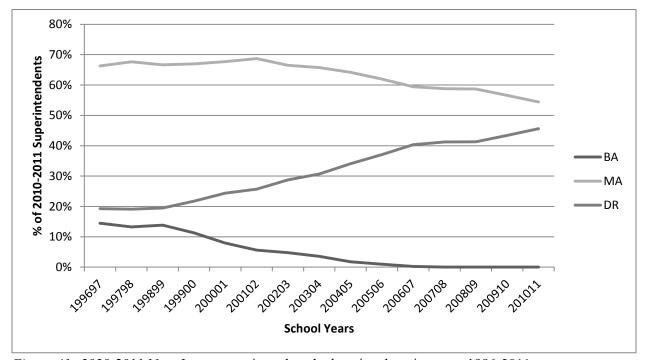


Figure 41. 2020-2011 New Jersey superintendents' educational attainments, 1996-2011.

Movement into Initial Superintendent Positions

Former principals and administrators make up the largest groups of entry superintendents (Figure 42). Former principals make up the largest segment of superintendents for the majority of the study. Administrators exceed principals as entry superintendents only twice in 2004-2005 and 2010-2011.

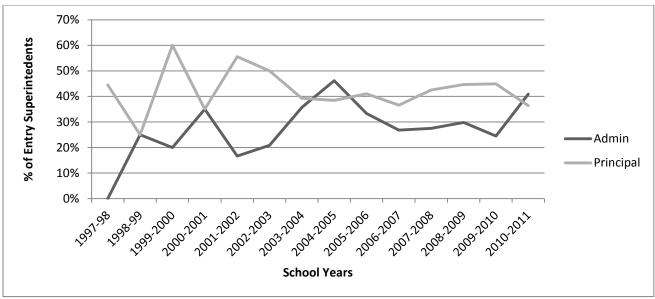


Figure 42. New Jersey 2010-2011 superintendents' movement from certificated positions of principal or administrator to superintendent, 1996-2011.

The number of superintendents who enter the New Jersey education system as superintendents coming from outside the New Jersey education system fluctuates during the study period (Figure 43). In year three of the study, 38% of the entry superintendents come from positions outside the New Jersey population of certificated positions. The following year there are none.

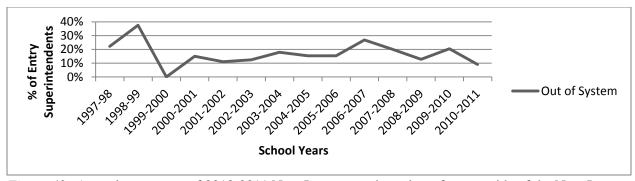


Figure 43. Annual movement of 2010-2011 New Jersey superintendents from outside of the New Jersey educational certificated positions to superintendent, 1996-2011.

Movement into Initial Superintendent Position by District Configuration and Socioeconomic Group

When analyzing the movement of New Jersey certificated staff from other positions to superintendent positions for the study period (Figure 44), the majority superintendent positions in districts with a configuration of kindergarten to grade 12 are filled by administrators. More principals are employed by kindergarten to grade 8 and kindergarten to grade 12 send districts than any other group of certificated positions. The teachers group is the least likely to attain superintendent assignments.

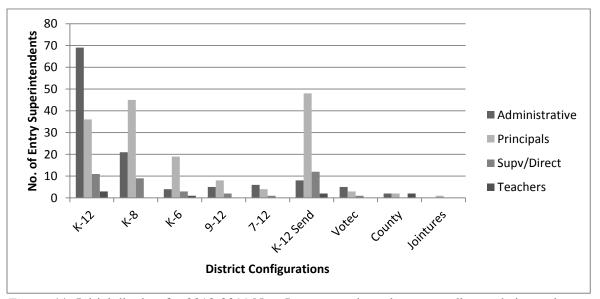


Figure 44. Initial districts for 2010-2011 New Jersey superintendents according to their previous certificated positions, 1996-2011.

While all the other administrative positions provide a steady but low stream of superintendents, assistant superintendents provide the largest group of candidates for the superintendent position (Figure 45). This is especially evident for positions in the kindergarten through grade 12 and the kindergarten through grade 8 configuration of districts.

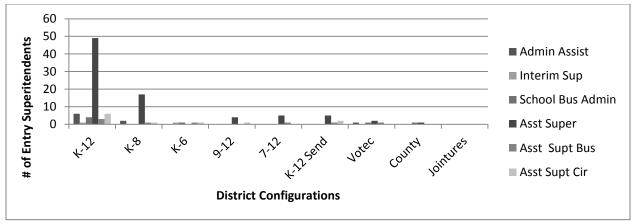


Figure 45. Movement from administrative positions to superintendent by district configuration, 1996-2011.

The majority of the principal group can be divided into three groups (Figure 46); the high school principals, the middle school principals, and the elementary school principals. The high school principals that become superintendents are superintendents of kindergarten through grade 12 districts. Middle school principals are most likely become to become kindergarten to grade 8 or kindergarten through grade 12 send districts as are elementary school principals. Throughout the study it is apparent that the majority of VOTEC, county and jointure superintendents are chosen from existing superintendents and not other groups of certificated staff positions.

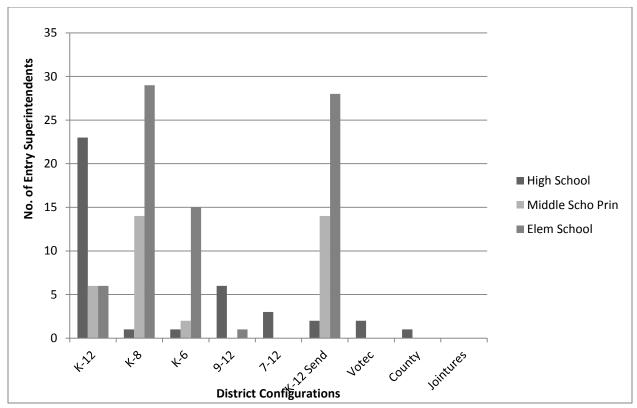


Figure 46. Distribution of New Jersey principals when they become superintendent by district configuration, 1996-2011.

As the majority 2011 superintendents migrate from teaching to the superintendency, high school principals and assistant superintendents are the most likely to become superintendents of K-12 districts while middle and elementary school principals are selected to the superintendency of K-8 and K-12 send districts.

Socioeconomically, there was no evidence that any group varied from the sources listed above. As Figure 47 shows the majority of the superintendents came from the principal category in every DFG. This chart also includes the superintendents that were appointed from a previous position outside the pool of New Jersey certificated staff position.

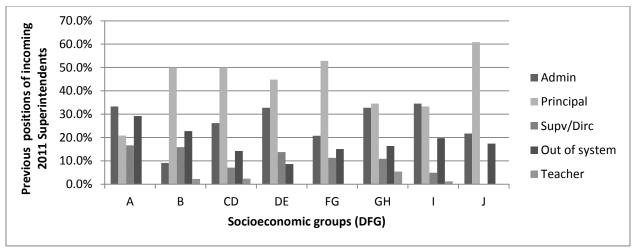
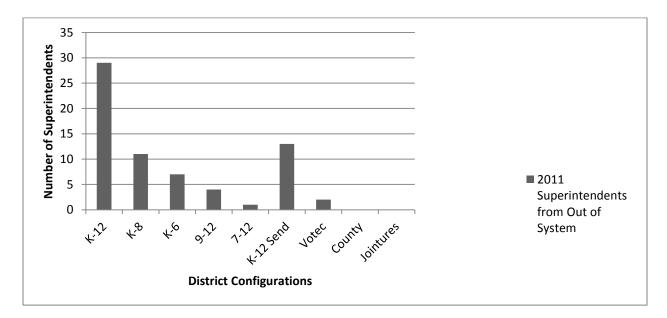


Figure 47. Distribution of 2011 New Jersey superintendent prior positions by socioeconomic grouping, 1996-2011.

The constant appearance of individuals from outside the New Jersey educational system warrants a closer inspection of these superintendents and their initial positions as New Jersey school district superintendents. Figure 48 shows the distribution of these individuals by district configuration and socioeconomic group.



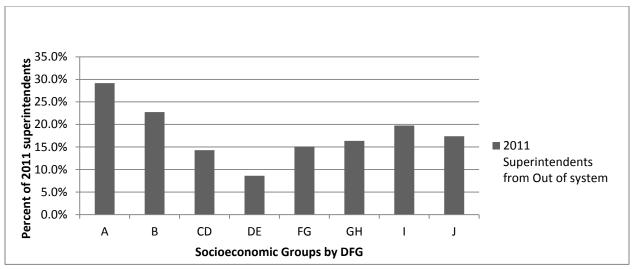


Figure 48. Initial superintendent positions for those individuals that were not certificated staff members in New Jersey in their previous position by district configuration and socioeconomic grouping, 1996-2011.

It appears that there is a third career path to the New Jersey superintendency from outside of the traditional principal or administrator route. Since existing public data does not contain any information except for years of previous experience it is impossible to determine the previous positions of this group of superintendents.

New Jersey Superintendent Turnover

Turnover Rate Tracking

Turnover rates are developed by tracking the movement in and out of the superintendent's position by district for the fifteen year period from 1996-97 to 2010-2011. This movement is summarized for the entire state, and then shown by school type, DFG and geographically by county.

Superintendent Turnover Statewide

While a cursory inspection of Figure 49 does not indicate an area of concern until the numbers are put into prospective. On the average, each district in the state has 3 different superintendents during this 15 year period. More than 40 % of the districts had 4 or more

superintendents and 19 % had five or more superintendents. Only 6% of all districts have the same superintendent for the length of the study.

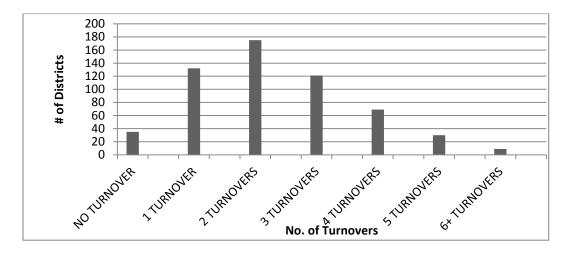


Figure 49. Turnover rates for all New Jersey districts, 1996-2011.

Superintendent Turnover by District Configuration

Turnover varies by district configuration (Figure 51). The districts with kindergarten through grade 12 (k-12) and kindergarten through grade 8 (k-8) configurations have on average 4 superintendents for the 15 year period of the study. County commissions (CSES), vocational and technical (VOTEC) and jointure (Joint) districts have 2 superintendents for the period. While the average turnover rate for the state is at three turnovers per district for the 15 years of the study, turnover rates for K-12 and K-8 districts average at 4 turnovers for the same period. These two groups represent 354 districts in the state or more than half of the school districts in New Jersey.

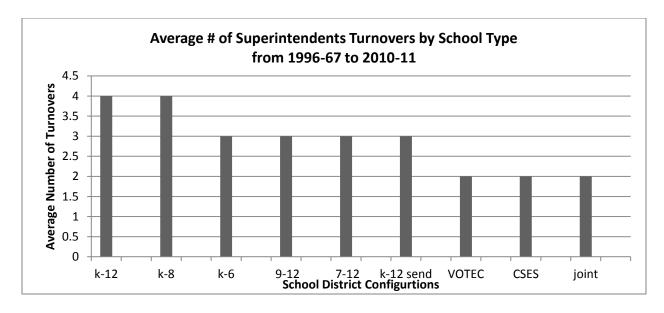


Figure 50. Superintendent turnover rates for New Jersey school districts by district configuration, 1996-2011.

Superintendent Turnover by Socioeconomic Group

Superintendent turnover is highest in the lowest and two highest socioeconomic groups representing 167 districts in New Jersey (Figure 51). They have an average turnover rate of 4 superintendents for the 15 year period of the study. Those districts that have no rating, are also not governed by a board or municipality, have a turnover rate of 2. There are 41 districts in this group.

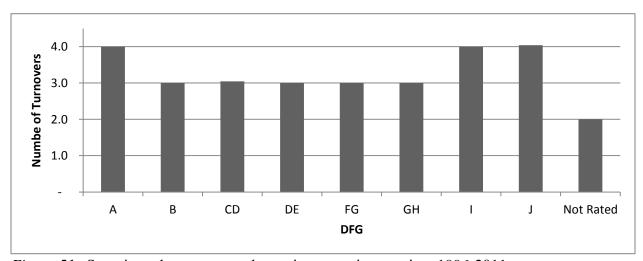


Figure 51. Superintendent turnovers by socioeconomic grouping, 1996-2011.

Superintendent Turnover by Geographic Location

Superintendent Turnover by Region

The state of New Jersey is divided into 3 geographic regions. All the regions are a mix of rural and urban counties. The regions also contain counties that surround major cities of New York and Philadelphia and are included as part of the major markets of those cities.

In reviewing the superintendent turnover rates for each region (Figure 52), the northern counties employ 741 different superintendents during the study period. The southern region employs 621 different superintendents and the central region 534. While the average turnover rate for the all the southern counties is three turnovers, five of the central counties have average turnover rates of four and the only one county had an average turnover rate of three. Of the northern counties, five have an average turnover rate of three and the remaining two counties have a turnover rate of four superintendents.

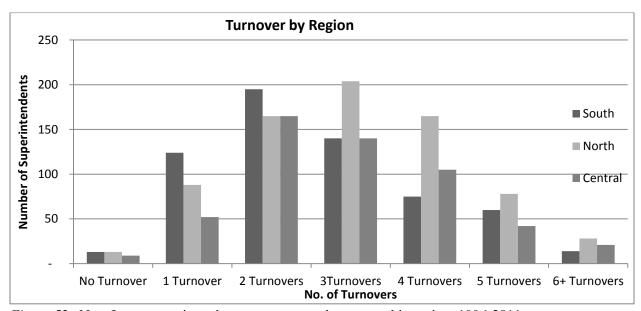


Figure 52. New Jersey superintendent turnover rates by geographic region, 1996-2011.

Superintendent Turnover by Population Density

Population of the 21 counties in New Jersey range from 66,000 to over 895,000. When dividing the counties into three groups for comparison purposes. The low group (7 counties with

the lowest populations) houses 11% of New Jersey's population. The 7 counties in the middle group house 34% of the population. The high group consists of 7 counties with 55% of the population.

The high population density 7 county group employs 769 superintendents during the 15 year study period. Two counties experience an average of four turnovers per district and five counties average three turnovers per district for the study period. The middle group had three counties with an average turnover of four superintendents per district and four counties with and average turnover of three. They employ 653 superintendents for the study period. The low population group employs 474 superintendents from July, 1996 through June, 2011 with six counties at an average turnover rate of three superintendents per district and only one county with a turnover rate of four.

Superintendent Turnover by Median Incomes

The median incomes by county in New Jersey range from \$48,000 to over \$100,000. In the low income group of seven counties, median incomes range from \$48,000 to \$56,000. This group employs 392 superintendents during the study years. The middle group of counties has median incomes ranging from over \$59,000 to over \$79,000 and has a total of 459 superintendents in its employ for the study. In both groups 6 of the counties have turnover rates of three with only one district in each group with a turnover rate of four. The high income group of counties has median incomes from \$75,000 to over \$100,000. This group employs 907 superintendents for the 15 years of the study. Only three counties in this group have turnover rates of three. The remaining four counties have turnover rates of four.

Superintendent Turnover by Recorded Incidences of Violence

Ranking counties by the recorded incidences of violence produced three groups for turnover analysis. The lowest 7 counties had recorded incidences that ranged from 72 to 422 annually. Theses counties employ 584 superintendents for the study period and four of the counties with turnover rates of three and three of the counties with rates of four. The middle counties have annual violent incidents that range from 678 to 1336. They employ 811 superintendents and all have a turnover rate of three. The high group's annual incidences of violence range from 1478 to 5467. They employ 510 superintendents during the study with three counties with turnover rates of four and the remaining four counties with average turnover rates of three.

Final Thoughts

The findings in this section demonstrate that the majority of the demographic characteristics have remained constant with the only noticeable difference in the gender distribution of today's superintendents. The panel study of 2011 superintendents show that the majority of the candidate pool consists of both school administrators and principals. The movement into and out of the superintendency perhaps reveal the most interesting findings. The high number of turnovers by district, the number of superintendents moving laterally or without salary increase and the noticeable difference between regular school districts and special school districts in terms of turnover and salary may provide interesting areas of further study.

CHAPTER 5 - DISCUSSION

This three part descriptive longitudinal study provides a 15 year investigation of New Jersey school district superintendents in order to track the demographics of individuals who have served as district superintendents from 1996 until 2011. It examines this group as a whole as well as contextually in order to compare and contrast New Jersey superintendents by the types of school districts they lead, the socioeconomic grouping of the districts and by geographic regions. Since New Jersey school districts surround two major cities, New York and Philadelphia, appropriate districts are grouped into metro areas for their respective city and are included in the analysis.

The second phase follows 2011 superintendents backwards for 15 years to provide career path information. It identifies likely candidate pools in general and by school type. Current superintendents are tracked from when they entered in New Jersey education system employed in a certificated position. This portion of the study also includes superintendent movement from one district to another and superintendent turnover by district.

The final section focuses on superintendent tenure and turnover. Again, observing the movement of superintendents from a district perspective. Superintendent turnover for the entire state is tabulated. The data are reorganized and viewed in the context of district configuration, socioeconomic status and geographic location.

Superintendent Demographics Discussion

Gender

From 1996 until 2011, the percentage of female superintendents rises from 13% of all New Jersey superintendents to 28%. By district configuration, the majority of this increase occurs in kindergarten through grade 6, kindergarten thought grade 12 where students are sent to

other districts for 7-12 or 9-12 grades and grades 9-12 districts. Socioeconomically, the largest increases in female superintendents occur in the 2 highest socioeconomic groupings. Regionally, 33% of the superintendents are female in the Central Region in 2011 from 24% in 1996. In the Southern Region the percent of women rose from 16% to 27% and from 15% to 23% in the Northern Region. It may be of some interest to note that the Northern Region still maintains the lowest percentage of women superintendents.

National surveys conducted in 1998 (Blout,1998: Tallerico & Blout, 2004) reported female superintendent population was at 10%, in 2003 (Grogran & Brunner, 2003) at 18%, in 2006 (Glass & Franceschini, 2007) at 21.7% and in 2010 (Kowalski et al., 2011) 24.1%. In 1998, 17% of the superintendents were female in New Jersey, in 2003, 24%, and in 2011, 28%. New Jersey has consistently employed more female superintendents on a percentage basis than indicated in the national surveys.

Racial/Ethnic Minorities

The number of racial/ethnic minority superintendents in New Jersey rose from 5% to 7% in the past 15 years. By district configuration, the highest percentages of minority superintendents are employed by kindergarten through grade12 school districts. In 1996, 10% of the k-12 superintendents are classified as racial/ethnic minorities and this figure rises to 13% in 2011. Socioeconomically, the poorest districts have the largest percentage of racial/ethnic minority superintendents at 31% in 1996 increasing to 39% in 2011. This group contains 39 districts. Regionally, only the Southern Region has increased its racial/ethnic population of superintendents from 4% to 8%. In 1996 the Philadelphia metro area districts has 3 % of the superintendents who are racial/ethnic minorities while the population of racial/ethnic minorities in the New York City metro area is at 7%. The racial/ethnic minority superintendents in 2011

comprise 8% of the superintendents in the Philadelphia metro area. In the New York metro area the population of racial/ethnic minority superintendents rises only 1% to 7% for the same time period.

Nationally, in 2000, 5.1% of the superintendents surveyed are classified as racial/ethnic minorities (Glass et al, 2000). In 2006 this figure rises to 6.1% (Glass & Fransecshini, 2007). According to Kowalski et al. (2011) in 2010 this figure declines very slightly to 6%. For the same years, New Jersey racial/ethnic minority superintendent population is at 4.8% in 2000, 5.6% in 2006 and 6.6% in 2010. The composition of the racial/ethnic minorities is changing from being predominantly Black to equal percent of Black and Hispanic superintendents at 33% of the cohort and Native Americans emerging as the third largest group at 25% nationally (Kowalski et al., 2011). In New Jersey, Blacks are at 64% of the racial/ethnic minority superintendents and Hispanics are at 10% in 1996. Presently in 2011, Blacks are at 67% while Hispanics represent 21% and Native Americans at 3% of the racial/ethnic minority cohort.

Superintendents' Ages

Superintendents nationally and in New Jersey are older than they were 15 years ago and the distribution of ages has also changed. In 2010 nationally (Kowalski et al., 2011) 5.6% of the superintendents are under the age of 41, 23.1% between 41 and 50 years of age, 53.9% between 51 and 60 and 17.4% over the age of 61. In New Jersey, the under 41 group equals the national distribution at 6%. The 41-50 year group is less at 18.3%. The 51 to 60 age group is at 40.6%, again less than the national group. The largest difference is in the 61 and over age group. In New Jersey 35.1 % of the superintendents are over 60. In New Jersey, both male and female superintendents have a mean age of 56 for the past 5 years since 2006.

Nationally, women superintendents are older than their male counterparts in 2010 (Kowalski et al., 2011). While the percentage of males 50 years old or less is at 30.9%, only 21.5% of the female superintendents are under 51 years of age. The largest age group of women superintendents is the 51 through 60 is at 60.1% versus men at 51.7%. In the over age 60 group the percentage for both men and women is at 18%.

Superintendents' Years of Experience.

While the age of superintendents has increase over the 15 years of the study, years of experience has not changed significantly. Average education experience fluctuates between 28 and 29 years, average experience in New Jersey fluctuates between 25 and 26 years and average experience in the district is at 11 years for 1996-2008 and then drops to 10 years for the last 3 years of the study. Consistency in years of experience is unexpected when the age of the population is increasing.

Superintendents' Salaries

Average annual salaries rise from \$100, 912 to \$167,905 for New Jersey superintendents during the 15 year study period. When separated by gender, men average an annual salary \$100,978 in 1996 while the average salary for women is at \$95,672 or 6% less. In 2011 male superintendents earn on average \$171,321annually while female superintendents earn \$159,292 or 7% less. Nationally, gender salary gaps are at 15% for public sector employees (Reese & Warner, 2012).

Racial/ethnic minority superintendents earn more than the average annual income for all superintendents. In 1996 this group's salary level was 9% higher than the average superintendent's salary. In 2011 this gap increased to 12%.

Experience and educational attainment both impact on superintendent salaries. In 1996 the average salary for a superintendent with a Master's degree is \$95,057 and the mean salary for a superintendent with a Doctorate is \$107,366, a difference of \$12,209 or 12.9%. By 2011 the gap narrows to 10.2% or a \$16,418 differential. As anticipated, the more experience superintendents have the more they earn. In 1996 an average annual salary for a New Jersey superintendent with 25 years of experience is \$7,969 more than a superintendent with less than 25 years of experience. In 2011 the gap had widened to \$17,592.

Superintendents in kindergarten to grade 12 district and grade 9 through 12 earn more than all other district configurations except for County service districts (CSESD) and Jointures. Socioeconomically, the two wealthiest socioeconomic groups (DFG I and J) pay the highest superintendent salaries for the length of the study.

Regionally, the mean salaries for superintendents are equal for the North and Central regions. The South region's mean salaries are significantly less. In 1996 South's salaries were 86% of the other two regions, and in 2011 the South's salaries drop to 76% of the others. A gap also exists between the two metro areas. Average salaries in the New York metro area are consistently higher than those in the Philadelphia metro area. In 1996, the gap in salaries between the two metro areas was 18%. This differential has grown to 28% during the 15 years of the study.

Superintendents' Career Paths Discussion

Superintendents' Movement Between and Out of Districts

The percent of superintendents that move from district to district ranges from a high of 36% to a low of 20% with an average annual movement of 27%. Of these 292 superintendents that move to other districts during the study period, 33% move to larger districts, 26% to district

within a higher socioeconomic group and 41% are considered lateral moves. 15% of all moves had no salary increases associated with the move, regardless of the category of the move. Average salary increase associated with the moves annually range from 9.7% to 25.8%. Average annual increases for superintendents who remain in position rage from 1% to 5%. While nationally, superintendents moved for two reasons. The first was from smaller to larger or more prestigious districts. The second was because of conflict in the district (Parker, 1996). Grissom and Anderson (2012) attributed superintendent movement to a set of complex factors including age, educational attainment and job performance.

While the majority of superintendents that vacate the superintendents position and leave the New Jersey public school system as a certificated staff member, a small number, 74 during the 15 year study, remain in the system. The majority become principals, administrators, supervisors and directors. Of this group 14% returned to teaching.

Career paths by certificated positions to the superintendency

Of the 2011 employed superintendents 66 are in position in 1996. By 2001, 22% are in superintendent positions. Between 2006 and 2011, 43% of the present superintendents enter the position. In 1998, eight become superintendents, which is the lowest. The highest number of superintendents, 49, are newly employed as superintendents in 2010.

During the 1996-1997 school year, of our panel of superintendents, 14.2% are in position. The largest group, at 23.0%, are principals. Teachers are at 18.7%. Supervisors, directors and nonsupervisory personnel make up 9.1%. Of our panel, only 5.8% are in administrative positions. 26% of the current superintendents were not in certificated positions in New Jersey.

By 2004-2005, at the midpoint of the study, 24.5% are principals, 6.7% are in director or supervisor positions, 8.8% are in administrative positions, while only 3.0% are teachers. Of the

panel, 43.0% are superintendents. The remainder, 14.0%, are not in certificated staff positions in New Jersey. By the 2006-2007 school year there is less than 1% of the panel in a teaching position. In the 2009-2010 school year 2% of the panel is still not in New Jersey but are hired from outside of the education system in New Jersey as superintendents in 2010-2011.

Last Position Held Prior to Superintendency

Researchers have established two career paths to the superintendency. The first is a traditional path that begins with teacher to principal and then to the superintendency (Kowalski et al., 2011). The second path adds a third step prior to the superintendency which is an administrative position (Bjork et al., 2005).

For 14 years of the study, principals are the largest pool of candidates to become superintendents. The percentage of new superintendents whose prior position are as principals fluctuates between 41% and 60% but always higher than the percentage of new superintendents whose prior position is an administrator. In school year 2010-2011, the final year of the study, 41% of the new superintendents are previous administrators and only 36% are previous principals.

The percent of 2010-2011 superintendents that come from outside the New Jersey education certificated staff fluctuates annually. In the 1999-2000 school-year, there is no movement from outside of the New Jersey education system into the superintendency. In the prior year, 38% of the superintendent positions are filled from outside the system. On average 18% of the panel of superintendents are selected from outside the system annually.

Where Does the Career Path Lead

If movement from prior positions to superintendency is divided into district configurations of the initial superintendent position a clear path emerges. Administrators,

specifically assistant superintendents, become superintendents of kindergarten through grade 12 districts. Principals are most likely to be superintendents in kindergarten to grade 8 districts or kindergarten through grade 12 that sends students to other districts for grades 7 or 9 through grade 12.

By categorizing principals into groups based on the grade levels of the schools they supervise, the majority of high school principals become superintendents of kindergarten to grade 12 districts. Middle school principals are more likely to become superintendents in kindergarten through grade 8 or a sending kindergarten through grade 12 districts. Elementary school principals become superintendents in kindergarten through grade 8 or 6 districts and sending kindergarten through grade 12 districts. It appears that the specialty districts hire existing superintendents to fill any vacancy.

Socioeconomically, districts use the same pool of candidates whether they are considered wealthy districts or poor districts. Principals are the main source of superintendent candidates. Administrators are the next largest pool. Directors and supervisors do not appear to be a significant source of superintendent candidates. More 2011 superintendents were selected from outside of the New Jersey educational system than amongst supervisors and directors.

Turnover Discussion

Statewide turnover rates for superintendents average at three turnovers for the 15 year period of the study, resulting in an average superintendent tenure of five years. When observing turnover rates in the context of district grade configurations, the tenure rate for k-12 and k-8 districts or a total of 354 districts is 2.7 years. The tenure rate for special school districts - Votecs, CSESD, and jointures is 7.5 years. Socioeconomically, average tenure for the poorest and two wealthiest socioeconomic groups (DFG A, I, J) is at 2.7 years. Nationally, average

superintendent tenure averages around 6 years (Bjork, 2003; Natkin et al., 2003; Glass & Franceschiti, 2007).

Conclusions

Who is Leading Our School Districts?

The number of superintendents has declined from 565 to 507 while the total number of districts has only declined by 12, from 602 to 590. In 1996-1997, 22 positions were filled by interims or shared superintendents and 15 districts had no superintendent. By 2011, 45 positions were filled by interim or shared superintendents and 38 districts with no superintendent. Based on the shifting role of the superintendent from instructional leader to one with educational accountability (Farkas et al, 2001; Feurstein & Dietrichm 2003; Lecker, 2002; Sherman & Grogan, 2003), can the State of New Jersey afford to have 14 % of the superintendent positions vacant or temporarily filled by interim or part time superintendents? If so, then why have superintendents as educational leaders? If not, then what policies should be implemented to insure that every district has an educational leader in place who would ultimately be responsible for the quality of education delivered to the students?

The Alchemy of Superintendent Compensation

A study of superintendent compensation is needed to better understand, how superintendents are paid. Contextually, school configuration does not appear to be a justification for significant differences in salary. Understandably kindergartens through grade 12 district superintendents receive more salary than kindergarten through grade 6 superintendents. However grade 9 through grade 12 district superintendents receives more salary than a grade 7 through grade 12 superintendents when the latter has high school as well as middle school

responsibilities. Special district superintendents are the highest paid and received the most salary increases.

Regionally, superintendents in the south including the Philadelphia metro area superintendents are less valuable from a salary standpoint then those in the northern and central counties. The southern superintendents in 2011 earned 23% less than superintendents in the other two regions. Philadelphia metro area superintendents earn 28% less than New York metro superintendents. Age, educational attainment and experience are basically the same in 2011 for all regions. However what has changed is the gender of superintendents in these regions. In the southern region, 27% of the superintendents are female while 33% of the superintendents in the central region are female. Again, not the deciding factor in the superintendent compensation regionally.

In the field of education, it could be assumed that educational attainment would be a goal for all administrative positions, especially the superintendent. Typically, a doctorate requires several years of additional course work, passing a qualifying examination and completing a dissertation. One would assume that once this course of study is completed that not only would there be intellectual and cultural rewards but there would be significant monetary rewards. Not so for superintendents with doctorates in New Jersey. In 2011 there was an average differential of \$13,400 in salary between superintendents with doctorates and those with master degrees. The difference is 7%.

Changing Superintendent Demographics or Not

It is apparent that the recruitment of women and racial/ethnic minorities should be further explored for not only the entire state but also by district configurations, geographic regions and socioeconomic groupings. Although improvements have been realized especially in the area of

the number of female superintendents, the total number of racial/ethnic minority superintendents has increased by four in the past 15 years. Additionally, the majority of the racial/ethnic minority superintendents are Black. There has not been an increase in other racial/ethnic minority superintendents.

Special Districts, Vocational/Technical District and Jointures Equal Superintendent Nirvana

According to this study the most sought after superintendents' positions would be in a county district, a vocational/technical district or a jointure commission. Salaries are higher. The raises are better. Average tenure is over seven years. Your board members are your peers or political appointees. The public does not vote on your budget. Since you provide either educational or support services to districts either by location or membership group and charge districts fees or tuition, you have a measure of success depending on the need for your services. Unfortunately, there are only 41 districts in this group.

Are All the Principals in the Pool

While the career paths for the New Jersey superintendency basically conform to the research (Brunner, 2000; Glass (2000); Kowalski et al., 2011; Bjork et al. 2005), the demographic differences between the principal population and the superintendent population infer that not the entire principal population becomes the pool of candidates for the superintendency. While 50% of New Jersey principals are female, 28% of New Jersey superintendents are female. While 22% of New Jersey principals are classified as belonging to an racial/ethnic minority group only 7% of New Jersey superintendents are so classified.

Analyzing additional superintendent and principal personnel data in terms of where they received

their education, how they scored on certification testing and what certifications they hold will enable researchers to clearly identify the pools of candidates for superintendent positions.

Comparison of the compensation of principals and superintendents should be included when investigating the actual pool of candidates from the ranks of the principals. In 2011, the average principal's salary was 22% less than the average superintendent with a master's degree. A principal might be more motivated to move to a larger school rather than manage a school district.

More than One Pool

There also appears to be a new pool of candidates for the superintendency forming. 18% of the 2011 superintendents are recruited from outside the New Jersey educational system. Who are these individuals? Are they superintendents from other states, that have retired? Are they state employees that have had positions at the New Jersey Department of Education or other state agencies? A study of their previous positions could provide an additional career path to the superintendency.

The Superintendency is a Revolving Door

If the average superintendent turnover is 3 years for most regular districts, how is that superintendent able to fulfill any of the duties or responsibilities implied in the position. In a district with a staff of 200 teachers, would the teacher even know who the superintendent is much less than be inspired by his/her educational philosophies or implement any improvements. The first year is spent in familiarization of staff and the functioning of the district, the second year in program development and the third year in looking for another position. If the superintendent's tenure increases to 4 years, implementation of new programs becomes a possibility and at five years, there is a chance that the programs are evaluated, modified and

improved. Determining the causes of superintendent turnover scientifically and not anecdotally may provide insights to stabilizing turnover rates.

Not only is the superintendency a revolving door for districts but it appears to be one for superintendents. For the length of the study and average of 27.4% of the new superintendents were from other districts annually. The highest was in 1998-1999, when the percentage of new superintendents that were from another district was 36%. This study indicates that a significant portion of these wanderers moved laterally or with no salary increase resulting in the move. Further investigation is required to identify this group of wandering superintendents and their motivation for changing districts.

The Superintendent and Student Achievement

Finally, turnover, interim superintendents, and the lack of an individual in the position may have the possible deleterious effect on student achievement. While the majority of studies concerning the impact of administrative turnover on student achievement center around school level administrators (Baker et al. 2009; Baker et al. 2007; Baker & Cooper, 2005, Bista & Glassman, 1998; Hallinger & Hect, 1998; Herman et al., 2008; Leithwood et al., 2004).

Researchers (Waters and Marzano, 2006) are discovering that the longer a superintendent stays in his or her position the greater the positive effect on academic achievement. Additionally research on the benefits of the use of interim superintendents is limited and an analysis of the cost to benefits ratio could be conducted to insure the best use of district funding.

Does the New Jersey Superintendent Need Fixing

During the past 15 years, New Jersey superintendents have moved into and out of districts at an alarming rate. Fewer superintendents have doctorates. While there are more female superintendents today, the racial mix has remained the same. More superintendent

positions are vacant or filled by temporary or part time employees. For this level of services the citizens of New Jersey expend more than \$200, 000,000 annually. Government on the state level needs to assess the present educational organization and determine if New Jersey is spending tax payer dollars on a system that is not the best suited to providing the highest quality education to their children.

Limitations

The main limitations to this study are those typical of data that is inputted on a local level and receives limited scrutiny by the state. Many of the data fields were not included in the study due to incomplete data, omitted data and incorrect data. Interim superintendents were labeled as full time superintendents, necessitating the purging of all superintendents that were in a district for a year or less. Since the data base did not contain any personnel identifiers, first and last names and age became the identifiers. The files were then visually scanned for misspellings and corrected.

Another important limitation was the inability to access additional personnel date that is maintained at the state level. This additional data would have identified additional certifications held by the superintendents. Those exiting the system, who were retiring, could have been identified. Testing results, degree attainment and grades could have added additional insight to career paths and superintendent selection. Incoming superintendents who were from outside the educational system could have been identified as to certifications and prior positions.

With all that said, this descriptive longitudinal study highlights changes to the demographics of the superintendency for the 15 year period from 1996 through 2011. It identifies career paths to New Jersey superintendent positions, which confirm prior research of

the typical superintendent career paths. Lastly, it identifies possible areas of further study to gain additional insights to the superintendency in New Jersey.

REFERENCES

Alsbury, T.L. (2003). Superintendent and school board member turnover: Political versus apolitical turnover as a critical variable in the application of the Dissatisfaction Theory. Education Administration Quarterly, 39(5), 667-989.

Anderson, J.D. (1988). Education of Blacks in the South, 1860-1935. Chapel Hill: UNC Press.

Antonakos, J., Bendahan, S., Jacquart, H., & Lalive, R. (2010). On making causal claims: A review and recommendations. The Leadership Quarterly, 21, 1086-1120.

Baker, B., Brown, C., & Clifford, M. (2009). School leadership entrance, movement, and exit: A descriptive analysis of the principal career pathway in Wisconsin. REL Midwest at Learning Point Associates.

Baker, B. & Cooper, B.C. (2005). Do principals with stronger academic backgrounds hire better teachers? Policy implications for improving high-poverty Schools. Educational Administration Quarterly, 41(3), 449-479.

Baker, B., Orr, M. T., & Young, M.D. (2007). Academic drift, institutional production, and professional distribution of graduate degrees in educational leadership. Educational Administration Quarterly, 43(3), 279-318.

Baker, B, Punswick, E. & Belt, C. (2010). School leadership stablility, principal moves and departures: Evidence from Missouri. Educational Administration Quarterly, 46(4), 523-555.

Ballinger, G.A. & Marcel, J.J. (2007). The use of an interim CEO during succession episodes and firm performance. Strategic Management Journal, 31, 262-283.

Bebchuk, L.A., Fried, J.M., & Walker, D. I. (2002). Managerial power and rent extraction in the design of executive compensation. University of Chicago Law Review, 69, 751-846.

Bigham, G.D. (2011). The brave new world of the interim superintendency. School Administrator, 68(4), 25-29.

Bista, M.B. & Glassman, N.S. (1998). Principals' approaches to leadership, their antecedents, and student outcomes. Journal of School Leadership, 8(2), 109-136.

Bjork, L. (2000). Women in the superintendency: Advances in research and theory. Education Administration Quarterly, 36(1), 5-17.

Bjork, L. G., Glass, T. E., & Brunner, C. C. (2005). Characteristics of American school superintendents. In L. G. Bjork & T. J. Kowaliski (Eds.), The Contemporary Superintendent: Preparation, Practice, and Development. Thousand Oaks, CA: Corwin Press.

Bjork, L.G., Keedy, J.L., & Gurley, D.K. (2003). Career Patterns of American superintendents. Journal of School Leadership, 13(4), 406-427.

Black, S. (2009, April). The interim CEO. American School Board Journal, 53-54.

Bloch, D.P. (2005). Complexity, chaos and nonlinear dynamics: A new perspective on career development theory. The Career Development Quarterly, 53(3), 194-207.

Blount, J.M. (1998). Destined to rule the schools: Women and the superintendency, 1873-1995. Albany: SUNY Press.

Bollen, K.A., & Curran, P.J. (2006). Latent curve models: A structural equation perspective, Hoboken, NJ: John Wiley.

Boyne, G. A., James, O., John, P., & Petrovsky, N. (2011, July/August). Top management turnover and organizational performance: A test of a contingency model. Public Administration Review, 572-581.

Bozza, R. G. (2010). Don't confuse me with facts. School Administrator, 67(2), 6.

Bredeson, P. V., Klar, H.W. & Johansson, O. (2008). Context-responsive leadership: How superintendents understand, take action and shape the context of their work. In Thompson, D.C. & Cramption, F.E. (Eds.), Preparing Democratic Leaders for Quality Teaching and Student Success: A Time for Action. Orlando, FL: University Council for Educational Administration Convention 2008.

Brunner, C.C. (2000). Unsettled moments in settled discourse: Women superintendents' experiences of inequality. Education Administration Quarterly, 36(1), 76-116.

Callahan, R. E. (1962). Education and the cult of efficiency: a study of the social forces that have shaped the administration of public school. Chicage: University of Chicago Press.

Callahan, R. E. (1966). The superintendent of schools: A historical analysis. (ERIC Document Reproduction Service No. 010 410).

Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal mean and covariance structures analysis (LMACS) and multiple indicator latent growth modeling (MLGM). Organizational Research Methods, 1: 421-483.

Chen, C.P. (2003). Integrating perspectives in career development theory and practice. The Career Development Quarterly, 51(3), 203-216.

Clifford, M., Condon, C., Greenberg, A., Baker, B., Williams, R., Gerdeman, R.D., & Fetters, J. (2012). A descriptive analysis of the principal workforce in Wisconsin (Issues &

Answers Report, Rel 2012-No. 135). Washington D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from http://ies.ed.gov/ncee/edlabs.

Cohen, D.K., & Ball, D.L. (1998). Instruction, capacity, and improvement (RR –42). Philadelphia Consortium for Policy Research In Education, University of Pennsylvania.

Conrad, T.L. & Rosser, V.J. (2007). Examining the satisfaction of educational leaders and their intent to pursue career advancement in public school administration. Journal of School Leadership, 17(5), 570-600.

Council of the Great City Schools (2003). Urban school superintendents: Characteristics, tenure, and salary. Urban Indicator, 7(1). 1-6.

Darling-Hammond, L. & Loewenberg-Ball, D. (1997). Teaching for high standards: What policymakers need to know and be able to do. Paper prepared for the National Education Goals Panel, 1-34.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. Education Policy Analysis Archives (on line) 8(1). Available: olam.ed.asu.edu/epaa/v8n1.

Edson, S.K. (1995). Ten years Later: Too little, too late? In D. Dunlat and P. Schmuck (Eds.), Women Leading Education. Albany: SUNY Press.

Farkas, S., Johnson, J., Dufferr, A. & Foleno, T. (2001). Trying to stay ahead of the game: Superintendents and principals talk about school leadership: Public Agenda.

Feurstein, A., & Dietrich, J. A. (2003). States standards in the local context: A survey of school board members and superintendents. Educational Policy, 17(2), 237-256.

Fuhrman, S. H. (1999). The new accountability. <u>CPRE Policy Brief</u>, RB-27- January 1999.

Fuller, E., Young, M., & Baker, B. (forthcoming). The relationship between principal attributes, school-level teacher quality and turnover and student achievement.

Gall, M., Borg, W. & Gall, J. (1996). Educational Research: An Introduction, 6th edition. White Plains, NY: Longman.

Gates, S.M., Ringel, J.S., Santibanez, L., Guarino, C., Gosh-Dastidar, B. Brown, A. (2006). Mobility and turnover among school principals. Economics of Educational Review, 25(2006), 289-302.

Glass, T. (1992). The 1992 study of the American school superintendency. Arlington, VA: American Association of School Administrators.

Glass, T.E., Bjork, L.G. & Brunner, C.C. (2000). The 2000 study of the American school superintendency. Arlington, VA: American Association of School Administrators.

Glass, T.E. & Franceschini, L.A. (2007). The State of the American School Superintendency – A Mid-Decade Study, Lanham, MD: Rowan & Littlefield Education.

Goodman, J.S. & Blum, T.C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. Journal of Management, 22:627-652.

Grogan, M. (1996). Voices of women aspiring to the superintendency. Albany: SUNY Press.

Grogan, M. & Brunner, C.C. (2005). Women leading systems. School Administrator, 6(2), 46-51.

Grogan, M. & Brunner, C.C. (2005b). Women superintendents and role conception:

(Un) Troubling the norms. In L. G. Bjork & T. J. Kowaliski (Eds.), The Contemporary

Superintendent: Preparation, Practice, and Development. Thousand Oaks, CA: Corwin Press.

Grogan, M. & Sherman, W. (2005). Superintendents in Virginia dealing with issues surrounding the black-white test-score gap. In D. Duke, M. Grogan, P. Tucker & W. Heinecke (Eds.), Educational leadership in an age of accountability. Albany: SUNY Press.

Grissom, J.A. & Andersen, S. (2012). Why superintendents turn over. American Educational Research Journal, 49(6), 1146-1180.

Gronn, P. & Ribbins, P. (1996). Leaders in context: Post positivist approaches to understanding educational leadership. Educational Administration Quarterly, 32(3), 452-473.

Hallinger, P. & Hect, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. School Effectiveness and School Improvement, 9(2), 157-191.

Hannaway, J. & Kimball, K. (1998). Big isn't always bad: School district six, poverty, and standards-based reform. (Contract EA9405301). Washington, DC: Planning and Evaluation Services of the U.S. Department of Education.

Heck, R. & Hallinger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in Math achievement. American Educational Research Journal, 46(3), 659.

Herman, R. Dawson, P., Dee, T., Green, T., Maynard, R., Redding, S., & Darwin, M. (2008). Turning around chronically low performing schools: IES practice guide (NCEE 2008-4020). Washington, DC: U.S. Department of Education, Institute of Educational Sciences.

Huang, Y. S. & Chen, C. R. (2013). Are college chief executives paid like corporate CEOs or bureaucrats? Applied Economics, 45(21), 3035-3043.

Iannaccone, L. & Lutz, F.W. (1970). Politics, power and policy: The governing of local school districts. Columbus, OH: Charles E. Merrill.

Keppel, G. (1991). Design and Analysis: A researcher's handbook. Upper Saddle River, NJ: Prentice Hall.

Kerr, B. & Neuse, S. (2000). Economic representation of women: Determinants of sex-based pay disparities in state governments, 1997-1998 (Working Paper). Fayetteville: The Center for the Study of Representation, University of Arkansas.

Kowalski, T.J., McCord, R.S., Petersen, G.J., Young, I.P., & Ellerson, N.M. (2011). The American school superintendent: 2010 Decennial Study. Lanham, MD: Rowman & Littlefield.

Kowalski, T. (2005). Evolution of the school district superintendent position. In L. G. Bjork & T. J. Kowaliski (Eds.), The Contemporary Superintendent: Preparation, Practice, and Development. Thousand Oaks, CA: Corwin Press.

Kowalski, T. (2001). The future of local school governance: Implications for board members and superintendents. In C. C. Brunner & L.G. Bjork (ed.), The New Superintendency. London: Elsevier Science.

Kowalski, T. (2003a). Contemporary School Administration: An introduction (2nd. ed.).

Boston: Allyn & Bacon.

Kowalski, T. (2003b). Superintendent shortage: The wrong problem and the wrong solutions. Journal of School Leadership, 13(3), 288-303.

Lecker, A. (2002). Listening to leaders: the obstacle course. American School Boards Journal, 189(2), 32-35.

Leithwood, K. & Mascall , B. (2008). Collective leadership effects on student achievement. Educational Administration Quarterly, 44(4), 529.

Leithwood, K., Seashore Louis, K., Anderson. S., & Wahlstrom, K. (2004). Review of research: How leadership influences student learning. Minneapolis, MN: Center for Applied Research and Educational Improvement.

Lent, R.W., Brown, S.D., &Hackett, G. (2000). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. Journal of Counseling Psychology, 47, 36-49.

Logan, J.P. (1999). The gender equality role of educational administration: Where are we? And where do we want to go? Journal of School Leadership, 9(2), 97-124.

Marks, H. & Nance, J. (2007). Contexts of accountability under systemic reform: Implications for principal influence on instruction and supervision. Educational Administration Quarterly, 43(1), 3.

Marks, H. & Printy, S. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. Education Administration Quarterly, 39(3), 370.

Mayrowitz D. (2008). Making sense of distributed leadership: exploring the multiple usages of the concept in the field. Education Administrative Quarterly, 44(3), 424-436.

Meyer, H.D. (2002). From "loose coupling" to "tight management": Making sense of the changing landscape in management and organizational theory. Journal of Educational Administration, 40(6), 515-520.

Mitchell, R.T., & James, L.R. (2001). Building better theory: Time and the specification of when things happen. Academy of Management Review, 26, 530-547.

Moulder, E. & Carlee, R. (2013). Compensation trends. Public Management, 95(3), 35-39.

National Alliance of Black School Educators (2001). Directory of African-American superintendents. Washington, DC: Author.

National Alliance of Black School Educators (2003). Directory of African-American superintendents. Washington, DC: Author.

National Women's Law Center (2009). Congress must act to close the wage gap for women: Facts on women's wages and pending legislation. Washington, DC: Author.

Natkin, G., Cooper, B., Alborano, J., Padilla, A., & Ghosh, S. (2003). Predicting and modeling superintendent turnover. Journal of School Leadership, 13(3), 328-346.

Nettles, S. & Herrington, C. (2007). Revisiting the importance of the direct effects of school leadership on student achievement: The implications for school improvement policy. Peabody Journal of Education, 82(4), 724-736.

New Jersey Department of Education (2005). Certificated Staff (on line). Available: www.state.nj.us/njded/schools/

New Jersey Department of Education (2005). District Factor Grouping System (on line). Available: www.state.nj.us/njded/schools/finance/dfgdesc.shtm/

New Jersey Department of Education (2009). New Jersey School Report Card (on line). Available: www.state.nj.us/njded/schools.

Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? Educational Evaluation and Policy Analysis, 26(3), 237-257.

Pandher, G. & Currie, R. (2013). CEO Compensation: A resource advantage and stakeholder-bargaining perspective. Strategic Management Journal, 34. 22-41.

Parker, P. (1996). Superintendent vulnerability and mobility. Peabody Journal of Education, 71(2), 64-77.

Perego, M. (2012, Jan/Feb). Getting compensation right: Ethically speaking, that is. Public Management, 2-3.

Pitariu. A.H., & Ployhart, R.E. (2010). Explaining change: Theorizing and testing dynamic mediated longitudinal relationships. Journal of Management, 36, 405-429.

Ployhart, R.E. & Vandenberg, R.J. (2010). Longitudinal research: The theory, design, and analysis of change. Journal of Management, 36, 94-120.

Polka, W. A. & Letchka, P.R. (2008). The dark side of educational leadership: Superintendents and the professional victim syndrome. Lanham, MD: Rowman & Littlefield.

Rand (2004). The careers of public school administrators (Research Brief). Santa Monica, CA: Author.

Reese, C. C. & Warner, B. (2011). Pay Equity in the States: An analysis of the gender-pay gap in the public sector. Review of Public Personnel Administration, 32(4), 312-331.

Ringel, J., Gates, S., Chung, C., Brown, A., & Ghosh-Dastidar, B. (2004). Career paths of school administrators in Illinois: Insights from an analysis of state data (Technical Report TR – 123-WF). Santa Monica, CA: Rand Education.

Rist, M. (1991). Race, politics, and policies rip into the urban superintendency. Executive Educator, 12(12), 12-14.

Rocconi, L. M., & Ethington, A. (2009). Assessing Longitudinal Change: Adjustment for regression to the mean effects. Research in Higher Education, 50, 368-376.

Rorrer, A., Skrla, L., & Scheurllich, J.J. (2008). Districts as institutional actors in educational reform. Educational Administration Quarterly, 44(3), 307-358.

Savickas, M.L. (2001). Toward a comprehensive theory of career development: Dispositions, concerns, and narratives. In F.T.L. Leong & A. Barak (Eds.), Contemporary models on vocational psychology. Mahwah, NJ: Eribaum.

Schlechty, P.C. (2006, October). Bureaucracies and learning organizations. The School Administrator, 63, 62-69.

Sharp, W.L. (1994). Superintendent vulnerability and the bottom line. Paper presented at the annual meeting or the American Educational Research Association [New Orleans, LA, April 4-8, 1994].

Sherman, W. H., & Grogan, M. (2003). Superintendents' response to the achievement gap: An ethical critique. International Journal of Educational Research, 6(3), 223-237.

Simmons, J.C. (2005). Superintendents of color: Perspectives on racial and ethnic diversity and implications for professional preparation and practice. In L. G. Bjork & T. J. Kowaliski (Eds.), The Contemporary Superintendent: Preparation, Practice, and Development. Thousand Oaks, CA: Corwin Press.

Singer, J.D., & Willett, J.B.(2003). Applied longitudinal data analysis. New York: Oxford University Press.

Stallings, J. A., and McCartthy, J. (1990). Teacher effectiveness research and equity issues. H. P. Baptiste, Jr., H. C. Waxman, J. Walker de Felix, & J. E. Anderson (ed.) Leadership, Equity, and School Effectiveness, Thousand Oaks, CA: Sage.

Sullivan, S. & Shulman, V. (2005). Managing change: The superintendent as lie director of instruction. International Journal of Educational Research, 8(2), 123-243.

Sunderman, G.L., Traacey, C.a., Kim, J., & Orfield, G. (2004). Listening to teachers: Classroom realities and not child left behind. Cambridge, MA: The Civil Rights Project at Harvard University.

Tallerico, M. & Blount, J. (2004). Women and the superintendency: Insights from theory and history. Education Administration Quarterly, 40(5), 633-662.

Villadsen, A. R. (2012). New executive from the inside or outside: The effect of executive replacement on organizational change. Public Administration Review, 72(5), 731-740.

Wade, J. B., O;Reilly, C.A.,& Pollock, T.C. (2006). Overpaid CEO's and underpaid managers: Fairness and executive compensation. Organization Science, 17, 527-544.

Waters, T. & Marzano, R. (2006). School district leadership that works: The effect of superintendent leadership on student achievement. Denver, CO: Mid-continent Research for Education and Learning.

Westphal, J.D. & Stern, I. (2006). The other pathway to the boardroom: How interpersonal influence behavior can substitute for elite credentials and demographic majority status in gaining access to board appointments. Administrative Science Quarterly, 51, 169-204.

Whetten, D. (1989). What constitutes a theoretical contribution? Academy of Management Review, 14(4), 490-495.

Willett, J.B. (1989). Some results on reliability for the longitudinal measurement of change: Implications for the design of studies of individual growth. Educational and Psychological Measurement: 49, 587-609.

Witzers R., Bosker, R. & Kruger, M. (2003). Educational leadership and student achievement: The elusive search for an association. Educational Administration Quarterly, 39(3), 398.

Young, M.D. & McLeod, S. (2001). Flukes, opportunities and planned interventions: Factors affecting women's decisions to become school administrators. Education Administration Quarterly, 37(4), 462-502.

Youngs, P. (2007). How elementary principals' beliefs and actions influence new teachers' experiences. Educational Administration Quarterly, 43(1), 101.