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Mapping The Talent Pool: An Exploratory Social Network Analysis Of The Southeastern Pennsylvania Public School Superintendent Labor Market

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MAPPING THE TALENT POOL: AN EXPLORATORY SOCIAL NETWORK ANALYSIS OF THE SOUTHEASTERN PENNSYLVANIA PUBLIC SCHOOL SUPERINTENDENT LABOR MARKET

by

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CERTIFICATE OF APPROVAL

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DEDICATION

To my mother and father, who taught me how to hold the pencil.

To my wife, who encouraged me to fill the lines, and

To my children, who reminded me when it was time to play.

Thank you - without you, this wouldn't be.

A.M.D.G.

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ABSTRACT

The purpose of this study was two-fold: to identify an echo chamber in superintendent shortage studies and to conduct an exploratory analysis of the Southeastern Pennsylvania superintendent labor market and, in turn, identify influences on the market(s) based upon the creation of an eight county (Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton) superintendent repository. This study utilized the bibliometric tools of Web of Science and Google Scholar/Metrics to identify an echo chamber and found evidence in cross-citation mapping of the existence of an echo chamber. This study then applied UCINET software to conduct a social network analysis to identify superintendent labor market(s) in Southeastern Pennsylvania.

This study found that a shortage of superintendents does not exist in Southeastern Pennsylvania and that several inter-changeable and intra-changeable labor markets exist exhibiting both homophily and non-homophily characteristics. Although predicted due to anticipated baby-boomer retirements, turnover played a cogent role in labor market dynamics as evidenced in comparative data from 2013 and 2016. The implications of this study suggest the need to re-conceptualize the framework of the superintendent shortage studies on the relationship between incentives and pipeline to better understand the agents that drive and influence the superintendent labor markets. Further implications suggest the need for additional research on turnover not as a negative trait but rather as a vehicle of change that affords career advancement for women and people of color. This study is a modest first step to promote superintendent labor market studies as a means to measure accurately the viability of the pipeline and network.

CHAPTER I

Purpose

Introduction

The 21st century superintendency has been described as exhilarating and challenging (Houston, 2001). For many, the challenge might outweigh the euphoria as evidenced in: the results of several regional studies that posit superintendent shortages (Azinger, 2003; Daresh & Playko, 1992; Esparo & Rader, 2001; Fusarelli, Cooper, & Carella, 2003; Hodges, 2005; Howley, Pendarvis & Gibbs, 2002; Lowery, Harris, Hopson, & Marshall, 2001; Manuel, 2008; Sharp, Malone, & Walter, 2002; Sutton, 2008; UCEA, 2009; Winter, Rinehart, Keedy, & Björk, 2007; Wolverton & Macdonald, 2002), research conducted by the American Association of School Administrators (AASA), and findings through *The Study of the School Superintendency, 2000* and *The American School Superintendent 2010 Decennial Study*. The educational literature also has identified negative perceptions of the 21st century superintendency. For example, the superintendent is viewed as "public property" (Manuel, 2008), the position is embedded with "abuse" and "blame" (Houston, 2001), and the demands of a persistent sixty-five plus hour average workweek are universal (Berryhill, 2009). In addition to the public criticisms are the obstacles of accountability, political activism, high-stakes testing, reduced funding, decentralized decision-making, inexhaustible paperwork, and board relations. Regardless of these drawbacks, Houston (2001) underscores the attraction of the position: "Superintendents know that they can change the trajectory of children's lives, alter the behavior of organizations, and expand the possibilities of whole communities" (p. 429).

This scope of superintendent responsibility and influence within, and beyond, a school district should elicit attraction from a pool of qualified candidates who, as educational leaders themselves, would want to pursue this leadership role. The position of the superintendent is

universal in public school districts across the United States. At the apex of the district administrative hierarchy, the superintendent is ultimately responsible for the quality of the educational programs offered, for student achievement, and for the district's reputation. Given the scope of these duties, only the most qualified candidates should aspire to fulfill these obligations; however, a body of literature has emerged since the millennium that indicates qualified candidates, those who possess superintendent certification, are choosing not to pursue the superintendency.

The Commonwealth of Pennsylvania maintains specific and rigorous requirements for superintendent certification. The procedure to acquire the superintendent letter of eligibility is arduous and candidates' conviction can be strained by the process. The Pennsylvania Department of Education (PDE), through school code § 49.172/ Letter of eligibility, defines the satisfaction of three requirements: (1) successful completion of an advanced degree (Master's or Doctorate) through an approved educational leadership program with approximately two years in preparation of chief school administrators, (2) recommendation by the preparing university, and (3) six years teaching experience including three years in a supervisory or administrative role. Table 1 lists the 24 universities and two colleges that provide certification approved programs identified on the PDE website (see www.education.state.pa.us).

In addition, PDE provides stringent requirements for superintendent preparation programs through *The Framework for Superintendent Preparation Program Guidelines* (2008). This 22 page publication has mandated institutions with accredited educational leadership programs to renew their curricula to ensure the following: (1) alignment with three core and six corollary PA Leadership Standards, (2) incorporation of programs with demonstrated student achievement improvement, (3) a comprehensive and relevant curriculum that includes

field placement with a minimum of 360 hours that is faculty supervised and superintendent mentored, and (4) highly qualified faculty comprised of both recent/current practitioners and researchers.

Table 1*: Pennsylvania Accredited Colleges/Universities Offering a PA Superintendent Letter of Eligibility Program*

Institution	Location	Status	Graduate Students
Southeastern Pennsylvania			
Arcadia University	Glenside	Private	1,600
Drexel University	Philadelphia	Private	9,460
Eastern University	St. David's	Private	1,160
Immaculata University	Malvern	Private	1,100
Lehigh University	Bethlehem	Private	2,050
Marywood University	Scranton	Private	1,300
Neumann College	Aston	Private	600
St. Joseph's University	Philadelphia	Private	3,500
University of Pennsylvania	Philadelphia	Private	1,100
Widener University	Chester	Private	1,670
Temple University	Philadelphia	Public	9,400
Non-Southeastern Pennsylvania			
Alvernia University	Reading	Private	600
Bucknell University	Lewisburg	Private	155
California University of PA	California	Public	1,980
Duquesne University	Pittsburgh	Private	4,500
Edinboro University	Edinboro	Public	1,945
Gannon University	Erie	Private	1,260
NOVA Southeastern University	Fort Lauderdale, FL	Online	19,449
Penn State/Main	University Park	Public	14,700
St. Bonaventure University	Allegheny, NY	Private	600
St. Francis University	Loretto	Private	600
Shippensburg University of PA	Shippensburg	Public	1,300
University of Pittsburgh	Pittsburgh	Public	10,000
University of Scranton	Scranton	Private	1,950
Westminster College	New Wilmington	Private	1,440
Wilkes University	Wilkes-Barre	Private	2,250

As is the case for qualified candidates in other states, those seeking the Pennsylvania letter of eligibility for superintendent certification do so with professional, financial, and time

investments. Hodges (2005) notes that the "stereotypical aspiring superintendent is a part-time, commuter student who pursues the degree or certification during the evenings and/or in the summer" (p. 78). According to Glass, Björk, and Brunner (2000) further challenges are evident for aspiring candidates as measured in districts' inability to provide "financial assistance, paid sabbaticals, and opportunities to work with exemplary superintendents" (p. 152). As a result, aspiring candidates' tenacity, perseverance, and level of commitment are evident in spite of the obstacles. Moreover, their intent to pursue the superintendency seems to be confirmed.

Given the socio-political context of contemporary public education, the need for strong leadership in the form of qualified superintendents is undeniable. At this time of political infringement in public education, lack of taxpayers' support during continued economic uncertainty, and the high accountability embedded in the national legislation of *No Child Left Behind*, it is important to identify superintendent labor markets because a potential shortage of qualified superintendent candidates will threaten to weaken an already compromised public education system. Of equal importance is the examination of a body of research that has emerged since the millennium that indicates qualified candidates, those who possess superintendent certification, are choosing not to pursue the superintendency (Azinger, 2003; Daresh & Playko, 1992; Esparo & Rader, 2001; Fusarelli, Cooper, & Carella, 2003; Hodges, 2005; Howley, Pendarvis & Gibbs, 2002; Lowery, Harris, Hopson, & Marshall, 2001; Manuel, 2008; Sharp, Malone, & Walter, 2002; Sutton, 2008; UCEA, 2009; Winter, Rinehart, Keedy, & Björk, 2007; Wolverton & Macdonald, 2002).

For many superintendents the challenges are immense, but it is uncertain if these challenges are deterring the next generations of superintendents to shoulder the responsibility. Swift change caused by the recent economic downfall and the current climate of accountability

have transformed the educational, managerial, and political roles of the superintendency (Björk & Gorley, 2005; Browne-Ferrigno & Glass, 2005; Fusarelli & Fusarelli, 2005). No longer are these domains exercised in isolation. Rather, for the 21st century superintendent, all three converge simultaneously and dominate the superintendent arena. As a result, new identities for the superintendent have emerged such as democratic leader, social scientist, and social activist (Björk & Gurley, 2005, Fusarelli & Fusarelli, 2005).

In 2008, the American Association of School Administrators (AASA) conducted a national questionnaire of its members through the AASA Center for System Leadership's Institute for Leadership Research and Design to assess the superintendent pipeline. Although 85% of these respondents indicated the pool of qualified superintendent candidates was inadequate, the low response rate must be taken into consideration as to the validity of a superintendent shortage. Of a random sample of 7,552 AASA superintendents, only 28% responded to the 15 item questionnaire. Although this return rate is low it is not atypical of results gleamed from superintendent research rooted in surveys. What is of most concern is that these low response rate surveys become embedded in research and promote a potentially false interpretation of superintendent labor markets.

By 2010, *The American School Superintendent Decennial* report seemed to muddle previous research on a superintendent shortage and attempted to reframe the debate. Major conclusions indicated a rise in the number of female superintendents, a high level of job satisfaction among all superintendents, but the threat of a major turnover as 51% of respondents indicated retirement by 2015. The anticipated turnover caused a resurgence in the argument of a superintendent shortage.

Locally, Jim Buckheit, Executive Director of the Pennsylvania Association of School Administrators (PASA), reported in June 2013 that Pennsylvania "continues to witness the increasingly rapid turnover of district superintendents" (p. 4). More specifically, 49.7% of Pennsylvanian superintendents changed from the 2009 – 2010 school year to the 2012 – 2013 school year equating to an approximately 50% turnover in a four-year period. From January 2012 through October 2012, ninety-five Pennsylvania superintendents, or approximately one-fifth, retired, transferred, or moved positions. In the same time period of January through October 2012, twenty-seven Pennsylvanian school districts experienced three superintendent turnovers and two districts experienced four superintendent turnovers. In suburban Philadelphia counties, superintendent turnover rates reflect the trend across the state with Bucks County experiencing a 69% turnover rate, Montgomery County experiencing a 43% turnover rate, Delaware County experiencing a 43% turnover rate, and Chester County experiencing a 33% turnover rate.

This rapid turnover trend has continued and as recent as September 6, 2015, *The Philadelphia Inquirer* published an article entitled "Turnover at the Top: PA School Superintendents Trend Short-Term." Of note, the article underscored the national average of superintendent tenure as 3 – 4 years based upon findings from the Brookings Institution, an American think tank and private, non-profit independent research organization. At the state level, Jim Buckheit is quoted in the article as stating, "Almost 300, or 60%, of the state's districts have seen change at the top in the last five years" (p. B3).

Turnover should not be perceived as negative per se, as it affords the opportunity for school boards to search for candidates to address the needs of their districts and to promote growth in the areas of student achievement and financial solvency. In addition, turnover cannot

be misconstrued as a precursor or indication of a superintendent shortage. Although shorter years of service seems to be the new norm in superintendent tenure, the shorter length of service in comparison to previous years cannot be abruptly judged as negative. In fact, comparisons should be made between the turnover rates in education and other fields such as business and nursing to determine the level of pervasiveness because turnover may not be emblematic in education alone.

In anticipation of the predicted turnover, the Pennsylvania legislature, in 2012, updated Public School Code Article X, Section 1003, (Eligibility) in order to expand the pool of superintendent candidates and effectively authorized degrees in graduate business, finance, management, and law as sufficient preparation for the superintendency. *The American School Superintendent 2010 Decennial* (Kowalski, McCord, Petersen, Young, & Ellerson, 2010) report commented on the vigor to "eliminate or attenuate licensing for superintendents" (p. 9) due to the current dissatisfaction with public education and the potential shortage of qualified candidates. The study noted that 54% of the 41 states that require superintendent licensure now permit waivers and emergency certification in order to fill positions.

Although such a practice may fill the perceived vacuum of educational candidates, these "CEOs" know very little to nothing about educational practice. Carella (2000) cautioned against such solutions when he wrote:

> Whereas some executive-managerial skills would undoubtedly transfer into the world of education, being a school superintendent requires a deep understanding of the role of education in society and certainly a grasp of pedagogy and curriculum design. Thus business and education, while on equal footing, are not interchangeable. (p. 5)

The Pennsylvania legislature's decision may have been in anticipation of a large number of baby-boomer superintendents' retirements and as a means to guarantee that a pool of candidates was available to fill anticipated vacancies, but the decision may raise more concerns than solutions. For example, if the benefit is better fiscal management during a persistent recession, it may come at the cost of mediocre educational leadership, low staff morale and, potentially, lower student achievement. In addition, legislators seem to have interpreted turnover as synonymous with shortage and overlooked the need to examine superintendent labor market trends in Pennsylvania. Identifying Pennsylvania superintendent labor markets and examining qualified candidates' demographics may reveal what common characteristics exercise influence in the labor market and if a shortage threatens the labor market.

Need for the Study

Since the publication of *The Study of School Superintendency 2000*, a number of regional studies have been published in the form of dissertations and research articles that seem to support the superintendent shortage. Statewide and regional studies in the Northeast (Esparo & Rader, 2001), Texas (Lowery, Harris, Hopson, & Marshall), Alaska, Idaho, Montana, Oregon, Washington (Rawls & Wolverton, 2000; Wolverton & Macdonald, 2002), Virginia (Fenn, 2002), Maine (Campbell, 2002; Manuel, 2008), Colorado (Hodges, 2005), Ohio (Howley, Pendarvis, & Gibbs, 2002), Illinois (Azinger, 2003) and Kentucky (Winter, Rinehart, Keedy, & Björk, 2007) concluded candidates are choosing not to pursue the superintendency. Moreover, articles began to appear in the superintendent shortage literature with verbiage such as "crisis" (Carella, 2000; Cooper, Fusarelli, & Carella; 2000Esparo & Rader, 2001; Glass, 2001b), "shortage" (Björk, Grogan, &Johnson, 2003; Glass & Björk, 2003; Kowalski, 2003), "job satisfaction" (Conrad, 2005; Fusarelli, Cooper, & Carella, 2003; McGehee, 2003; O'Malley, 2004; Padalino, 2009;

Pallena, 2000; Peters-Schinsky, 2001; Schoen, 2006; Solomon, 2004; Tarleton, 2009), "pipeline" (Azinger, 2003; Hodges, 2005; Manuel, 2008; McCord, Jordan, & Jordan, 2008; Melver, 2011; Rawls & Wolverton, 2000; Sutton, 2008; University Council for Educational Administration, 2009) and "turnover" (Glass, 2002; Berryhill, 2009). Titles posited questions such as "Who Will Serve?" (Fusarelli, Copper, & Carella, 2003), "Why Do the Job?" (Manuel, 2003), and "What's the Status of the Superintendent Pipeline?" (Sutton, 2008) and, in doing so, raised readers' levels of concern and sensationalized the shortage perception.

Correspondingly, the majority of the research associated with these studies is myopic as researchers relied upon surveys with low response rates and glossed over the conclusion of *The Study of School Superintendency 2000* report that stated:

> Although anecdotal evidence suggests the existence of a 'shortage,' the absence of comprehensive, credible data on the number of individuals licensed, but not entering search pools, makes it uncommonly difficult to understand the scope and urgency of the issue or develop coherent policy alternatives. A series of state and national studies are needed to understand the dimensions and characteristics of the problem and produce an adequate supply of highly qualified school and district administrators. (p. 145)

This conclusion calls into question whether the superintendent shortage is a myth rather than a reality (Bjork, Grogan, & Johnson, 2003; Kowalski, 2003). The 2000 study (Glass, Björk, & Brunner, 2000) does state in its summary, "Although many individuals who complete preparation programs may not actually become superintendents the knowledge and skills acquired are invaluable to building the capacity of districts to improve the education of children, particularly those at risk" (p. 161). Likewise, the summary adds, "an increasing number of superintendents are viewing the position as 'impossible,' and the salary and benefits as

inadequate, contributing to many highly qualified professionals deciding not to enter candidate pools" (p. 161); although concerning, neither of these statements are indicative of an imminent or forthcoming superintendent shortage.

The possibility exists that an echo chamber may have evolved wherein researchers built upon an erroneous conclusion based upon survey methodologies with low response rates and intertwining references in both the national and regional studies which, in turn, has yielded a perseverance that a superintendent shortage is a reality. Goldie, Linick, Jabbar, and Lubienski (2014) described an echo chamber with a dual purpose; namely, to repeat "small and selective set of studies…to advance a policy agenda" and to draw conclusions that are "simplified as they reverberate through policymaking discussions as proven truths, reinforced by repetition without the nuance and complexity they deserve" (p. 282). As a result, superintendent shortage studies may be suspect to misinterpretation due to an inter-connective reference network, overgeneralization based upon low response rates, and inaccuracy of an actual superintendent shortage. Figure 1 raises the possibility that an echo chamber effect may exist in the superintendent shortage literature as evidenced in the citation patterns in dissertations (white) and journal articles (black).

This canon of superintendent shortage research is based upon surveys with extremely low response rates. Table 2 reflects a chronological list of the national and regional superintendent shortage studies from the years 2000 through 2011 and includes response rates. In fact, the response rate for *The Study of School Superintendency 2000* was low. Although the report reflects a 42.4% response rate it represents only 18% of the total superintendent population in the Unites States. Therefore, conclusions are susceptible to criticism because they do not reflect the majority of opinion. Moreover, much of the existing research focuses on principal job

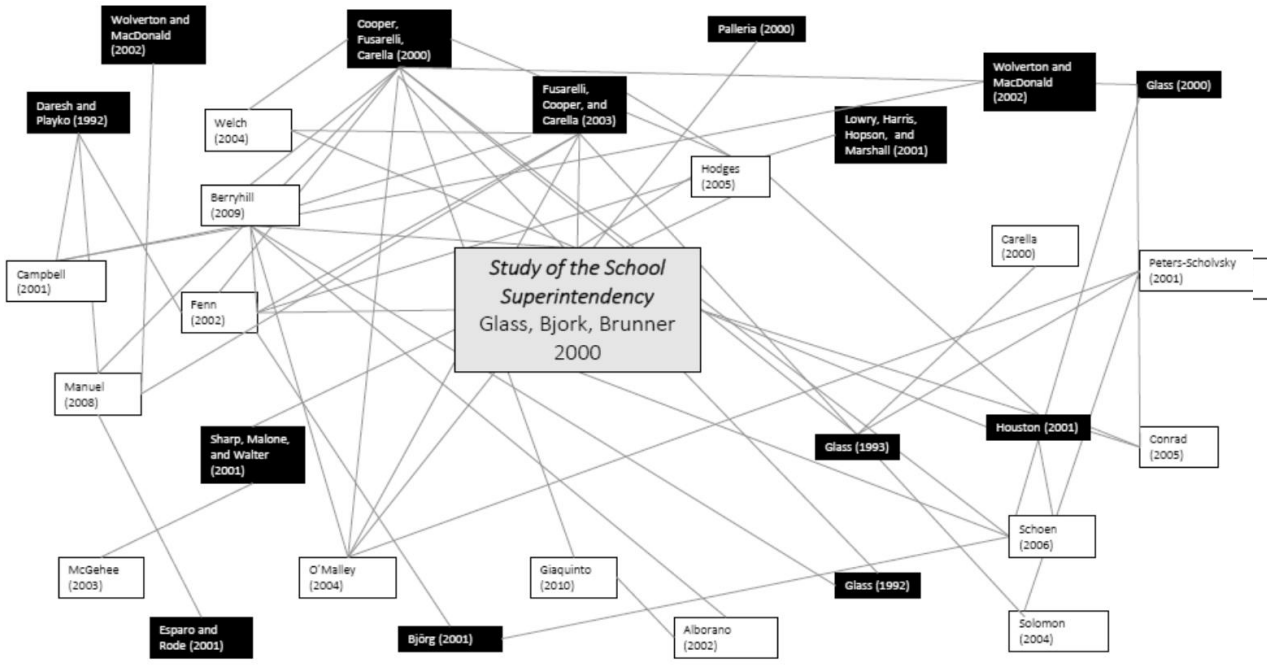


Figure 1**.** *Citation patterns (dissertations/white and journal articles/black) raise the possibility of an echo chamber effect.*

satisfaction as a barometer to measure whether a superintendent shortage is imminent and very few examine local/regional superintendent labor markets to identify pipeline issues in order to establish the reality of a shortage. In other words, superintendents and their levels of job satisfaction were not the foci of pipeline viability but principals who may, or may not, truly understand the scope of the superintendent position were assessed. Without principals knowing the daily role and responsibilities of the superintendent is it possible for them to project with certainty whether they would pursue the superintendency? They lack the adequate background knowledge and view the position from the vantage point of the principalship.

Of further concern is the misleading return rates reported on the majority of superintendent shortage studies. In addition to the national survey only surveying 18% of the total superintendent population in the United States, many of the regional studies are also replete with misleading return rates that mar readers' comprehension of a superintendent shortage.

Table 2*: Chronological List of National and Regional Superintendent Shortage Studies*

Authors	Year	Population	Research Design	Responses/Sample	Return Rate
Glass, Bjork, & Brunner	2000	National	S	18% of all identified superintendents	42.4%
Campbell	2001	MN	S	236 respondents	56% - superintendents 36% - certificate holders 64% - graduate students
Lowery, Harris, Hopson, & Marshall	2001	TX	S	231superintendents	90%
Howley, Pendarvis, & Gibbs	2002	OH	S	826 respondents	62%
Sharp, Malone, & Walter	2002	IL, IN, TX	S	Superintendents: IL – 46 ID – 20 TX - 53	 46% 50% 53%
Wolverton & Macdonald	2002	AK, ID, MN, OR, &WA	S	371 respondents	60%
Campbell	2002	ME	S	236 respondents	48%
Fenn	2002	VA	S	202 respondents	65%
Welch	2004	National	S	994 newly appointed superintendents	53%
O'Malley	2004	NJ	S	50 superintendents	62%
Hodges	2005	CO	S	117 superintendents	57%
Glass & Franceschini	2008	National	S		28%
Manuel	2008	ME	S & I	70 targeted principals	43%
Berryhill	2009	TX, CT, KY, & OR	S & I	Superintendents: TX – 328 CT – 32 KY - 62	 32% 24% 37%
Kassebaum	2011	NE	I	21 superintendents	

For example, Lowery, Harris, Hopson, and Marshall's conclusions are based upon only 25% of the Texas superintendent population which consisted of 1,036 individuals. Likewise, Sharp, Malone, and Walter base their conclusions on 15% of superintendents in each of the states they surveyed. O'Malley's research was limited to 50 superintendents and Kassebaum's research was limited to 21 superintendents.

Purpose of the Study

The first purpose of this study was to analyze the superintendent shortage literature to determine the extent to which an echo chamber exists. Should an echo chamber be identified it calls into question the reality of superintendent shortages. Second, this study attempted to identify superintendent labor markets to assess whether a superintendent shortage exists or is imminent in the Southeastern Pennsylvania counties of Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton. To control for misinterpretation and to avoid sensationalizing results, the data was empirical, but not based upon surveys. Third, this study identified common characteristics among the eight county superintendents through the construction of a superintendent repository to determine their influence in the labor market. Lastly, this study explored the extent to which an inter-changeable or intra-changeable labor market exists among the eight counties of Southeastern Pennsylvania. This study analyzed superintendent demographics and movement to provide a profile of the superintendent labor market in Southeastern Pennsylvania.

This study intended to add to the limited body of literature on the superintendent labor market. No central repository for superintendent demographics exists in the Commonwealth of Pennsylvania. The Pennsylvania Department of Education maintains certification records of superintendents throughout the Commonwealth using T.I.M.S. (Teacher Information

Management System), but demographic information is not contained in a single file, document, or archive. Such a database was created in order to better understand the superintendent labor market as evidenced in demographics (title, race, gender, race, education, superintendent preparation programs, original content area certification, and employment history) and in movement (voluntary transfers, terminations, and retirements) for the 114 superintendents in the counties of Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton counties in Southeastern Pennsylvania. These counties comprise the southeastern region of Pennsylvania outside the Philadelphia metropolitan area and are so arranged that they create two bands (see figure 2) outside the School District of Philadelphia.

Due to its size and organizational structure, the School District of Philadelphia was not included in this study. One superintendent heads the Philadelphia district administrative team but numerous assistants provide regional support at a superintendent level. This is a unique configuration in comparison to the majority of southeastern Pennsylvania school districts where, depending upon district size and population, a superintendent leads the entire district with either one or two assistant superintendents providing central office administrative support.

Until this database was created it was difficult to assess with certainty the threat of a superintendent shortage. The goal of this database was to identify common characteristics among the 114 superintendents that may influence the labor market. In addition, this study sought to identify the extent to which the labor market is inter-changeable, intra-changeable, or neither based upon the movement and appointments of superintendents among these eight counties. Lastly, this study sought to provide reassurance, direction, and recommendations for the Pennsylvania Department of Education on the viability of the Southeastern Pennsylvania superintendent pipeline, to school boards to build background knowledge on the candidate pool

of potential superintendents, and to colleges/universities with superintendent preparation programs to provide them with a tool to improve programming.

Figure 2. *Map of the eight Southeastern Pennsylvania counties that surround Philadelphia. Source: https://genpa.org/region/southeast-Pennsylvania.*

Research Questions

1.) To what extent does an "echo chamber effect" exist in the superintendent shortage literature?

2.) Which common characteristics of the eight county superintendent talent pool exercise influence in the labor market?

3.) To what extent does an inter-changeable or intra-changeable labor market exist among the eight counties of Southeastern Pennsylvania?

Significance of the Study

Current research on superintendent shortages reflect serious limitations and superintendent labor market studies are relatively nonexistent. Without a canon of data-based and empirical studies, results from survey-based research cannot be deemed conclusive. Likewise, reliable and valid measurements have not been developed, tested, or replicated. The

absence of a reliable set of quantitative and qualitative studies may result in potentially false conclusions continuing to persist. Empirical data that reflects the true nature of the superintendent labor market is needed in order to reframe the superintendent shortage debate and re-conceptualize the framework to conduct superintendent research.

The use of the word *shortage* in the research is, in fact, misleading but has not been challenged. There may be a "shallow pool" of qualified candidates and fewer candidates may be applying for superintendent vacancies. However, shortage connotes an absence of candidates for the superintendency, yet none of the studies indicate unfilled superintendent vacancies in any districts across the United States. Therefore, the hypothesis of superintendent shortage studies needs to be explored and analyzed to determine legitimacy. In simplest terms, a shortage would indicate that there are no qualified candidates and public school districts operate without superintendents, which is not the case. Superintendents exist across the United States and universities with superintendent preparation programs have administrators enrolled for the purpose of earning their superintendent certification.

As a whole, the superintendent shortage studies share a contiguous flaw. A common thread among all the studies is that conclusions are based upon results from sample populations with low response rates that cannot be generalized to the broader population and, most importantly, cannot affirm a superintendent shortage. The majority of the studies employed survey methodology to collect data. These surveys relied solely on respondents' perceptions, opinion, and personal experience to make conclusions (Berryhill, 2009; Campbell, 2002; Fenn, 2002; Hodges, 2005; Howley, Pendarvis, & Gibbs, 2002; Wolverton and Macdonald, 2002). A superintendent shortage may amount to speculation and is not representative of a pandemic

among qualified candidates. As a result, there is an urgent need to shift focus on superintendent labor markets to identify potential shortages.

Studies need to be reframed not through the anticipated intentions of qualified candidates but rather through the lens of current superintendent labor markets. Major cities such as New York, Philadelphia, Chicago, and Los Angeles share common denominators as large urban school districts and may share a labor market more so than these metropolitans do with their surrounding suburban school districts within their respective states. Locally, a shared labor market may exist among the eight counties that surround Philadelphia; however, empirical data on the superintendent labor market is necessary before conclusions can be made. Questions that require attention include: Is there one suburban labor market or more than one? How are market lines drawn? To what extent does travel distance and salary differentials play in defining markets? Do districts with similar characteristics hire similar superintendents and does this create a separate labor market not based upon region or location but rather socio-economic indicators?

An exploration of the superintendent labor market may reveal network dynamics not readily apparent on the surface. For example, given the high socio-economic environment of Bucks and Montgomery counties is it certain to conclude that qualified candidates would not vacate their high salaried positons as building or central office administrators to pursue the superintendent position in another county where the pay would not be commensurate? Analyzing superintendent movement among the eight county districts may answer this question and provide empirical data on the Southeastern Pennsylvania superintendent labor market. This data, too, would yield more meaningful insights than could a survey and would provide potential direction on how school boards could attract the best candidate to their district. Most

importantly, the answer might provide a better understanding as to why shortage perception persists. Qualified candidates exist and are interested in pursuing a superintendency; however, they may not do so at the cost of salary regression. Such an approach may yield reliable and valid data that is currently missing from the research.

Limitations

This study is limited to 114 superintendents who hold positions in the public school districts that constitute the counties of Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton in Southeastern Pennsylvania during the 2014 – 2015 school year. Research may be limited to the availability to access information from databases for all superintendents and there will be no recourse for missing information. A second limitation will be the generalization of the results from these counties to the state or national level. Given the relative homogeneity of the region, it might be difficult to apply results to the more socio-economically diverse districts across the Commonwealth of Pennsylvania and to the national level. Two assumptions will guide this study; namely, the data collected on the 114 superintendents will be accurate and reliable information and the instruments used will be reliable in order to provide meaningful statistical data.

Definition of Terms

Accountability: in education, "a policy of holding schools and teachers accountable for students' academic progress by linking such programs with funding for salaries, maintenance, etc." (as defined by Dictionary.com).

Echo chamber: the fallacious, but unintentional, result when research conclusions are based upon surveys and low response rates in a thread of studies and cross citation occurs.

Homophily: the clustering of people in social network analysis based upon shared characteristics that form homogeneous groups.

Network: for purposes of this study, a reference to the inter-district and inter-county labor market wherein superintendents' mobility can be tracked.

Network Density: the ability to measure the strength of cliques or networks using the ratio n(n-1)/2 wherein the number of actors in a network is place over the total number of possible actors between all pairs.

"Oughtabes": reference to those who should pursue the superintendency but fall outside the traditional stereotype, i.e. females and people of color.

Political infringement: in education, a phrase used to describe the encroachment of either local, state, or national agencies to dictate public education policy.

Pipeline: referring to the pool of principals who already hold, or intend to pursue, superintendent certification for their particular state.

Social Network Analysis (SNA): a statistical methodology that identifies relationships among people and provides a quantitative analysis of a network, such as a superintendent labor market.

Superintendent Shortage Literature: reference to a canon of educational research that as a result of *The Study of School Superintendency 2000* that underscored a national superintendent shortage as a result of qualified candidates not pursuing the position.

Tapping: a term to describe the practice of veteran administrators (principals and superintendents) to invite teachers to pursue an administrative track in their educational career.

Transitivity: used to describe tie characteristics in social network analysis, i.e., if actors A and B share a tie as do actors B and C then transitivity posits that A and C are also connected.

Qualified candidate: for purposes of this study, those individuals who are current public school administrators (elementary, middle, or secondary) and who hold a superintendent letter of eligibility certification for the state of Pennsylvania.

Superintendent preparation program: any graduate level program of study that prepares school administrators for the role of the superintendent and awards them, upon successful completion of the program, with the appropriate knowledge-base to earn the state certification.

CHAPTER II

Literature Review

Introduction

Although the results to state and regional studies on a superintendent shortage seem compelling they cannot be interpreted as conclusive. Survey results are susceptible to respondents' inclinations at a given moment in time and low response rates may not reflect the overarching sentiments of the targeted group. A small sample size of principal respondents who may not understand superintendent responsibilities on a daily basis may not provide accurate responses and thus provide misleading results. Moreover, researchers in an attempt to identify a crisis may have cross-referenced sources to the extant an echo chamber may have resulted.

This unintentional phenomenon skewed the attention away from those qualified candidates who may have been a small population but, nonetheless, were intent upon pursuing superintendent vacancies and, hence, would have avoided a perception of a superintendent shortage. A chronological examination of the regional studies on a superintendent shortage reflect similar methodologies and results from low survey rates to draw conclusions. Low survey returns, in particular, weaken the conclusions that a superintendent shortage exists; however, studies with similar results continued to replicate each other's work in various regions. The end result unfolded as an echo chamber that posited there was a national shortage of qualified candidates seeking the superintendency.

Tracing a Possible Echo Chamber in Superintendent Shortage Research Studies

As a result of the findings in *The Study of School Superintendency 2000* (Glass, Björk, & Brunner, 2000) and *Career Crisis in the Superintendency? The Results of a National Study* (Cooper, Fusarelli, & Carella, 2000), Esparo and Rader (2001), conducted research in the Northeast and identified a leadership crisis. They noted "a shortage of qualified candidates for

school district superintendencies exists in all northeastern states" (p. 46). Esparo and Rader called upon local, regional, and state agencies to address the superintendent shortage and gave a directive to review school-wide governances, accountability issues, preparation programs, and identifying talented leaders earlier as a means to address the shortage. The ultimate goal was to reverse the trend in the Northeast as "turnover continues to rise, the number of applicants for each posted position has decreased steadily" (p. 46).

That same year, Lowery et al. (2001) cited a national trend in the shortage of qualified superintendent candidates. Using Texas as the base of research, they cited heightened accountability, political activism, and unrealistic performance expectations as the causes for candidates to be dissuaded from seeking the superintendency. Although Lowery et al. reported a 90% response rate, the statistic is misleading. Of the 1,036 Texas superintendents, only 25% were sampled. This translated into 259 random superintendents receiving the survey and the actual number of respondents was 231. Based upon this limited pool of responses, Lowery et al. identified bureaucracy as the main inhibitor to the superintendency. In addition, community politics, school board relations, time commitments, and isolation from the classroom were also noted as contributing factors not to pursue the superintendency (Lowery et al., 2002).

In turn, Campbell (2002) conducted similar research in the state of Maine and assessed three sample groups to determine the viability of the Maine superintendent pipeline: current superintendents, superintendent certificate holders, and graduate students enrolled in school administration programs. This study yielded 236 respondents and a 48% return rate. Again, results were reported to align with other regional studies. Forty-nine percent of the superintendent certificate-holders indicated they were not interested in pursuing a superintendent position. The graduate students enrolled in school administration programs were interested in

pursuing a principal position but only 19% indicated they would be interested in a superintendent position. The factors that most dissuaded qualified candidates were "accommodating special interest groups (political), distance from the classroom (job satisfaction), and evening matters (job satisfaction)" (p. 96). However, actual response rates call into question the level of concern that should be afforded to these statistics. Results were based upon the survey responses from a limited population: 82 superintendents, 90 certificate holders, and 64 students. Regardless, Campbell concluded:

> An assumption can be made that students and certificate holders do in fact have a true picture of the realities of the superintendency through their rating of the factors that influence them to pursue a superintendent's position. This study documented that all groups (superintendents, current certificate holders and potential certificate holders) agreed on the factors that most influence and least influence them in the pursuit of a superintendent's position. However, the factors that were rated more positive than those rated more negative were not strong enough influences for the certificate holders and students to show interest in the superintendency as a career choice. (pp. 102 – 103)

Likewise, Fenn (2002) conducted a study in Virginia of superintendent certificate-holders who had not pursued the position and addressed perceived barriers for eligible candidates. Results from a 65% return rate indicated that half of the respondents would not seek the superintendency. The greatest deterrent was board conflict. Although the response rate seems to validate the assumption that a superintendent shortage exists, the actual number of respondents questions whether the conclusion is accurate. Fenn's targeted population was superintendent certificate holders and those seeking certification in the Commonwealth of Virginia; however, 311 surveys were mailed to the sample population and 202 responded. From this small

population, Fenn posited, "Perhaps most individuals pursued the license just in case the door of opportunity knocked, and not because they actually sought the role" (p. 86). Moreover, Fenn reverberated Paul Houston's (2001) call to tap the "oughtabes," those that *should* be superintendents, when she concluded: "All school leaders should facilitate and encourage the professional growth of qualified administrators and candidates preparing themselves for this chief officer role" (p. 87). Underlying this premise is the need to recruit and mentor those candidates that demonstrate the talents and skills to successfully navigate the 21st century superintendency. Such a "tap-on-the-shoulder" approach may strengthen the superintendent pipeline by providing confidence to those candidates who evidenced interest by earning the certificate and instill the passion that may be lacking.

In the Northwest, Wolverton and Macdonald (2002) revealed that of the over 1,000 superintendent certificate holders in the states of Alaska, Idaho, Montana, Oregon, and Washington only 150 candidates (15%) planned to apply for superintendent vacancies. Specifically, of the 191 superintendents who planned to retire by 2003, only 119 qualified candidates intended to interview for the vacancies. Within the pipeline of surveyed principals in the study, 65% indicated they did not intend to apply for the superintendent vacancies. Wolverton and Macdonald ultimately concluded:

> Whether the disincentives that surround the superintendency derive from content, process-related, or socially learned factors, the result is the same. Fewer qualified applicants who want the position exist than are needed to generate such pools in the Pacific Northwest. While the data and the analysis provided by this study did not uncover all the reasons why this is the case, they point to one troublesome reality – the job itself does not appear to be a very attractive career option. (p. 15)

Although Wolverton and Macdonald's research was a regional study that targeted five states (Alaska, Idaho, Montana, Oregon, and Washington) the usable surveys amounted to 371 respondents.

Reasons for not seeking the superintendency were rooted in job satisfaction and were enumerated as political stress, board relations, salary, and position instability. Wolverton and Macdonald uncovered another variable, "enjoy current position," (p. 4) also influenced qualified candidates' decision not to pursue the superintendency. Moreover, they posited that the demands of the superintendency are counter to the original choices to pursue a career in education; namely, working with children, ample family time, and a level of job security. Wolverton & Macdonald's conclusion corroborates a superintendent shortage; however, the findings are based upon a small portion of the overall targeted population.

O'Malley (2004) conducted research on superintendent job satisfaction in Hunterdon and Somerset counties in New Jersey and speculated, "The reason young professional educators are not aspiring to the superintendency might be the amount of negative literature written on the superintendency position, which may not be an accurate representation of how those who hold the positions feel about the superintendency" (p. 4 – 5). During the 2002 – 2003 school year, O'Malley surveyed fifty superintendents in Hunterdon and Somerset counties in New Jersey to measure the level of their intrinsic and extrinsic job satisfaction. Using the Minnesota Satisfaction Questionnaire (MSQ), O'Malley analyzed data using descriptive statistics including T-tests and the Pearson correlation coefficients. With a 62% response rate, O'Malley concluded that the superintendents who participated in the survey expressed a high level of job satisfaction with the superintendency. Likewise, Berryhill (2009) conducted research on superintendent job satisfaction in Texas and corroborated O'Malley's findings and underscored that although

superintendent literature highlights the negative components that are inherent to the position superintendents across the nation reiterate a high level of job satisfaction. Both propose a valid observation and one that can be substantiated through the literature; namely, very few non-superintendents understand the complexity and nuances of the position and without strong mentoring qualified candidates do not possess the context of understanding for the position. Therefore, without comprehension they may be inclined to rely upon general, and oftentimes negative, commentary on the superintendency.

On the premise that qualified candidates were remaining in current positions because they were satisfied, O'Malley (2004) used the variables of salary, district size, and gender as a means to encourage qualified candidates to pursue the superintendency. The highest areas of job satisfaction included: "chance to try my own methods of doing job," "chance to do things for other people, and "chance to do something that makes use of my abilities." The areas of least job satisfaction included: "competence of my supervisor in making decisions," and "chance to tell people what to do" (p. 49). In terms of intrinsic job satisfaction, respondents' scores fell between the satisfied and very satisfied range. In terms of extrinsic job satisfaction (security, pay, physical working conditions), respondents' scores fell between the neutral and satisfied range. O'Malley concluded, "While the job is fraught with external pressures, it is filled with internal possibilities" (p. 79).

In Colorado, Hodges (2005) assessed the viability of the superintendent pipeline. The 2003 Colorado Association of School Executive's (CASE) Superintendent Study was the origin for this study. Again, results indicated that qualified candidates are not seeking the superintendency. Similar to the findings of other regional studies, reasons for not pursuing the superintendency included compliance with state regulations, district accountability, contract

negotiations, and dealing with board dynamics. Although Hodges reports a 57% response rate, the findings are based upon the responses of only 117 participants who were "identified by their superintendents as a person who he or she believed was qualified or may one day be qualified for the superintendency" (104). Given the unspecified qualification of the respondents to provide answers based upon a solid understanding of the role and functions of a superintendent and coupled with a small sample size, the conclusions may not reflect the majority of opinion or sentiment of qualified candidates.

Building upon Fenn's research, Manuel (2008) conducted a study of Maine certificate holders who did not intend to pursue the superintendency. Qualified candidates were candid in stating their original pursuit of the superintendent certificate was the result of a belief that the superintendency was the logical career sequence after the principalship. Moreover, qualified candidates indicated a level of confidence in being able to perform the duties of a superintendent but echoed the sentiment that they made the conscious choice not to pursue the superintendency. Political pressure, detachment from students and staff, greater evening commitment, family sacrifice, and level of current job satisfaction all contributed to qualified candidates' decision to not pursue the superintendency. Similar to Fenn, Manuel concluded that candidates:

> …sought the superintendent certificate almost casually without serious intentions to seek the job. Their two main reasons for earning the credential was to prepare them for future career options and because it was easy and convenient. No one expressed a passion for moving into this role. (p. 209)

Manuel developed a mixed methodology of survey and interviews to gather data. Of the 70 targeted principals with superintendent certification, 30 responded with usable responses. In addition, Manuel included the transcripts from 6 interviews. Manuel was self-aware of the small

respondent population and conceded, "The small percentage and number of survey respondents, therefore, must be considered a research limitation" (p. 68).

In a multi-state study, Berryhill (2009) conducted a study of superintendent turn-over in Texas, Connecticut, Kentucky, and Oregon. Incorporating a mixed methods approach to gather data, Berryhill's respondents expressed a concern that superintendent turn-over would continue to unfold in each of the states assessed. The level of concern, however, needs to be placed within the context of a response rate. Although the study targeted four states, the total number of respondents was 491. More specifically, of the 1020 Texas superintendents only 328 responded. This equates to a response rate of 32.2 %. The trend continued throughout the study as evidenced in the following response and actual number of respondents: Connecticut 32/134 respondents (response rate: 23.9%), Kentucky 62/169 respondents (response rate: 36.7%), and Oregon 69/173 (response rate: 32.8%).

Coming upon the 15th anniversary of *The Study of School Superintendency*, a superintendent shortage can be refuted to perception. Moreover, an echo chamber among researchers may have promoted the belief that a shortage existed or was imminent. In reality, the quality of candidates in terms of preparation, determination in improving student achievement, and commitment to public education matters more than the quantity of qualified candidates. A common thread throughout the superintendent shortage research is the use of surveys and the low response rates associated with each study. Based upon low response rates, studies seem to corroborate preceding studies and have built a canon of superintendent shortage literature. Moreover, each study builds upon the next and incorporates the research from previous studies. The end result is the plausibility that an echo chamber exists in the research.

New Identities for the 21st Century Superintendent Arena

Petersen and Barnett (2005) acknowledge that "because of the contextual and professional responsibilities of district superintendents, several authors have questioned the concept of '*superintendent as instructional leader*'" (p. 113). Furthermore, they underscore the political and conflict –ridden world of the superintendent as a distractor from the role of instructional leader. Petersen and Barnett (2005) assert the political framework of NCLB has direct implications on the superintendent's role as instructional leader and, in particular, with accountability, parental choice, resource flexibility, and teacher quality. In *The American School Superintendent 2010 Decennial Study,* superintendents were asked to measure the success of accountability standards such as NCLB. When asked if the benefits outweigh the detriments superintendents were adamant in their response. Nearly 65% of the 1,867 respondents stated that the perceived detriment of NCLB to schools was either "far greater" or "slightly greater" than the benefits. Moreover, 74.5% of superintendents characterized federal mandates and accountability standards as either "major" or "minor" liabilities for school districts.

Cooper (2000), too, describes the superintendency as an impossible job where even the most talented encounter conflict among interest groups and experience little job security. Houston (2001) referred to this phenomenon as the "lighting rod aspect to the job." The superintendent is "fraught with public criticism," is "abused and other times blamed," and operates in in a dimension where "expectations are high and often unrealistic" (p. 429). Moreover, Houston contends that superintendents become targets when plans go awry and receive minimal recognition for any district success. Exploring a potential national superintendent recruitment crisis, Carella (2000) stated:

> The expectations of school superintendents are greater than ever before. These leaders must be well versed in matters of pedagogy, finance, child growth and development, politics, staff development, human relations, and student management. However, even when superintendents bring these and other abilities to the role of chief school administrator, they find these abilities are insufficient, given the present climate of American education. (p. 11)

The 2000 Study of the American School Superintendency provides a prescription for the 21st century superintendent's survival that places an emphasis on political professionalism. This focus allows superintendents to "increase their influence on policymaking at the local and state levels" and to "attract political support by encouraging needed changes in curriculum and educational technology" (p. 6). Björk and Gurley (2005) also underscore a "sound understanding of the politics of education, school board relations, and the dynamics of human political behavior at macro and micros levels of government and organizations" (p. 181). From this political paradigm, a powerful image of the superintendent emerges: "…superintendents must have a high level of political acuity tempered by moral principles and the capacity to communicate effectively with a broad range of community-based constituents and work collaboratively for the common good" (p. 170). Such a definition is empowering, but also carries a "superman effect" that in today's climate seems overly daunting.

Regardless of a superintendent's political savvy, however, the study makes an uncertain, and prophetic, analysis of power control in 21st century education when Glass, Björk, and Brunner (2000) write: "No definite answers have emerged as to who will develop educational policy and who will control schools in the early 21st century" (p. 6). On the national level is the "education president," on the state level is the "education governor," and on the local level are

the private sector groups, parents, and taxpayers all vying for control of educational policy and practice. As a result, another dimension to the 21st century superintendency will be "master juggler in an increasingly complex organization" (p. 6).

For the first time, *The American School Superintendent 2010 Decennial Study* included a chapter focused on politics, mandates, standards, and government relations. Acknowledging that the topic had only received "superficial attention in preceding national studies of district superintendents," Kowalski et al. (2011) saw the need to "trace the evolving political frame of the superintendency" (p. 129). Bolman and Deal's (2003) political frame for organizations is specifically referenced and described as "all too familiar to school superintendents, and they have elevated the importance of political leadership in recent years" (p. 129). Kowalski et al. (2011) address the political pressure superintendents experience and define three key areas: experiencing political action, superintendents' opinions on issues with political implications, and superintendents' opinions on federal, state, and local government support/involvement.

Superintendents reported political actions at all levels of district size. They expressed a willingness to work with "politically powered individuals" but reluctance to work with "coalitions of like-minded, empowered individuals" (p. 145). The reform movement, which included standards and assessments, was viewed universally negative as 74.5% of superintendents responded that federal mandates and accountability standards are a major or minor liability.

In order to promote the skill-set needed to be an effective 21st century organizational manager, Browne-Ferrigno and Glass (2005) state:

> Although the AASA and ISLLC standards provide blue-prints concerning knowledge, disposition, and performance expectations for all educational administrators, many

> district-level management requirements are not stipulated in those standards. Collaboration across institutional boundaries is needed to develop an approved superintendent-preparation curriculum that includes management tasks specific to the dimensions of the job (e.g., working with the public and media, negotiating contracts related to personnel and real estate issues, operating complex systems, and handling financial responsibilities. (p. 155)

If most school districts are bureaucratic-like organizations accountable to tax-payers and policy-makers then it is the superintendent's responsibility to make the system operate to the satisfaction of all stakeholders. As Browne-Ferrigno and Glass (2005) point out, "They must rely on their principals, teachers, and other administrators to use leadership to achieve district goals and management to complete their assigned work" (p. 143). This is essential in order for superintendents to manage governmental regulations (laws, legal matters, policy options, special education, student personnel issues), district personnel (recruitment, hiring professional development, appraisals), finances and budgets (appropriate management of limited resources), facilities (land, building, and equipment), contractual negotiations, and public relations.

Accountability demands that superintendents develop a skill set in data interpretation at the state, district, and school level which, in turn, necessitates communication with parents and taxpayers. Accountability forces superintendents to take a more active educational leadership role as evidenced in the daily active engagement with principals and teachers, strategic planning, and the budgetary process to name a few. As a result, superintendents have assumed a capacity-building role as "the 'lead learner' who teaches and also is willing to be taught" (Petersen & Barnet, 2005, p. 125). Superintendents now must design support structures (study groups, visitations, evaluations, curriculum committees, staff development) and fund instructional

programs (hire instructional specialists, grant acquisitions). Moreover, the superintendent is accountable to the school board, parents, and taxpayers for any level of change. It is the superintendent's responsibility to educate stakeholders and, often times, educating includes defending especially during the current economic times where financial support for public education is waning.

Superintendent preparation programs discuss the educational, managerial, and political framework for superintendent leadership, but often do so in isolated coursework. The reality of the superintendency reflects these three roles are not separate but are continuously linked through high accountability. Houston (2001) points out that accountability "intensifies" the superintendency and underscores "accountability without authority is punishment" (p. 433) and advocates the 21st century superintendent should focus attention on the macro level as issues on this level shape the superintendent's job.

He believes that in order for superintendents to be successful in the 21st century, they must go beyond the traditional role of management and completely change their approach. Specifically, Houston (2001) promotes a transformation away from what he calls the "killer B's," the "stuff of education," such as buildings, buses, books, budgets, and bonds, and a new focus on the "crucial C's," the processes that support progress, such as connection, communication, collaboration, community-building, child advocacy, and curricular choices. Houston believes that "twenty-first century superintendents will understand that learning is no longer about place, it is about process" (p. 431).

Houston (2001) also identifies the "demanding D's" of social change that are reshaping society and the way children learn. The list is comprehensive: changing demographics, growing diversity, the divide between economic classes and inequalities among resources, the devaluing

of children, the de-emphasis on education. Given the present political context, Björk and Gurley (2005) also describe the superintendent of the 21st century as a democratic leader. According to Björk and Gurley, the definition "requires that superintendents be well-grounded in democratic values. As much as the authors of the 2000 study are forward thinking on the changing role of the superintendency, they also speculate a return to 19th guardianship of public education. For example, Glass et al. (2000) believe that superintendents will be called to defend the "dream of Horace Mann" against funneling tax dollars away from public schooling through the pressures of the political right, vouchers, the charter school movement, home schooling, and privatization. A comparative study of superintendents in Indiana, Illinois, and Texas conducted in 2008 confirmed this belief. When asked which issues were more important today than in the past, school funding appeared twice in the top-five list, as follows: 90.3% identified school finance in general as number one and 76.1% identified school finance equity as number three. (Sharp et al., 2008).

Four issues, in particular, Houston believes will "strike directly at the heart of what the superintendent of the future will do" (p. 430). These are deregulation (change as evidenced in home-schooling, vouchers, and charter schools), devolution (transference of shared power), demassification (erosion of common culture and the questioning of public schooling), and disintermediation (technology replaces institution). As a result, 21st century superintendents will need to: determine the needed and best services that benefit all students, model shared leadership that engages organizational members and community members, focus on learning that is individual and focuses on the larger social context of living together in a complex democracy, and maintain the traditional role of public schools while extending schools' reach beyond the front door.

Likewise, Fusarelli and Fusarelli (2005) promote the superintendency as applied social scientist and social activist. In an age of high accountability, as evidenced in NCLB and limited resources, the superintendent must apply scientifically based research to make effective decisions to improve student achievement. Moreover, limited resources have forced superintendents to obtain alternate funding within the community. This public role requires partnerships with local business and community organizations and transforms the superintendent into a social activist who engages "the entire community in school reform initiatives" (p. 188). In the current skeptical climate of public education, taxpayers are reluctant to fund blindly. The superintendent then becomes the vehicle to "effectively market and sell their product (public schools) to an unprecedented degree and in ways that they never before imagined" (p. 188).

Houston (2001) identified four problems with current superintendent leadership: impossible job, unrealistic expectations, inadequate training, and an inverted pipeline. As such, he calls for the evolution of a distributed leadership system where skills and accountability are shared and where the superintendent "must be a team leader and team developer" (p. 432). Superintendent training for such a model is crucial as current programs do not adequately teach the collaborative skills necessary for "today's more complex and connected environment" (p. 432). Browne-Ferrigno and Glass (2005) advocate that universities alone cannot be accountable for superintendent organizational- manager preparation and called for a partnership between universities and districts that addresses the needs of aspiring, and veteran, superintendents.

Persistent Challenges of the 21st Century Superintendency: The Inequity of Race and Gender

Goldberg (2001) identified five common characteristics among effective school leaders: a conviction to the work, the courage to persevere, social consciousness, purpose and devotion,

and mastery and accomplishment. Clearly, these characteristics are not idiosyncratic to the superintendency but encompass all educational leaders; however, Fenn (2002) also points outs the challenges that superintendents, in particular, universally share in common with each other:

> The literature within the past decade reflects numerous barriers to the position of the public school superintendent, including disharmony with school boards, risk-taking abilities, gender and ethnic issues, the lack of assistance or mentors, and low pay differential for the position. (p. 21)

Harris et al. (2004) believe that a reconfiguration of the superintendency is required so that the "inhibitors are de-emphasized and the motivating factors of the job are emphasized" (p. 119) and qualified candidates are enticed to pursue the position. Moreover, they advocate the recruitment of superintendents from diverse populations as "a critical component" to meet the changing demographics of the United States and call upon university programs, in particular, to address the needs of women and people of color.

Conrad (2005) underscored the dearth of female and people of color representation in the superintendent pipeline when she wrote: "Women and ethnic minorities are noticeably underrepresented in high school administration, a primary pathway to the superintendency" (p. 3). According to Conrad, female superintendents "tend to have a stronger background in learning and instruction, spend more time in the classroom, seek out from the community and parents, and have attained their highest degree more recently than male superintendents." (p. 10).

Glass (2000) offers several reasons why women may be dissuaded from the superintendency: (1) women do not hold the typical positions, i.e. high school principal, that lead to the superintendency, (2) although women earn doctorates only 10% seek superintendent certification, (3) school boards view fiscal management as essential and women may not be as

interested or experienced as a male counterpart, (4) women do not pursue the superintendency for personal reasons, i.e. interference with spouse/children, (5) school boards may be reluctant to hire women, (6) women entered education to teach not to administer, and (7) women become superintendents late in their career (Manuel, 2008).

Glass's observations can be substantiated by *The 2000 Study of the American School Superintendency*. In listing the barriers limiting administrative opportunities for women, 41% of female respondents indicated "lack of mobility of family members" as a deterrent. The second and third barriers were "perception of school board members that women are not strong managers" (38.1%) and "perceptions of school board members that women are unqualified to handle budgeting and finances" (33.7%). In addition, *The American School Superintendent 2010 Decennial Study* revealed that 45.4% of women responded they had encountered discrimination while another 6% were uncertain.

The inequity of women, and especially superintendents of color, in the Southeastern counties of Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton is blatant. For example, of the 114 public school superintendents in these during the 2013 – 2014 academic year, only 32 (22.3%) were women and from this group only 2 (6.1%) were minority. The statistic for female superintendents is still below *The American School Superintendent 2010 Decennial Study* that reports a 24.1% female superintendent population. The study reports that this is the highest figure and is a substantial increase over the 13.2% reported in 2000. Regardless, Derrington and Sharratt (2009) argue that it will take an additional thirty years, if the current rate of change continues, to achieve a male-female balance in the superintendency. The presence of minority male superintendents is comparable. Within the eight counties during the 2013 – 2914 school year, only five existed with each serving in

different counties. *The American School Superintendent 2010 Decennial Study* reported a 6% minority population among superintendents for *all* minority groups. This was only a 1% increase from 2000. The white-male-doctorate- superintendent stereotype was evident in the 2014 demographics in Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton counties, as evidenced in Table 3.

Table 3*: Superintendent Gender by Number and Percentage per County, 2013 – 2014*

County	Superintendents	Male		Female	
	N	n	%	n	%
Bucks	13	10	76.9	3	23.0
Chester	12	11	91.6	1	8.3
Delaware	15	12	80.0	3	20.0
Montgomery	21	11	52.3	10	47.6
Northampton	9	8	88.8	1	11.1
Lancaster	17	12	70.5	5	29.4
Lehigh	7	6	85.7	1	14.2
Berks	20	12	60.0	8	40.0
Totals	114	82	75.7	32	22.3

Fenn (2002) observed parallels in her Virginia study and cited 110 males out of a population of 134 superintendents with 75% earning a doctorate degree. People of color representation was higher in comparison and Fenn noted, "Virginia leads within a six-state region with the most minority superintendents in office" (p. 27). Her figures reflected 35 (26%) minority superintendents, of which three were African-American women, ten were African-American men, and one was a Cuban-American man.

Camasso (2010) cited numerous barriers for females to enter the superintendency: age, motherhood, salary, being mentored, residency requirements, commute time, gender discrimination, and the education level of female school board members. With respects to more women matriculating to the superintendency, Camasso stated:

> Among 114 valid responses most (80.3%) women reported having children majority of whom reported having children over 18 (72.8%). Clearly, children were not hindering women's positive perception of the superintendency as a career choice. This correlation is important in that the demands of the position might be expected to work against this finding. (p. 82)

Given the large percentage of women with children over eighteen, Camasso posits they may have "considered their children in postponing seeking the superintendency." Conrad (2005) gleans opportunity in identifying and removing barriers for women to enter the high school principalship and superintendency as such an approach would "ease the burden of this potential crisis" (p. 12).

According to Carter and Cunningham (1997), the key to successful superintendency in the new millennium is responsiveness to the diverse demands placed on education. With these diverse demands comes the need to hire diverse candidates to meet the challenges. These "increasing demands include the federal mandates of NCLB, state mandates, public accountability, school safety, and funding and operating required educational programs" (Manuel, 2008, p. 14), all of which place stress upon the superintendent. The literature is replete with the theme of superintendent stress and this "negative press" (Azinger, 2003; Björk & Gurley, 2005; Campbell, 2001; Conrad, 2005; Esparo & Rader, 2001; Glass, et al., 2000; Glass & Franceschini, 2006; Harris, Lowery, Hopson et al., 2004; Houston, 2001; Howley, et al., 2002; Manuel, 2008; Melver, 2011; O'Malley, 2004).

Superintendents and School Board Barriers

The theme of board power struggles also resonates in the literature (Azinger, 2003; Berryhill, 2009; Campbell, 2001; Glass, Björk, & Brunner, 2000; Hodges, 2005; O'Malley,

2004; Welch, 2004). Today, more superintendents are finding school board members seek to micromanage school operations and overstep the role of policy maker. O'Malley (2004) provides advice to school boards when he writes:

> School boards across the state need to be mindful of the data from this study that would suggest that superintendents are leaving their jobs because school boards of education have lost their focus, become more micromanagers of school districts, and have not been rewarding and supporting superintendents for the job they are doing. (p. 75)

Welch (2004) confirms O'Malley's conclusion, especially for neophyte superintendents. Welch conducted a national study on superintendent job satisfaction, motivation, and stress using Herzberg's Two-Factor Motivation Theory. Welch's target population was newly appointed superintendents during the 2002 – 2003 school year (N = 2,069). Using a 30 item survey that targeted the importance of hygiene and motivator factors, Welch achieved a 53% return rate on a random sample of 994 neophyte superintendents. Communication with the school board posed significant stress, especially for those new to the superintendency. With respects to self-esteem and self-efficacy, respondents indicated they were rarely afforded recognition for their accomplishments and over half reported they never received praise. The underlying variable was the school board influenced every facet of the position for the new superintendent (Floyd, 2009).

The 2000 Study of the American School Superintendency revealed that one-third of reporting superintendents identified their school boards as "under-qualified" for the position. Eighty-three percent of respondents reported board relations as an inhibitor to effectiveness. Moreover, lack of community support/school board support is the second in importance reason why superintendents leave the field. However, this struggle may be a changing as indicated in data from *The American School Superintendent 2010 Decennial Study*. Ninety-one percent of

respondents were “very satisfied” or “moderately satisfied” with their school boards. Moreover, respondents report the “vast majority” of superintendent policy recommendations were approved by boards in 2010 and this was a repeat trend from the 2000 study. In fact, in the 2010 study, the top reason reported for leaving the superintendency (30.3%) was to “assume a new challenge.” Leaving due to school board conflict accounted for 15.3% of responses.

The same is true for the 2000 study where 37.9 % of respondents indicated they left their previous superintendency to move to a larger district and 14.6% indicated a board conflict was the precursor to such a move. Surely, credibility must rest with current superintendents unless respondents to the survey are those superintendents who are satisfied with their position. At the time of the 2010 study, it was estimated that 12,600 superintendents were employed in school districts across the United States. All superintendents were invited to participate in the study but only 1,867 opted to do so. This equates to a 14.8% response rate.

A comparison of the 2000 and 2010 superintendent studies reveals an interesting omission; namely, the 2000 study contains a section entitled “Stress” under the heading of Superintendent/School Board Relations; however, the 2010 study does not reflect the word “stress” in the report’s table of content nor is there any discussion of stress in the report. This may be due to superintendents in 2010 reporting that they were twice as likely to provide board orientations for new board members or the reported increase in direct communication with the board since 2000. According to the 2010 study, board members universally emphasize the superintendent’s role as effective communicator as most important over manager, instructional leader, statesman/democratic leader, and applied social scientist (Kowalsaki, et al., xvi). Perhaps the overarching reason not to highlight superintendent stress in the 2010 report was explained in the 2000 report: “Stress levels perceived by superintendents in the 2000 Study show a disturbing,

but largely predictable trend." The need to underscore superintendents' stress levels may be unnecessary since stress is ubiquitous among all respondents with 51.5% of 2000 respondents reporting they experience "considerable" or "great stress" and 40.9% reporting "moderate" stress. Another reason might be the high level of job satisfaction that superintendents report in both studies. This level of satisfaction may outweigh the stress or, as speculation, the success over stress may reaffirm superintendents' level of power and control.

Hodges (2005) and Manuel (2008) identified a recently new trend in qualified candidates based upon conflicts with familial responsibilities. Hodges reported 46.2% of respondents highlighted time away from family as a deterrent to the superintendency. Similarly, 43.6% of respondents perceived a "diminished quality of life" (p. 116) as a factor. Interesting to note as well was the 38.5% of respondents who felt the timing was not right and the 32.5% who felt they lacked sufficient preparation. Manuel (2008), too, identified the timing-is-not-right theme two-fold: (1) as it pertains to current job satisfaction as principal and their lack of motivation to learn a new role and (2) regardless of gender, impact of change on spouse and ages of children.

Ultimately, *The 2000 Study of the American Superintendent* concedes:

> Although many individuals who complete preparation programs may not actually become superintendents, the knowledge and skills acquired are invaluable to building the capacity of districts to improve the education of children, particularly those at risk. In addition, it is becoming evident that an increasing number of superintendents are viewing theposition as "impossible," and the salary and benefits as inadequate, contributing to many highly qualified professionals deciding not to enter candidate pools. In addition, the weaknesses of both university- and non-university-based programs are similar, which reinforces the

> often-heated debate from research and practice to addressing a commonproblem and finding shared solutions. (p. 161)

Accountability, board relations, and conflict seem to provide the "ABC's" as to why the majority of qualified candidates are not seeking the superintendency, but other barriers exist. Women and minorities are often at a disadvantage in seeking the superintendency and remain an untapped resource to address a potential shortage. In addition, more and more scholars are identifying the elements that are wrong with the superintendency and are, more importantly, redefining the role and necessary talents for successful 21st century superintendencies. These approaches do not deny the realities of the position, but rather posit the need for better preparation and recruitment to meet the challenges of accountability, board relations, and conflict.

The Superintendent Paradox: Commitment and Job Satisfaction

Superintendent job satisfaction is a relatively new field of inquiry, but the majority of studies surprisingly corroborate that current superintendents are satisfied with their positions. Survey results from *The 2000 Study of the American School Superintendency* revealed that 56% of superintendents experienced *considerable* job satisfaction and 34% experienced *moderate* job satisfaction. Most importantly, two-thirds of respondents indicated they would choose the superintendency again. Based upon this data, the 2000 report stated, "…the superintendency is not a profession in serious crisis" (p. vi) and further asserted, "It seems reasonable to say that superintendents nationwide will not be retiring in large numbers in the next 5 to 10 years" (p. 51). Moving forward to the 2010 report, only 31.9% or respondents indicated they would remain in their current position in 2015. Retirement was the main variable as 42.5% indicated they would retire (10.5%) or retire and work part-time (32%).

The *American School Superintendent 2010 Decennial Study* reports 96.6% of respondents, regardless of gender or race, were *very satisfied* or *moderately satisfied* with their position. Moreover, 88.6% of males and 87.7% of females responded they would choose the same career path again. Respondents also identified school law, school finance, school public relations, and human resource management as the four most important academic courses in preparation for the superintendency.

Regional studies have been conducted to examine superintendents' level of job satisfaction (Floyd, 2009; Harris et al., 2004; Peters-Schinsky, 2001; Sharp, Malone, & Water, 2001; Solomon, 2004). Regardless of measuring the intrinsic or extrinsic factors, superintendents generally reported a high level of job satisfaction. Solomon (2004) conducted research on New Jersey superintendent job satisfaction in affluent districts. Using the MSQ, Solomon surveyed 110 superintendents with a 50% response rate. Solomon used the variables of student population, district structure, and superintendent gender to determine general, intrinsic, and extrinsic job satisfaction. His findings corroborate O'Malley (2004) and Malanowki (1999), both of whom conducted superintendent studies in New Jersey; namely, superintendents reported a high level of job satisfaction. Moreover, Solomon concluded that school structure and superintendent gender did not impact job satisfaction.

Surprisingly, themes of reported low stress levels and the appeal to meaningful work are reflected in some superintendent job satisfaction studies. Peters-Schinsky (2001) examined the relationship between California superintendent job satisfaction, stress, and district effectiveness and superintendents' perceptions of stakeholders' view of their performance. During the 1999 – 2000 school year, Peters-Schinsky surveyed 112 California superintendents from a randomly selected pool of eighty-four public elementary, union, and unified school districts. Using

descriptive statistics, Peters-Schinsky measured job satisfaction, job stress, job effectiveness, and perceived job satisfaction. The majority of respondents reported high levels of job satisfaction and performance. Surprisingly, low stress levels were reported, but higher student enrollment increased superintendents' stress. Harris et al. (2004) conducted research on superintendent job satisfaction in Texas and concluded that 55% of respondents evocated a *love* for the superintendency. Qualitative responses included: "Sure, I've made mistakes, but most of my mistakes were on the behalf of the kids…I can live with that," "School is all I know and, after twenty-five years in the business, I still love school!" and "I just like knowing that after a long day at work, I've done something good for someone…even if no one else notices but me." Responses evidence the intrinsic job satisfaction that O'Malley (2004) and Solomon (2004) identified through their New Jersey studies. Harris et al. noted that commitment to make a difference and helping others were the two intrinsic motivators for Texas superintendents.

Floyd (2009) also conducted research on superintendent job satisfaction in Texas using surveys modeled after the MSQ and Job Diagnostic Survey to measure the relationship between intrinsic (i.e., meaningful work, status, professional growth, accomplishment, etc.) and extrinsic (i.e., board issues, compensation, relationships, etc.) factors. With a 42% response rate (N = 450), superintendents responded that extrinsic factors were more important than intrinsic factors. Floyd asserted findings that corroborated Malanowski (1999) who conducted research on superintendent job satisfaction (intrinsic and extrinsic) in New Jersey urban districts (N =63), but refuted Palleria (2000) who conducted research on superintendent job satisfaction in South Dakota (N = 141). Floyd's findings indicated that 98% of superintendents were overall satisfied as evidenced in the meaningful level of work the position affords, the satisfying level of autonomy and responsibility the position carries, and the sense of accomplishment that was

experienced. Moreover, Floyd advised, "The combination of the intrinsic and extrinsic factors…requires a school board to be cognizant of what satisfies their superintendent" (p. 74). Sharp, Malone, and Walter (2001) summarized superintendents' level of satisfaction with their position when they wrote:

> They feel that they can make a difference in their districts by setting direction, becoming a part of the district's progress, and by building a team of educators in order to improve teaching and learning for students. They feel that their skills are utilized in the superintendency, possibly more than they were in other educational positions that they have held. And, they like the fact that they have daily challenges in their jobs. (p. 12)

Moreover, Sharp et al. pointed out that those who work closely with superintendents understand their level of dedication to the primary goal to improve the educational experiences of students. Results from Sharp's et al. research revealed that 86.6% of superintendents reported "very high" or "high" levels of job satisfaction and 93.2% indicated they would choose the superintendency again. They are also explicit, and joyful in their tone, in answering the question to their article title:

> What's right about the school superintendency? A great deal. Superintendents feel that they can make a substantial impact in the district in teaching and learning and impact the education of children…This should be good news for people considering a career in the superintendency. Do not be put off by some of the negative aspects of the job. They are real, of course, but the positive aspects far outweigh these negative aspects, and they are important contributions to education and to American society. (p. 11 – 12)

In spite of the demands and challenges, superintendents are reporting nationwide high levels of job satisfaction and are indicating they would choose the same career path. With such

strong endorsements for the position, the potential shortage of qualified candidates remains an enigma.

Tapping the "Oughtabes" and the Need for Revised Preparation Programs

Houston (2001) believes the current superintendent pipeline is inverted and depends upon "wannabes" as opposed to the "oughtabes" to fill vacancies. The challenge, Houston believes, is identifying and encouraging the latter group who have great potential for school leadership and providing training that is cross-disciplinary. He notes:

> Nearly two-thirds of the current staff members in district offices are women, and many of them have mastered the skills of affiliation and collaboration through the process of acculturation that we seem to reserve for little girls. We must find ways of shattering the remnants of the glass ceiling and making the role attractive to this new kind of leader. (p. 433)

The 2000 Study of the American School Superintendency corroborates Houston's argument. Female superintendents consistently placed a higher value of importance on curriculum and instruction, relationships, communication, and community groups as factors that may advance career opportunities than male superintendents. Conrad (2005) makes the same argument:

> The masculine traits that have traditionally been associated with successful administrators are being questioned as new leadership theories emerge. A woman's approach to leadership often tends to be more collaborative, more focused on communication, and less authoritative (Glass, 2000; Keller, 1999). Women are viewed as team players, well-versed in curriculum and instruction, dedicated to working with empowering teachers, and capable of effectively communicating with political interest groups and community

members (Glass, 2000; Grogan & Brunner, 2005a; Porat, 1991). In other words, women may possess the transformational leadership style needed by modern day school leaders. (p. 44)

Women superintendents rated their own effectiveness as a superintendent on par with males. Ninety-seven percent of males perceived their effectiveness as "highly successful" or "moderately successful." Females responded to the same categories at 96.5%. For those women who have assumed the superintendency, they perceive their performance, and preparation, to be equal those of males. Perhaps this confidence is one reason why the percentage of female superintendents has increased significantly from the 2000 study (13.2%) to the 2010 study (24.1%). This confidence may be a direct result of mentoring. In the 2010 study, 83% of respondents indicated they had mentored an aspiring superintendent and the percentages of males and females fulfilling the role of mentor was identical. The data did not reflect the percentage of women superintendents mentoring aspiring female superintendents, nor did the 2010 study address specific barriers for women in the superintendency as did the 2000 study.

As much as the superintendent literature highlights the stress and conflict associated with the position, mentoring programs counter this view by providing a balanced perspective rooted in experience. Moreover, mentoring may shatter the glass ceiling for women and evidence from the 2010 study may support this claim. For qualified candidates "looking in," the view of the superintendency is often marred by myopia caused by the negative literature and/or comments. Effective, deliberate, and systematic mentoring may be the solution to the potential superintendent shortage. Practice in the real business of the superintendency alongside an experienced mentor seems the best preparation for qualified candidates. Such an approach provides application of theory in context and much needed experience. Mentoring may

demystify the negativity of the position, build candidates' capacity and confidence to assume the superintendency, and allow candidates the opportunity to decide first-hand if the position is a good fit. As Björk (2001) points out, "Mentoring is an intrinsic part of superintendents' professional work lives, and it provides an effective way of inducting and supporting new administrators" (p. 45).

Researchers also advocate the need to revise superintendent preparation programs to address the changing demands of the position and to prepare qualified candidates to meet the challenges. As early as 1989, the National Policy Board for Educational Administration (NPBEA) advocated the need for "using the practitioner orientated doctorate (Ed.D.) as credential for school administrators" and in 1999 postulated the creation of the American Board for Leadership in Education (ABLE) to provide national certification (Björk, 2001). One of the tenants of ABLE included performance-based certification standards.

In an article entitled "Preparing the Next Generation of Superintendents: Integrating Professional and Experiential Knowledge," Björk (2001) notes the "the closely entwined themes of school reform and the reform of administrator preparation programs" (p. 19) and calls for a "midrange strategy for integrating formal and experiential learning" (p. 20). Greater attention has been paid to superintendent preparation programs within the past decade and statistics may support that universities are heeding researchers' recommendations. For example, commonality exists nationwide in the types of courses offered through superintendent preparation programs. Finance, personnel administration, organizational theory, school law, and school-community relations, as cited in *The American School Superintendent 2010 Decennial Study,* are common courses. Unlike a national certification program for teachers, Kowalski et al. (2011) note that a national curriculum for superintendents does not exist. Moreover, they allude to a lack of

consistency in superintendent preparation programs when they acknowledge not all programs require an internship.

In the 2010 report, 78.7% of respondents rated their academic preparation as *good* or *excellent* and 81.1% rated instructor credibility as *good* or *excellent.* However, the most meaningful component to superintendent preparation may be compromised. As Björk (2001) underscores,

> …most administrators aspiring to the suprintendency are in their 40s, work at mid-career level administrative positions, and have family obligations. Giving up their full-time positions to attend graduate school or engage in year-long, full-time internships, without income is implausible. (p. 34)

The solution then to encouraging more qualified candidates to seek the superintendency leads to a dead end. Even for forward-thinking districts that may initiate a superintendent intern program, the current economic forecast may dissuade school boards to support such a program. The concept would entail availing a building principal the opportunity to experience the superintendency first-hand as an intern with a substitute principal at the building level. Ideally, the principal position could provide opportunity for a teacher aspiring to the principalship. Boards might not be inclined to pay the additional administrative salary and benefits package, but the concept has its merit. Björk (2001) concurs: "a professional school model will require considerable financial investment. Expanding the use of both clinical faculty and internships requires political will and financial commitment that is, at this writing, the exception rather than the rule" (p. 37).

School-university partnerships are essential to restructuring superintendent preparation programs. Björk believes that both domains possess expertise - the university in intellectual

domain and the school district in experiential domain. Integrating both domains requires the use of mentors and cohorts, both of which may the necessary "taps on the shoulder" that some qualified candidates may need to pursue the superintendency. Moreover, he identifies key events in the superintendent's annual work cycle to realign university preparation programs. These events are identified to provide meaningful and practical experience for the aspiring superintendent. Björk organizes these events into three categories: *strategic* (i.e., opening schools in September, the annual budget, staffing projections, facility planning reports, staff development, etc.), *periodic* (i.e., board of education meetings, administrative meetings, etc.), and *episodic* (i.e., unscheduled meetings, communication with school board, tax payers, media, etc.). Björk views the superintendent annual work cycle as "a template for unpacking the professional knowledge base and linking content to specific field-based activities" (p. 44). Field experience in all three domains provides real-life application of university-learned theories and coursework. In addition, field experience demystifies the real work of superintendents and provides opportunity for the aspiring superintendent to practice the role while under the tutelage of a veteran superintendent.

In order to recruit more female superintendents, Grogan and Brunner (2005) posit preparation programs need to address the "nonacademic side of the position" (p. 244). Specifically, they underscore that fewer female superintendents served in central office positions that dealt with finance, facilities, or personnel. Likewise, few females serve as high school principal and do not have experience in athletic programs. Preparation programs must be mindful of these trends and provide opportunities for females to gain practical experience. Mentoring, too, plays a pivotal role. This is especially true for women and for people of color who has historically been marginalized. Grogan and Brunner state, "Multiple mentors are

needed to help these aspirants navigate the unchartered waters of traditional routes to the superintendency" (p. 245). Given the "white, middle-class norm" of the superintendency, Grogan and Brunner insist that race and gender stereotyping must be addressed in program content and practices. Textbooks need to reflect the experiences of female and minority superintendents and program instructors need to be diverse as well. Ultimately, Grogan and Brunner assert:

> The best course of action for those who want to collaborate in the preparation and development of the next generation of superintendents to be effective in reaching all of America's children is to actively *recruit* women and other aspirants of color, to provide the necessary *support* for them to succeed in the program, to *assist* them in networking to find a position, and then to continue to *mentor* them in the field. It should be a comprehensive process that is shared by professors in higher education and practitioners. (p. 245)

In order to recruit more females and people of color, traditional programs that support white, male, middle-class values must be revised. In describing the limits of this patriarchal system, Björk notes, "…such norms and behaviors do hold control over 'who is' and 'who isn't' invited to the table at which powerful decisions are made" (p. 267). If women and people of color are recruited the process must be inviting and realistic to meet their needs. Björk proposes a common sense approach to revising preparation programs to recruit more females and people of color and to build their capacity for the political arena and acceptance into it:

> …if the designers of preparation programs are intent on developing political leadership skills in women and minorities, this curriculum must be framed in a context that meets

their realities, including the acknowledgement and analysis of race and gender barriers and the needed methods and behaviors to counteract blocked access. (p. 267)

Björk recommends the following revisions: include "empowerment strategies" for females and people of color to navigate problems associated with race and gender, focus on management and finance, promote courageous conversations on the topics of race and gender in the superintendency, ensure females and people of color are instructors in superintendent preparation programs, include human rights training, aggressively recruit, support through mentoring and networking, and advocate female and people of color superintendent appointments.

According to 2005 statistics, 18 states did not have any African American superintendents and another 13 had three or less. Given the number of districts across the United States and the changing demographics of the nation, it is of concern that more people of color and females are not pursuing the superintendency. As Björk points out many external barriers exist that bar their entrance into this patriarchal system. In order to meet the needs of the ever increasing ethnic diversity of public schools, more female and people of color superintendents will be needed. These "oughtabes" require more than just a tap on the shoulder in order to be persuaded and rightly so. The traditional superintendent preparation program seems to perpetuate the white, male, middle-class values and norms. Therefore, in order to recruit female and minorities effectively revisions to preparation programs are necessary. Essential revisions include addressing gender and race issues in the superintendency, focusing on specific course content such as financial management and providing extensive mentoring opportunities.

Summary

An entire canon of research exists from the past fifteen years that underscores and corroborates a national superintendent shortage. As the years have unfolded, this assertion has

manifested into more prediction than reality. Conclusions rested on survey research with extremely low response rates. As a result, validity can be called into question and generalizations cannot be applied. Rather than identifying a shortage per se, research needs to refocus the construct of superintendent research on varying topics such as recruiting, the changing role of the superintendent in the 21st century, identifying common characteristics among superintendents, and tracing regional superintendent labor markets to encourage the "oughtabe" population to seek the superintendency. Although shorter tenures may be the new norm, overarching evidence suggests that current superintendents exhibit a high level of job satisfaction and would pursue the position again if they had the choice to do so. If this is the current milieu of superintendents, then to question the validity of a shortage is legitimate. Perhaps changing times are affecting the established characteristics of a superintendent and now is the opportunity for gender and race changes at the top of the educational hierarchy.

CHAPTER III

Methodology

Introduction

The position of the superintendent is universal in public school districts across the United States, but seldom has the superintendent labor market been the focus of empirical research. The greatest peril to the superintendent labor market is the possibility of a superintendent shortage. This chapter provides an analysis of literature from the past fifteen years on the potential for a superintendent shortage. First, findings are challenged based upon samples and response rates. Next, two studies are presented: one examines a potential echo chamber in the national, state, and regional studies on superintendent shortages and the other provides an exploratory analysis of the Southeastern Pennsylvania superintendent labor market as an example to re-conceptualize the shortage construct.

Given the superintendent's ultimate responsibility for the quality of educational programs, student achievement, and district's reputation, the position of superintendent should attract only the most highly qualified candidates. However, research from the past fifteen years has posited a superintendent shortage. National studies (Carella, 2000; Cooper, Fusarelli, & Carella, 2000, Glass, 2001b; Glass, Bjork, & Brunner, 2000; Glass & Franceschini, 2006) and regional studies (Azinger, 2003; Daresh & Playko, 1992; Esparo & Rader, 2001; Fusarelli, Cooper, & Carella, 2003; Hodges, 2005; Howley, Pendarvis & Gibbs, 2002; Lowery, Harris, Hopson, & Marshall, 2001; Manuel, 2008; Sharp, Malone, & Walter, 2002; Sutton, 2008; UCEA, 2009; Winter, Rinehart, Keedy, & Björk, 2007; Wolverton & Macdonald, 2002) have been conducted, but myopia on the part of the researchers has resulted in sensationalized conclusions that are not based upon credible data. Moreover, the focus on qualified candidates'

perceptions of the superintendency and their likelihood to pursue the office are flawed and cannot be generalized to a local, state, or national level to conclude a shortage exists at either the state or national level.

Purpose

The overarching purpose of this study was to conduct an exploratory analysis of the Southeastern Pennsylvania superintendent labor market using empirical data from publically available sources. The methodology of the study was divided into two strands. The first was a bibliographic literary analysis of national, regional, and state studies to determine the existence of an echo chamber in the superintendent shortage literature (Goldie, Linick, Jabbar, & Lubienski, 2014; Lubienski, Scott, & Debray, 2014). The second was an exploratory analysis of the Southeastern Pennsylvania superintendent labor market using social network analysis (SNA) for the purpose to define the superintendent labor market through the lens of a practitioner.

This study identified common characteristics among the eight county superintendents to determine their influence in the labor market and explored the extent to which an inter-changeable or intra-changeable labor market exists among the eight counties of Southeastern Pennsylvania. This study analyzed superintendent demographics and movement to provide a profile of the superintendent labor market in Southeastern Pennsylvania.

Data collected sought to answer the following research questions:

1.) To what extent does an "echo chamber effect" exist in the superintendent shortage literature?

2.) Which common characteristics of the eight county superintendent talent pool exercise influence in the labor market?

3.) To what extent does an inter-changeable or intra-changeable labor market exist among the eight counties of Southeastern Pennsylvania?

Overview of Study Design
Instruments and Procedures
Strand 1: Bibliometric Analysis and Echo Chamber Effect

Bibliometrics is the statistical analysis of bibliographic data that focuses on research impact as evidenced in the number of times a work is cited (Leeds, 2014). Also referred to as citation analysis, bibliometrics measures the impact level and, in turn, the influence an article or research study has within a given field. By identifying the number of times an article is referenced trends in research can be identified. More importantly, as trends are identified so, too, can the fidelity to the original study. Therefore, in addition to identifying the influence of an article through the number of times it is cited by other authors, bibliometrics provides the means to track the level to which the findings of the original article are cited in other articles.

In recent years, the field of bibliometrics has been employed as a research tool across the fields of medicine, business, sociology, and education. As Goldie, Linick, Jabbar, and Lubienski (2014) point out, bibliometrics is:

> a field that quantitatively examines research literature, to reveal, for example, the impact or reach of cited research reports, which studies are cited by whom and how often, which citations are selected by particular intermediary groups and political organizations, the type and quality of research cited, and the identification of overlap in these citations. (p. 283)

For example, in the field of education a Google Scholar search of *The Study of the American Superintendency 2000* indicates the report has been cited in 438 other works. Similarly, *Career Crisis in the School Superintendency?* has been cited in 143 other works and *The American School Superintendent: 2010 Decennial Study* has been cited in 86 other works. The quantity of

citations reveals the degree of influence the articles possess in the area of superintendent shortage research in terms of impact, selection, and overlap.

When cross citation occurs, the result is an echo chamber wherein a "small but defined set of studies is repeatedly cited" but ignore the "methodological concerns about the studies and mixed effects of these programs on different populations" (Lubienski & Garner, 2010, p. 285). This may be true of the superintendent shortage studies. This study's bibliometric analysis paralleled that of Goldie et al. (2014) and cross referenced citations in order to explore the level of repetition among studies and to identify an echo chamber. This was an important research step because a body of literature may have evolved that erroneously concluded a shortage exists.

In order to determine if an echo chamber exists in the studies, a superintendent shortage studies database was organized into chronological order and identified the author(s), title, type of study (national, state, or regional), research design, response rate, and citations. Next, the bibliometric tools of Web of Science and Google Scholar were used to identify the existence of an echo chamber. Web of Science has the ability to trace citations among articles but has a limited research field. Whereas Google Scholar is the most user-friendly of the bibliometric tools it does not perform at the same level of specificity as does Web of Science. Of the two metric tools, Web of Science is described as the "gold standard for research discovery and analytics" according its website (https://www.thomsonreuters.com). Owned by Thomas Reiters, the multinational mass media corporation, Web of Science is able to connect its 2.6 million articles via citations and controlled indexing.

Each of these software tools has advantages and limitations; therefore, both were employed to raise the level of reliability to draw conclusions on the existence of an echo chamber. Data produced by these software tools allow for second generation counts and long

term analysis, research fronts/cluster analysis, and trend/time series analysis that will either support or refute the existence if an echo chamber.

Instruments and Procedures

Strand 2: Exploratory Analysis of the Superintendent Labor Market Using SNA

Social Network Analysis (SNA) is a statistical methodology that identifies relationships among people and provides a quantitative analysis of a network such a superintendent labor market. As McFarland, Diehl, and Rawlings (2011) point out, "Much of what SNA potentially offers sociology and the field of education…is a means for better capturing complex interdependencies and fluid dynamics than many current and more popular methods are able to" (p. 3).

In 2006, Westat prepared the document "Conference on Applications of SNA to Educational Research and Evaluation" for the National Science Foundation that highlighted the use of SNA in education. Authors Frechtling, Segal, and Slaughter acknowledged SNA application in the fields of business, defense, and industry and "sought, therefore, to increase understanding of the ways in which SNA has, or could be used, in education" (p. 1). The conference highlighted nine studies in the field of education with methodologies rooted in the use of SNA. For example, authors of these studies used SNA application to explore the areas of teacher professional communities, teachers' social networks, mathematics partnerships, and inter-organizational collaboration (Coburn & Russell, 2008; Hanssen, 2009; Berkowitz, 2009; Penuel, 2006). Likewise, SNA has been applied to other educational research in the areas of learning relationships and teacher collaboration (Grunspan, Wiggins, & Goodreau, 2014; Penuel, Sussex, Korbek, & Hoadley, 2006).

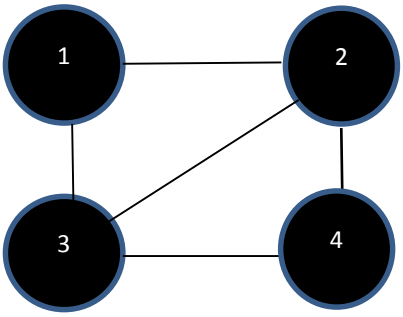
Kretchmar, Sondel, and Ferrare (2014) underscore that "SNA represents an entire family of analytical and theoretical tools for examining and interpreting relations between actors and

events" (p. 6). Likewise, Grunspan, Wiggins, and Goodreau (2014) point out, "The importance of relationship and emergent structures formed by relationships makes SNA different from other research paradigms, which often focus solely on the attributes of actors" (p. 168). Applying network analysis may re-conceptualize the superintendent shortage research by focusing attention on the superintendent labor market, the influences that control the movement of superintendents, and the relationships among districts to attract qualified candidates to the position of superintendent.

In addition to tracing the unfolding of a potential echo effect in the superintendent shortage research, another goal of this study was to use SNA to identify superintendent mobility among the eight county focus of this study in order to identify the potential for multiple labor markets. SNA focuses on relationships and visualizes the connectedness among people. As such, SNA is an ideal vehicle through which to analyze the superintendent labor market.

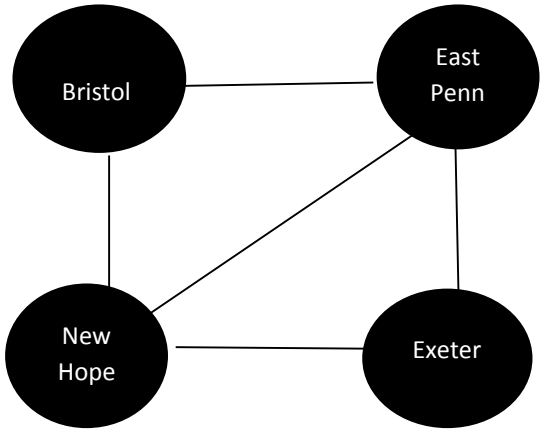
SNA defines homophily as the clustering of actors (i.e., districts) based upon shared, or complementary, characteristics. In turn, homophily fosters homogeneous groups. Homophilous ties can be strong or weak. Transitivity is a characteristic of the ties as well. For example, if actors A and B share a tie as do actors B and C then transitivity posits that A and C are also connected. Together, transitivity and homophily create cliques (i.e., labor markets). The density of these cliques, or networks, can be measured using the ratio: n (n – 1)/2 wherein the number of actors in a network is placed over the total number of possible actors between all pairs.

The following is an example by Dr. Giorgos Cheliotis from the National University of Singapore (see www.slideshare.net/gcheliotis/social-network-analysis-3273045) and illustrates how the density of cliques is computed using the ratio n (n – 1)/2:



The density of this network is computed using the ratio 5/6 which represents the number of possible connections over the total possible connections. The density of this network is 0.83 and represents a dense network as 1.0 reflects a perfect network, or a clique (Cheliotis, 2015). This same procedure and ratio can be applied to superintendent movement among the eight counties in order to identify labor markets and hiring trends. For example, if each of the circles represents a school district among the varying counties under examination in this study it may be possible to identify a labor market based upon the hiring practice of the school board. Districts 1 shares similarities with 2 and 3 as does 4 with 2 and 3. However, 3 also shares similarities with 2 and may evidence a potential labor market. As Cheliotis (2015) points out, a "small world is a network that looks almost random but exhibits a significantly high clustering coefficient" (32).

Examining the superintendent movement among districts may reveal clustering patterns that reveal labor markets or, at the very least, trends in superintendent hiring practices. Regardless, the identification of this empirical data was valuable information. Using the same diagram, but now transcribing numbers into school districts, reveals the potential to identify an intra-county labor market:



Borgatti, Everett, and Freemen (2002) developed UCINET, a software program for the analysis of social network data. UCINET software was used to map the superintendent movement across the eight counties to define the labor market(s). In addition to mobility, the use of SNA also identified relationships and trends in the superintendent labor market such as inter-district movement of superintendents and the role demographics play when movement occurs. As Kretchmar et. al (2014) point out, "As educational reform movements become more complex and organizationally interconnected, it behooves critical scholars to develop new theoretical and methodological tools capable of piecing together these relationships" (5).

To develop an understanding of current superintendents in the targeted eight counties, a database was created that lists the following superintendent demographic information: county, school district, title, superintendent, race, gender, college/university from which the letter of eligibility was earned, the year the letter of eligibility was earned, year of original superintendent appointment, original content area certification, employment record (position, district, years of service), and salary. Information used to construct this data was culled from a variety of publically accessed resources including TIMS (Teacher Information Management

System/Pennsylvania Department of Education), district websites, and on-line resources such as LinkedIn and community newspaper archives.

The purpose of creating a database was to fill the void for a central superintendent repository and to build a profile of the superintendent labor market in the eight county focus of this study. Commonalities and anomalies were traced to better understand the factors that motivate the labor market. In addition, movement of superintendents and appointments of new superintendents were traced in order to establish labor market(s). As Fenn (2002) points outs,

> Descriptive research does not attempt to test a scientific theory, but rather describes and characterizes the situation that exists. The most common way to report these descriptions and characterizations is through frequency counts, distribution, and graphical displays. (p. 33)

This database provided the basis for a descriptive analysis of superintendents that comprise this study.

Population

The target population for this study was the 114 public school superintendents who served in the eight Southeastern Pennsylvania districts of Bucks, Chester, Delaware, Montgomery, Berks, Lehigh, Lancaster, and Northampton during the 2014 – 2015 school year. In order to identify change and the impact of turnover, comparisons were made in several categories. The study did not include assistant superintendents. The list of superintendents was accessed through the Pennsylvania Department of Education website. In order to control for turnover the list of superintendents was verified for accuracy though district websites. Charter schools, private schools, and cyber schools were not taken into consideration for this study because the organization of these institutions do not reflect the administrative hierarchy of a

public school district. Likewise, due to size and commonalities with other large urban school districts as well as the need to organize the district into regions with "superintendents," the School District of Philadelphia was not included in this study.

Validity

This study sought to eliminate threats to validity by avoiding the use of surveys to collect data. Rather, this study relied upon existing empirical data – bibliographics, social network analysis, and superintendent demographics – in order to draw conclusions. In addition, the methodologies used in this study, albeit non-traditional, are rooted in current and proven research (Frechtling, Segal, & Slaughter, 2009; Grunspan, Wiggins, & Goodreau, 2014; Penuel, Sussex, Korbak, & Hoadley, 2006; MacFarland, Diehl & Rawlings, 2011).

Summary

An echo chamber may have eschewed the validity of superintendent shortage research in the past fifteen years. This study sought to identify the existence of an echo chamber and to challenge the existence of a superintendent shortage through bibliometric analysis. Moreover, this study sought to identify the superintendent labor market(s) in Southeastern Pennsylvania and the common characteristics of the superintendents. Although a relatively new field of inquiry, and seldom used in educational research, social network analysis is a valid statistical methodology that can be used in education as Frechtling, Segal, and Slaughter (2006) acknowledge and promote. With this in mind, this study incorporated SNA as an innovative tool to identify the superintendent labor market(s) in Southeastern Pennsylvania. In doing so, this study hoped to discredit a shortage belief and, more importantly, identify common superintendent characteristics.

CHAPTER IV

Results

Introduction

Existing superintendent shortage research presents a dearth of candidates interested in pursuing the superintendency and posits shortages across the nation (Azinger, 2003; Daresh & Playko, 1992; Esparo & Rader, 2001; Fusarelli, Cooper, & Carella, 2003; Hodges, 2005; Howley, Pendarvis & Gibbs, 2002; Lowery, Harris, Hopson, & Marshall, 2001; Manuel, 2008; Sharp, Malone, & Walter, 2002; Sutton, 2008; UCEA, 2009; Winter, Rinehart, Keedy, & Björk, 2007; Wolverton & Macdonald, 2002). However, this research is limited by low response rates to survey-based methodologies and fails to recognize the interconnectedness of shortage, pipeline, and rewards as they operate within a labor market framework. The purposes of this study were to identify the potential existence of an echo chamber in the superintendent shortage research and to provide an exploratory analysis of the Southeastern Pennsylvania superintendent labor market as an example to re-conceptualize the shortage studies.

Overview of Study Results

Strand 1: Bibliometric Analysis and Echo-Chamber Effect

The goal of this strand of the study was to identify relationships among scholarly research in order to determine the extent to which, if any, an echo chamber exists in the literature. Through Web of Science and Google Scholar, a bibliometric analysis was conducted to map the interconnectivity of research and articles pertaining to a superintendent shortage. *The Study of the School Superintendent 2000: A Look at the Superintendent of Education in the New Millennium* (Glass, Björk, & Brunner, 2000) was the nucleus of this bibliometric analysis. A comprehensive list of subsequent superintendent research based upon, or influenced by, *The Study of the School Superintendent 2000* was created. UCINET provided the means to map the

ties between *The Study of the School Superintendent* and subsequent research in order to identify an echo chamber effect.

***The Study of the School Superintendent* Research Ties.** Figure 3 is a sociogram that represents the research ties and influence of *The Study of the School Superintendent 2000* over the period of a decade. Each of the nodes represents research in the field of superintendent shortages that includes *The Study of the School Superintendent 2000* in its reference sections. The graph reflects the volume of research on the topic of superintendent shortage from 2000 until 2010 and illustrates how one particular study influenced a subgroup of research investigating the potential for a superintendent shortage.

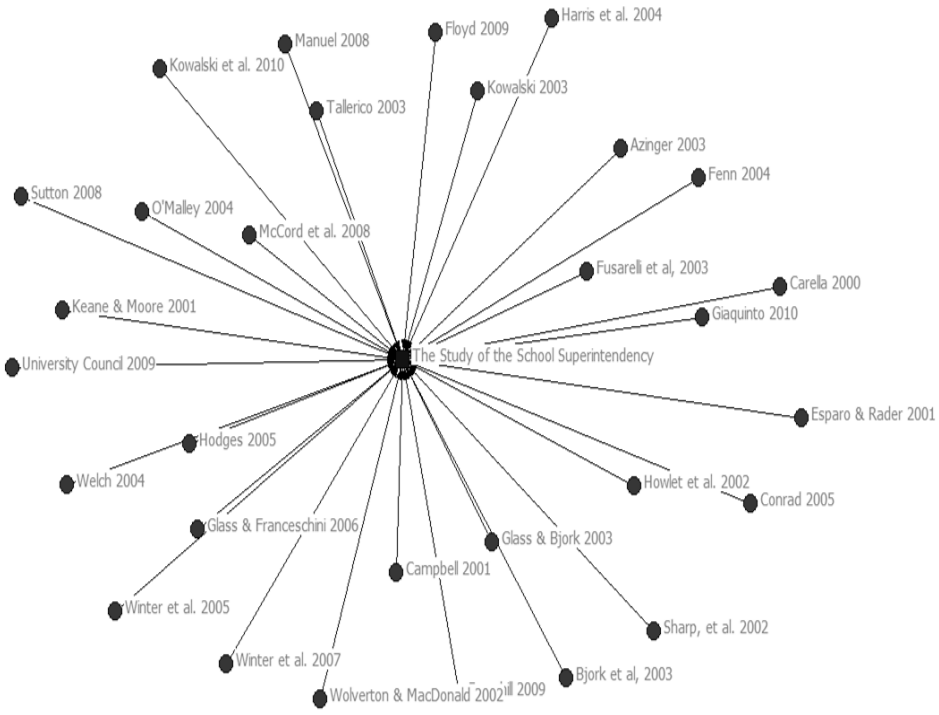


Figure 3. *Sociogram of The Study of the School Superintendency 2000 as the nucleus of the superintendent shortage literature.*

Mapping Citation Networks. When identifying an echo chamber effect, a citation network provides the means to identify the degree to which cross citation is occurring. Through

citation network mapping the level of repetition among studies is able to be explored. In other words, as authors cite other authors' research an inter-connective web is created that, in turn, results in a possible echo chamber effect. Moreover, the identification of the existence of an echo chamber effect is possible.

Figure 4 reflects superintendent shortage literature and displays the author(s) and years of publication. More importantly, figure 4 represents a map of citation networks among superintendent shortage studies and evidences cross citations and repetition. Given the results of mapping using UCINET, it is possible to conclude that an echo chamber exists in the superintendent shortage studies.

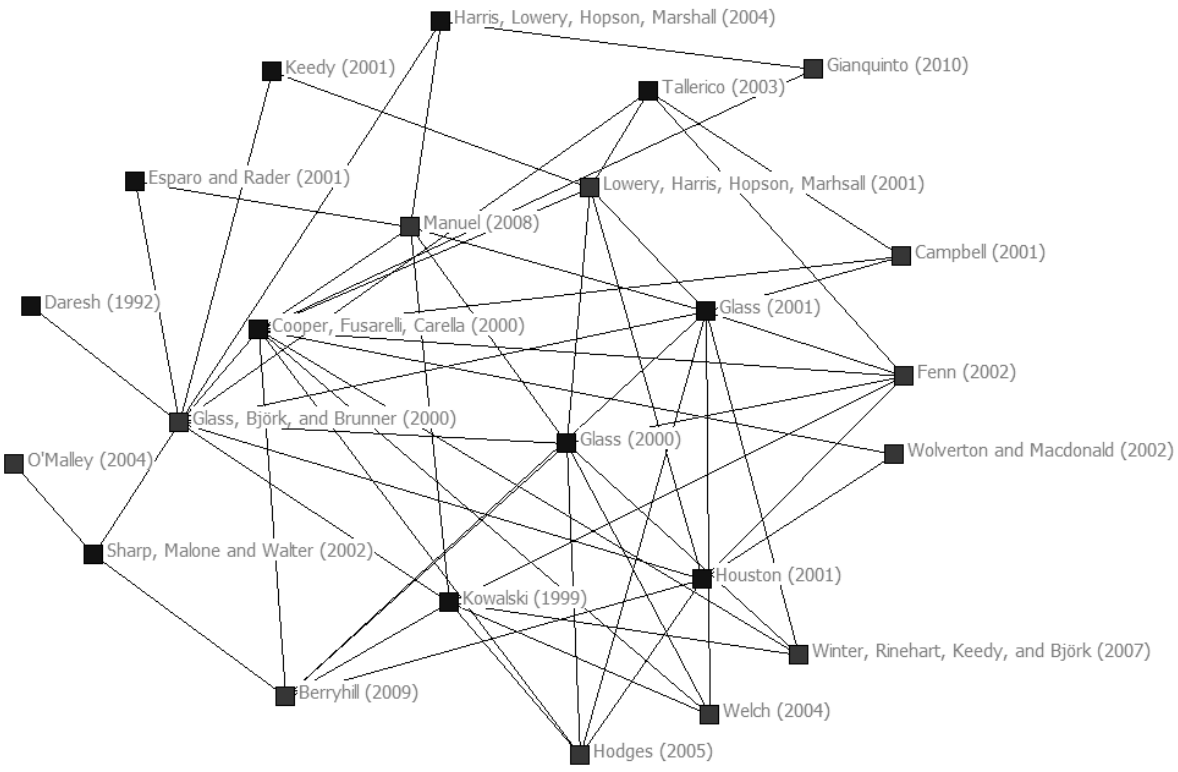


Figure 4. *Map of citation networks among superintendent shortage literature evidencing cross citations.*

Literature Methodological Limitations. In addition to the citation network, methodological limitations also characterize the superintendent shortage literature and call into question the validity of conclusions. These deficiencies are rooted in survey-based collection of data and focus on principals' perceptions of the demands of the superintendency to determine whether they would pursue the position as a career next-step choice. These surveys evidence low response rates and do not extract the data necessary to draw conclusive results on the validity of a potential superintendent shortage at either the national or regional platforms. Moreover, due to the nature of cross-citation, repetition exists among the studies and evidence dependence upon the previous research of Björk, Grogan, Cooper, Fusarelli, and Carella, Glass. Keane, and Moore, and Kowalski.

Impact Factors. An analysis of both the impact factor and influence scores of educational journals is important in understanding whether, as Goldie et al. (2014) defined an echo chamber effect, a "small and selective set of studies" have drawn conclusions "reinforced by repetition without the nuance of complexity" taken into consideration. To determine the scope of influence of the superintendent shortage studies, a list of the top twenty educational journals was obtained through Google Scholar Metrics.

Given the attention that the potential for a superintendent shortage received it would be anticipated to find these studies published among the top twenty educational leadership journals. However, this is not the case. Figure 5 reflects the top twenty educational leadership journals and lists the frequency of superintendent shortage studies and the impact factor for each journal.

In addition, Figure 5 includes three other journal sources – *School Administrator, American School Board Journal, Planning and Changing* – and ProQuest Dissertations and Theses where superintendent shortage studies have been published. By definition, an echo

chamber exists within the parameters of a "small and selective set of studies." Knowing the frequency of publication and the journal impact factor are important to this study because it lends to an understanding of a potential echo chamber effect in the superintendent shortage studies. If the superintendent shortage studies are not published within the top twenty educational leadership journals then the possibility exists that these studies did not receive a universal platform that the top twenty journals could provide but rather became a small, selective, and inter-connective set of studies and, thus, met the standard for an echo chamber effect.

Only two journals were reflected on the chart of the top twenty; namely, *Educational Leadership* and *Phi Delta Kappan*. With only two journals from the superintendent shortage studies reflected on the top twenty list, a bibliographic analysis of publications from the set of studies was conducted to determine the publishers of superintendent shortage studies. Figure 5 represents data obtained from Web of Science and Google Scholar that identified publishers and count for superintendent shortage-related studies. ProQuest Dissertations and Theses reflected the highest number of superintendent shortage-related publications and bibliometric cross analysis revealed references among these studies were inter-connected. The end result was "a small and selective set of studies" with symbiotic relationships that promoted a superintendent shortage that never materialized.

Reference Interconnectivity, Citation Counts, and Emerging Trends. When viewing the body of literature pertaining to the superintendent shortage chronologically, a pattern of cross referencing emerges wherein each new study incorporates the works of previous studies. Figure 6 represents a line chart of superintendent studies from 2000 through 2011 and the citation counts for each as derived from Google Scholar.

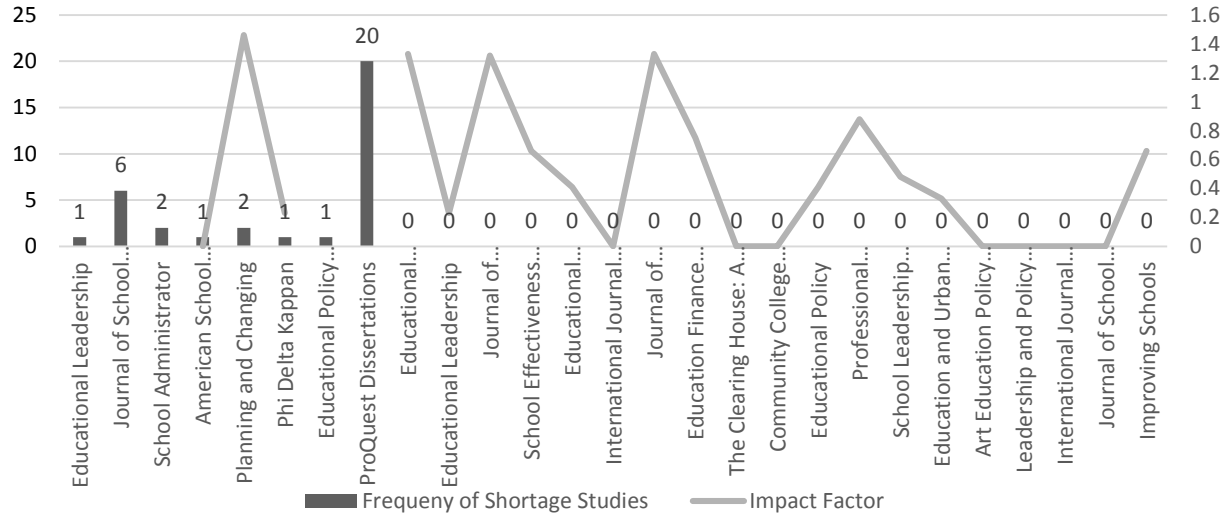


Figure 5**.** *Chart of the frequency of superintendent shortage studies in journals with secondary y-axis to identify the impact factor.*

Only four years – 2000, 2001, 2006, and 2010 – reflect citations that are above the mean and these years also coincide with the publications of *The Study of the American School Superintendency 2000* (Glass, Björk, & Brunner, 2000), *The State of the American School Superintendency: A Mid-decade Study* (Glass & Franceschini, 2006), and *The American School Superintendent: 2010 Decennial Study* (Kowalski, McCord, Petersen, Young, & Ellerson, 2010). The citations by count evidence the number of times these publications were cited in other scholarly journals or dissertations. Although older publications have greater opportunity for citation, and this is evident in the higher citation count in 2000 than 2006 and 2010, the data reveals that these national publications influenced superintendent research including superintendent shortage studies.

Specific trends emerged and provided insight to the dynamics of superintendent shortage studies. First, when national studies, such as *The Study of the American School Superintendency2000, The State of the American School Superintendency: A Mid-decade Study*,

and *The American School Superintendent: 2010 Decennial Study*, were initially published the conclusions were tested and replicated at the state or regional level and, in turn, evidenced a spike in superintendent studies. Data from the line chart supports this hypothesis as increases in superintendent shortage studies occurred in 2001, 2006, and 2010 following the publications of the national studies.

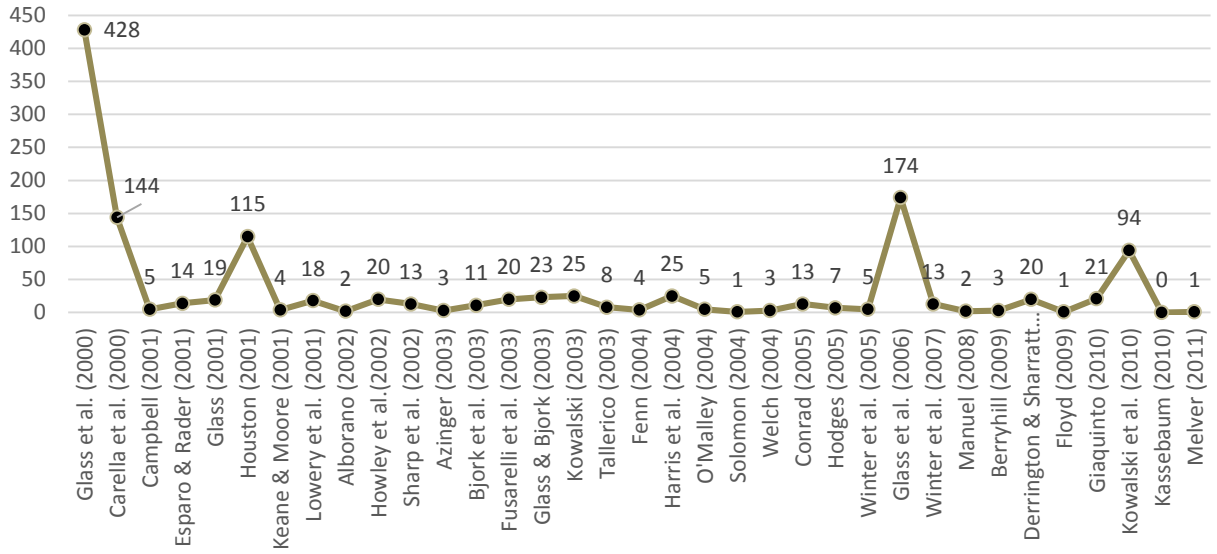


Figure 6. *Citation analysis in line chart format of superintendent studies (2000 – 2011).*

A second trend is the downward interest in superintendent shortage studies as the decade unfolded. For example, the citation count for *The Study of the School Superintendency 2000* is 442, but by 2006 the citation count for *The State of the American School Superintendency: A Mid-decade Study* declined to 174 citation counts. This suggests that as the decade unfolded and the predicted superintendent shortage never materialized, researchers no longer underscored the threat of the shortage. The trend continued as evidenced in the citation count of 94 in *The American School Superintendent: 2010 Decennial Study.* Given the level of urgency originally attached to the potential for a superintendent shortage as evidenced in the 442 citation counts

attributed to *The Study of the American School Superintendency 2000* it is of particular interest to note the exponential drop-off in citation counts in the subsequent studies of 2006 and 2010.

Although this downward trend may be rooted in the fact that a superintendent shortage never materialized, it is interesting to note that as the decade unfolded the focus of superintendent studies shifted focus away from the topic of a shortage and onto the topic of superintendent job satisfaction. Without a shortage, researchers' attention turned to why superintendents were content with the position as a focus for continued research and, perhaps, as a means to expand the pool of qualified and recruit interested candidates (Camasso, 2010; Conrad, 2005; Kassebaum, 2011; O'Malley, 2004; Padalino, 2009; Schoen, 2006; Solomon, 2004; Tarleton, 2009; Welch, 2004). No longer were studies myopic in superintendent research and the lens broadened beyond shortages to examine turnover, job satisfaction, and the increased need for women and people of color in the superintendency.

Summary

Evidence exists that supports an echo chamber effect in the superintendent shortage literature. Through the use of bibliometric tools of Web of Science and UCINET, citation ties were mapped among superintendent shortage studies. The emergence of reference interconnectivity was further supported through a citation count that also identified emerging trends. Using Google Scholar to analyze citation counts revealed the dynamics of superintendent shortage studies. With the publication of each national study in 2000, 2005, and 2010, respectively, a resurgence in superintendent shortage studies occurred. However, as the decade unfolded and a shortage never materialized shifts in research focus also occurred. The focus of superintendent research shifted away from a potential shortage in qualified candidates and morphed into superintendent job satisfaction, turnover impact, and the need to recruit women

and people of color to the position. Given the small sect of studies and the interconnectivity of references coupled with the repetitive use of specific authors such as Björk, Brunner, Grogan, and Kowalski an echo effect does emerge in the superintendent shortage literature that satisfies the definition of Goldie et al., namely, a "small and selective set of studies" that have drawn conclusions "reinforced by repetition."

Overview of Study Results

Strand 2: Demographic Analysis of the Superintendent Labor Market Using Repository Data

Demographic data collected from TIMS (Teacher Information Management System), LinkedIn, district web sites, and newspapers on the Southeastern Pennsylvania public school superintendents was organized into a repository and provided the means to examine Research Question Two: Which common characteristics of the eight county superintendent talent pool exercise influences in the labor market? This repository was organized according to county and listed the name of each school district, the name of the 2015 - 2016 superintendent, the title of the superintendent, the superintendent's race and gender, the year in which the superintendent earned the Letter of Eligibility and school from which the Letter of Eligibility was obtained, the superintendent's original content area certification, and the superintendent's employment history that reflected the school district, position, and years of service.

Superintendent Turnover. Superintendent turnover, whether exercised through retirement, termination, or change to a new position, exerted a cogent presence throughout this study. Of the 114 school districts included in this study across an eight county spectrum, 47, or 41.2% have experienced superintendent turn-over since 2013. Chester County experienced the least amount of turn-over at 25% and Bucks County experienced the most turnover at 77%. Of greater significance, of the 41.2% of school districts that did experience turnover, 59.6% also experienced demographic changes from one superintendent to the other.

Table 4 represents a comparative demographic analysis of the superintendent turnover from 2013 to 2016. As previously noted, of the 47 school districts that experienced turnover from 2013 – 2016, 59.6% of those also experienced demographic changes in the hired superintendent. This percentage may be indicative of the variance shift in the qualified candidate pool outside the traditional white-male-doctorate norm. Four districts did experience change in the area of hiring people of color to serve as superintendent. Noteworthy, three districts transitioned from a white superintendent to a superintendent of color. Specifically, one district transitioned from a white male to a black female and two others transitioned from a white female to a black male. Two school boards with superintendents of color followed the same pattern of hiring racially but one transitioned to a female superintendent of color from a male superintendent of color. Lastly, one district transitioned from a Latino male superintendent to a black female superintendent.

Although 38.3% of replacement superintendents were static and 27.7% of the population reflected white male doctorates, the combined percentages of newly appointed superintendents as a result of turnover who were women, women of color, or men of color was 33.9% which suggests more women and people of color are applying for and are successful in interviewing for superintendent vacancies. Based upon the demographic changes as evidenced in Table 4, the possibility exists that school boards are changing hiring practices to be more inclusive of women and people of color and this premise is worthy of further investigation and research. Moreover, more female candidates were hired than males. Although marginal when compared, the total

percentage of newly appointed female superintendents was 27.6% and the male percentage was 23.3% suggesting the gender gap may be closing.

Table 4: Superintendent Demographic Turnover Patterns 2013-2016 (n=47)

Static Replacements			n	%
Ed.D,	W	M	13	27.7
Ed.D.	W	F	4	8.5
Ed.D	B	M	1	2.1
Totals			18	38.3
Turnover Patterns				
Education Changes			n	%
Master's	→	Ed.D.	8	17.0
Ed.D.	→	Master's	10	21.3
Totals			18	38.3
Gender Changes			n	%
M	→	F	11	23.4
F	→	M	9	19.1
Totals			20	42.6
Race Changes			n	%
BF	→	WF	1	2.1
WF	→	BM	2	4.2
HM	→	BF	1	2.1
WM	→	BF	1	2.1
Totals			5	10.6

Original Content Area Certification. In 2016, the original teaching certifications for serving superintendents reflected a variety of content areas. TIMS provided the means to identify the original teaching certifications for 89 of the 114 superintendents. Table 5 represents the superintendents' original content area certifications and is organized according to content areas as well as elementary, secondary, or K – 12 divisions. At 21.3%, elementary education reflected the most represented certification (n = 19). When viewing the certification through a secondary division lens, social studies (12.2%), English (9%), and Math (5.6%) were the most prevalent and reflected a total of twenty-four superintendents.

Table 5*: Superintendents' Original Content Area Certification, 2016*

Content Area	N	% Sample
Elementary	19	21.3
Elementary/Special Education	2	2.3
Early Childhood	1	1.1
Elementary/Early Childhood	1	1.1
Total at Elementary Level	23	25.8
Social Studies	11	12.4
English	8	9.0
Math	5	5.6
Communications	2	2.3
General Science	2	2.3
Chemistry/Biology	4	4.5
General Science/Biology	2	2.3
Spanish	1	1.1
Accounting	1	1.1
Humanities	1	1.1
English/Social Studies	1	1.1
Agriculture/Special Education	1	1.1
Mid-level Citizenship	1	1.1
Total at Secondary Level	40	45.0
Special Education	10	11.2
Music	7	7.9
PE/Health	4	4.5
Reading Specialist	2	2.3
Speech	1	1.1
Arts/Technology	2	2.2
Total at K-12 Level	26	29.2
Totals	89	100

Of the total population (n = 61) of superintendents whose original certification could be identified as either elementary or secondary, 37.7% (n = 23) were elementary certified and 62.3% (n=38) were secondary certified. Content areas such as special education, music, PE/Health, reading specialist, Spanish, and speech certifications were omitted from the disaggregation as the division level was not elementary or secondary specific.

Special education does carry a K–12 certification and it is interesting to note that 11.2% of superintendents hold this certification. Unless an aspiring superintendent taught on one level and became an administer on another, only special education would provide aspiring

superintendents with the K–12 perspective as teachers with this certification could teach at the elementary, middle, or high school levels.

Superintendent responsibilities are expansive and include the tasks of educational and extra-curricular programming, budgeting, and board relations. These responsibilities require the skills of being a highly analytical thinker, an effective communicator of both the written and spoken word, and a person who possesses the ability to constantly multi-task. Based upon original content area certifications, 57.3% of superintendents possess a liberal arts certification, 15.8% possess a science/math certification, and only 1.1% possess a business certification. Given the eclectic tasks assigned to a superintendent, the imperative to provide high quality and pragmatic superintendent preparation programs is magnified when original content area certifications are taken into consideration.

Education Level. Although not necessary to earn the Pennsylvania Superintendent Letter of Eligibility, Table 6 represents the percentage of superintendents per county and gender who earned a doctorate degree. Male doctorates exceeded female doctorates by a marginal 4.1% but what was noteworthy is the number of counties withnexclusively female doctorate superintendents. In five of the eight counties on this study 100% of the female superintendents earned their doctorate. This occurred in Bucks, Chester, Northampton, Lancaster, and Lehigh counties. Of note, none of the eight counties of this study reflected 100% doctorates for male superintendents.

Unlike their male counterparts, female doctorate percentages were not below the 50% line across any of the eight counties. In Northampton and Lehigh counties, male doctorates were 37.5% and 33%, respectively, whereas their female counterparts were both 100% suggesting that either aspiring female superintendents or school boards view the doctorate as essential to

compete for vacancies against males who may, or may not, possess the doctorate. When compared to 2013 statistics, doctorates on average are increasing among superintendents regardless of gender. Male doctorates increased 6.7% and female doctorates increased 7.4%.

Table 6: Superintendent Doctorates by Gender, 2016

County	Superintendent	Doctoral Male		Doctoral Female	
	N	%	n	%	n
Bucks	13	80	8	100	4
Chester	12	91	10	100	2
Delaware	15	75	9	50.	2
Montgomery	21	92.3	13	85.5	6
Northampton	9	37.5	3	100	1
Lancaster	17	83.3	10	100	6
Lehigh	7	33	2	100	1
Berks	20	91.7	11	62.5	5
Total	114	83.5	66	79.4	48

Superintendent Programs. Figure 7 represents superintendent preparation programs in 2013 and 2016, respectfully. Both years are presented and compared in order to underscore shifts in aspiring superintendents' choice for superintendent preparation programs. Although the reasons for the shift are not attainable, it is thought-provoking to note the change in the aspiring superintendents' choices for preparation programs.

Turnover may have played a role in the change as universities' locations may have lent convenience to aspiring superintendents' willingness to attend their respective programs, but school boards, too, may have been attracted to candidates with Ivy League educations as evidenced in the hiring of more Penn graduates in Bucks, Delaware, Montgomery, and Berks counties from 2013 to 2016. Consistent throughout this time period was the hiring of superintendents with private school preparations over public school preparations as evidenced in the number of superintendents that attended Lehigh, Widener, Penn, and Immaculata

Universities (n = 31). This sample of superintendents represents 46.2% of the overall pool of known superintendent preparation programs (n = 67). Noteworthy as well was the interface between Lehigh and Immaculata Universities. Whether convenience of location from home districts, tuition costs, or program reputations were variables it is noteworthy that where Immaculata gained three in superintendent representation Lehigh decreased in the same amount.

Regardless, Lehigh, Immaculata, and Penn have consistently produced the largest number of superintendents for the eight counties of this study. Geographically, Lehigh would serve Bucks, Northampton, and Lehigh counties, all of which have 100% doctorate female superintendents. Likewise, Immaculata would most likely serve Chester and Montgomery counties both of which have 100% and 85.5% doctorate female superintendents, respectively. Whether a recruitment or gender issue in not viewing the doctorate as necessary on the part of aspiring male superintendents, Northampton and Lehigh counties reflected the lowest male doctorate population among the eight counties of this study.

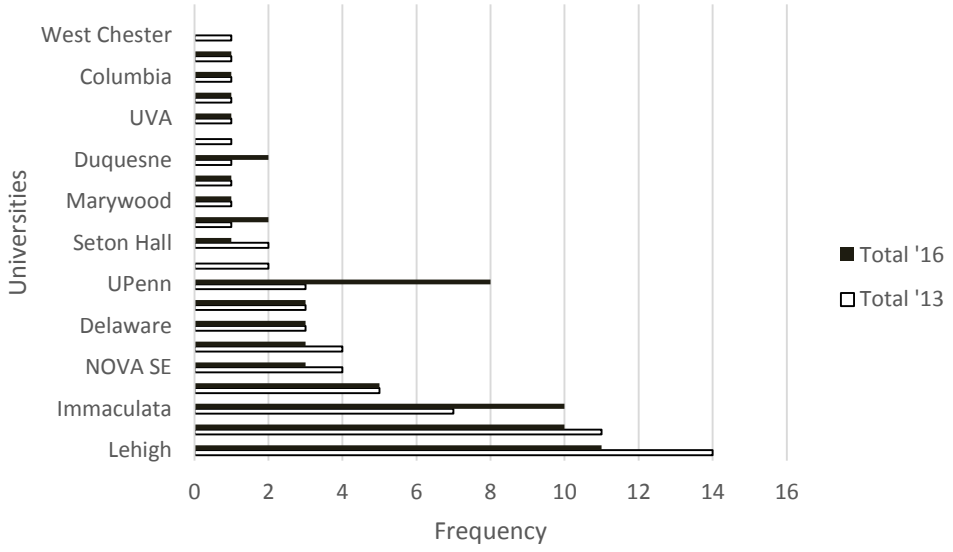


Figure 7. *Comparative Vertical Bar Graph of Superintendent Preparation Programs, 2013 and 2016.*

Number of Years from Earning Letter of Eligibility to First Superintendency. In 2013, the majority of superintendents moved into to the superintendency within five years of earning the letter of eligibility. Figure 8 represents the number of years from earning the letter of eligibility to entering the superintendency regardless of gender. Of the 108 sample, 46 candidates, or 42.5% entered the superintendency within five years of earning the letter of eligibility.

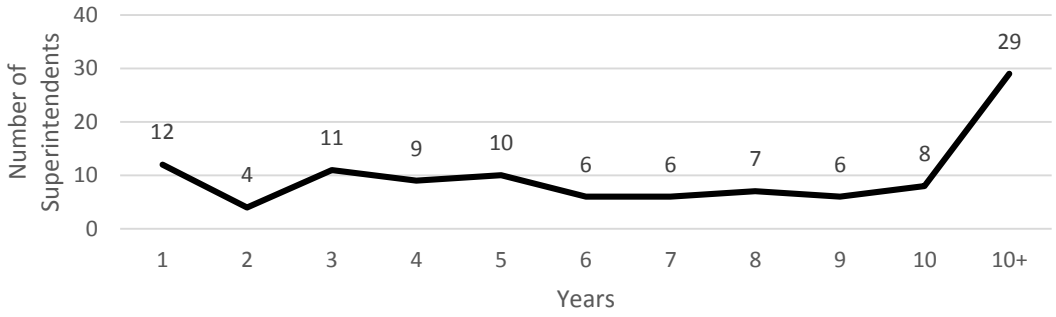


Figure 8. *Line Graph Reflecting the Number of Years from Earning the Letter of Eligibility to Obtaining First Superintendent Position for Superintendents Serving in 2016 (N = 108).*

When disaggregating the data in 2016, however, gender became a variable as to when candidates entered the superintendency. Of the thirty turnovers that occurred in 2015 – 2016, thirteen equated to first time superintendents. Figure 9 represents the disparity gender plays when males and females entered the superintendency based upon 2016 turnover. Identification of the variables that created this disparity may be based upon the speculation of bias, a more limited pool of female candidates, and female commitment to the family.

When comparing the average span between earning the letter of eligibility and entering the superintendency between males and females, the females entered the superintendency with twice the time. On average, the males entered five years after earning the letter of eligibility with a span of one year to nine years and a mode of seven years. Conversely, women

entered on average ten years after earning the letter of eligibility with a span of six to fourteen years and a mode of ten years.

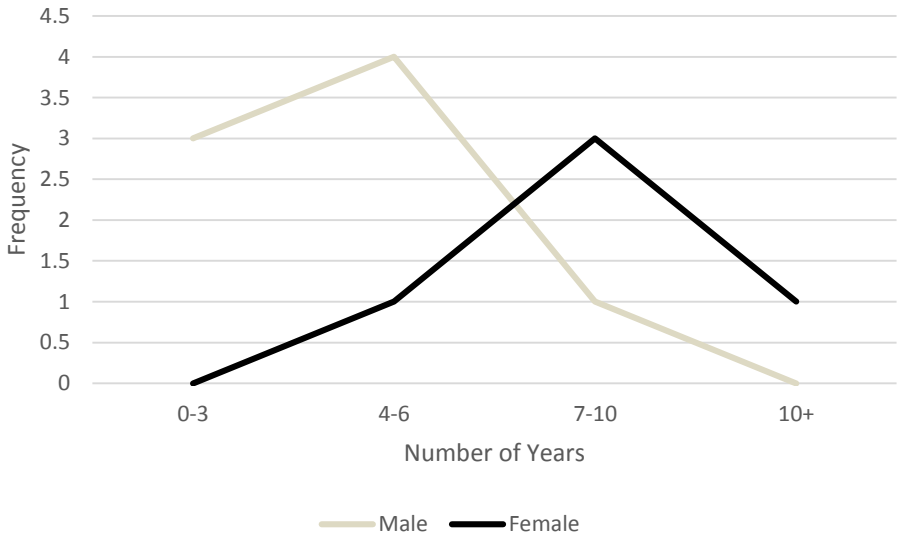


Figure 9. *Representation of the Number of Years from Earning the Letter of Eligibility to First Superintendency for 2016 Hires Based Upon Gender (N = 18).*

Of interest as well were multiple school boards' decisions to hire candidates not with the Pennsylvania Letter of Eligibility but candidates who hold a Qualified Certificate, an alternative letter of eligibility certification, because they were hired out of state or possessed professional experience not reflecting a traditional route. For example, in 2016 two new superintendents were hired out-of-state, another was hired from The School District of Philadelphia and another was culled from the Archdiocese of Philadelphia. These candidates either held a former superintendent or director position that was not necessarily curriculum-based.

Number of Years as a Superintendent. The outcomes of the predicted high superintendent turnover rate in Pennsylvania by Jim Buckheit, Executive Director of the Pennsylvania Association of School Administrators (PASA), by 2015, were most evident when

analyzing the number of years a superintendent has held the position. Table 7 represents the number of years of service in a current superintendency.

With the exception of Northampton and Lancaster counties, the remainder of the six counties in this study experienced at least 50% turnover since 2013. Bucks and Berks counties, in particular, experienced the highest rate of turnover as evidenced in the high percentage of superintendents only in the first three years of service with Bucks at 84.6% and Berks at 89.5%.

The neophyte quality of current superintendents was also evident at the opposite end of the spectrum where veteran superintendents are the exception. As of 2016, an experienced superintendent who remained in the same position for ten or more years was nonexistent in Bucks and Delaware counties. This same low trend existed in Montgomery and Berks counties where the superintendent with 10+ years of experience rested at 5% and 5.3%, respectively. In fact, the highest population of 10+ years of experience was in Northampton County with 22.2% percent.

Within the category of 7 – 9 years of service, the statistics were bleak in the four counties of Delaware, Northampton, Lehigh, and Berks where no superintendents with this level of tenure existed. Lancaster maintained the highest percentage of superintendents in their 7^{th} – 9^{th} year of service at the marginal 11.7% level. When combining years of service into a category of 1 – 6 years, the overarching majority of superintendents were either new to the position or new to the district. In Bucks and Berks counties this equated to 92.2% and 94.8% of the overall superintendent population. In Delaware County this amounted to the total population of superintendents (100%). When disaggregating the data, the average percentage across the eight county focus of this study for superintendents serving one to six years in their current superintendency was 85.6%.

The trends throughout the eight counties of this study reflect the new "normal" of short superintendent tenures with an average length of service to be between four and six years. Whether the hiring of younger superintendents will increase the average length of service remains to be seen and is an area of superintendent research that should be tracked. Longevity remains a fluid area of the superintendency as baby boomer superintendents continue to retire and their vacated positions yield to neophytes who do not reflect the demographics of the retiring superintendents.

Table 7: *Percent and Number of Years in Current Superintendency, 2016*

County	Number of Superintendents	1 – 3 Years %	4 – 6 Years %	7 – 9 Years %	10+ Years %
Bucks	13	84.6	7.6	7.6	-
Chester	12	50.0	25.0	8.3	16.6
Delaware	13	76.9	23.1	-	-
Montgomery	20	50.0	35.0	10.0	5.0
Northampton	9	44.4	33.3	-	22.2
Lancaster	17	47.1	29.4	11.7	11.7
Lehigh	6	66.7	16.7	-	16.7
Berks	19	89.5	5.3	-	5.3
Total Average	109	64.0	22.0	6.0	8.0

Superintendent Salaries. Superintendent salaries were obtained from the Pennsylvania Department of Education (PDE) website and reflect 2013 figures because PDE has not updated this information for the public. Table 8 represents the top fifteen annual base salaries for the superintendents in this study to underscore the highest paid superintendents, to identify trends in superintendent salaries, and to determine whether a superintendent labor market based upon socio-economics exists in Southeastern Pennsylvania.

Only four counties, Bucks, Chester, Delaware, and Montgomery contributed to the top fifteen salaries and reflected the high socio-economic status of their constituency. Chester County dominated the top fifteen salary cohort with 47% of its superintendents represented on

the list followed by Delaware County at 33%, Montgomery County at 13%, and Bucks County at 6.7%.

Although this group was almost exclusively comprised of white males at 86.6%, the highest paid superintendent in this study was a white female who earned $263, 058 in annual base salary. In 2016, this salary was extended to $319, 714 and became the highest superintendent salary in Pennsylvania. Salaries ranged from $209, 893 to $263, 058 and years of experience did not necessarily equate into a higher salary. For example, nine out of the top paid superintendents, or 60%, had five or less years of experience in the position. Conversely, only four, or 26.6%, had more than twenty years of experience and none were represented in the top six salaries.

Table 8*: Top Fifteen Annual Salaries for Superintendents Noting County, Gender, Race & Years of Service, 2013*

Number	County	*District*	*Annual Salary*	*Gender*	*Race*	*Years of Service*
1	Montgomery	Abington	263,058	Female	White	12
2	Chester	West Chester	236,670	Male	White	4
3	Delaware	Springfield	230,059	Male	White	13
4	Chester	Downingtown	228,233	Male	White	3
5	Montgomery	Lower Merion	226,549	Male	White	5
6	Bucks	Central Bucks	225,000	Male	White	1
7	Chester	Coatesville	224,995	Male	White	27
8	Chester	Tredyffin-Easttown	224,515	Male	White	25
9	Delaware	Wallingford-Swarthmore	221,708	Male	White	3
10	Chester	Phoenixville	214,327	Male	White	3
11	Chester	Great Valley	214,200	Male	White	3
12	Chester	Avon Grove	213,825	Male	White	26
13	Delaware	Radnor	212,987	Female	White	5
14	Delaware	Upper Darby	209,893	Male	White	24
15	Chester-Upland	Delaware	224,515	Male	White	1

The average salary among the top fifteen cohort was $224,702.26. Table 9 represents superintendents' salaries from highest to lowest per county in 2013. The average superintendent salary for the eight counties of this study was $164, 089; however, when disaggregating this data the salary spans were remarkable. For example, the pay differential between the salary of the highest paid superintendent and the lowest paid superintendent was $145,058 which equated to the average Lancaster County superintendent salary of $145,482. The highest paid superintendents were from Montgomery County where the average salary was $179, 153 and the lowest paid superintendents were from Lehigh County where the average salary was $145, 455.

Table 9*: Superintendent Salaries Highest – Lowest – Average per County in 2012 - 2013*

County	Highest	Lowest	Average
Berks (n=18)	$175,000	$125,000	$147,416
Bucks (n=13)	$225,000	$120,000	$151,204
Chester (n=12)	$236,000	$132,200	$202,296
Delaware (n=15)	$230,059	$147,518	$193,245
Lancaster (n=16)	$181,900	$118,000	$145,482
Lehigh (n=9)	$170,000	$123,932	$145,455
Montgomery (n=20)	$202,293	$151,043	$179,153
Northampton (n=8)	$170,375	$126,500	$148,460
Average	$170,383	$135,524	$164,089

Through the lens of a superintendent labor market, the comparison between 2013 and 2016 provides the context to question whether highly paid assistant superintendents and principals in Bucks, Chester, Montgomery, and Delaware counties are willing to compromise salary to accept superintendent positions in districts located in lower paying counties such as Lancaster, Northampton, or Berks. Although speculative, an analysis of superintendent salaries provides validity to the concept that economics may divide the superintendent labor markets in Southeastern Pennsylvania. Of particular interest, superintendent salaries did nor correlate with years of experience. Wealthier communities seemed willing to pay higher salaries regardless of

a candidate's educational background and professional experience in terms of years of administrative service.

Longevity and Multiple Superintendencies. Measuring superintendent longevity was a challenge when the rate of turnover is taken into consideration. Neither serving multiple superintendencies nor serving with long tenures seemed to be the current norm.

Table 10 represents the longevity in years of superintendents with multiple superintendencies. Turnover was evident in the seven superintendents who were serving in their first year in a new district. Moreover, only two superintendents from the 114 sample of superintendents served in three districts or more. The overwhelming majority of superintendents served in either one or two districts.

For those that served only once, the superintendency was seen as the end-stop for a career in public education and segued into retirement. For those that served in two districts the reason for the moves were based upon conjecture. Serving in multiple districts as a superintendent was often the result of entering the position at an age that is far from retirement and having the opportunity to move into other more desirable districts due to experience. The expected high turnover rate due to baby-boomer superintendents' retirements resulted in the opportunity for younger superintendents with experience to be highly marketable by school boards.

Of particular note, five of the superintendents with multiple superintendencies held previous experience in New Jersey and one held previous experience in Maryland. The New Jersey tenures averaged 5.4 years and the Maryland tenure was 3 years. Of the New Jersey superintendents, three moved to districts with smaller student populations in Pennsylvania whereas one New Jersey superintendent and the Maryland superintendent moved to districts with significantly higher student populations than their previous districts. Though not evident in

Table 10 and only speculation, two questions surface; namely, (1) are the short and multiple tenures across state lines evidence of career superintendents? and (2) Are the short tenures and moves to much larger districts evidence of career superintendents interested in pursuing PDE level positions?

Table 10*: Tenure Longevity (in Years) & Size Differentiation (in Student Population) for Superintendents with Multiple Superintendencies, 2016*

Previous District (Student Pop.)	Years	→	Current District (Student Pop.)	Years
Bristol (1,250)	5	→	Bensalem (6,000)	1
Bensalem (6,000)	2	→	Centennial (5,600)	1
Middle Township, NJ (2,700)	11	→	Morrisville (880)	1
Cherry Hill, NJ (11,248)	4	→	Haverford (5,945)	1
Lower Merion (8,344)	2	→	Cheltenham (4,600)	1
Neshaminy (8,400)	3	→	Lower Merion (8,344)	1
Stroudsburg (5,900)	8	→	Upper Merion (3,946)	1
Wilson (2,245)	4	→	Downingtown (11,779)	7
Riverside, NJ (1,370)	5	→	Oxford (3,800)	4
Quakertown (5,500)	7	→	West Chester (12,000)	8
Bangor (3,595)	12	→	Easton (9,047)	4
Curwensville (1,153)	9	→	Manheim (5,000)	8
Bridgewater-Raritan, NJ (8,810)	7	→	East Penn (8,058)	4
Salisbury Township (1,660)	5	→	Northwestern Lehigh (2,400)	7
Caroline County, MD (5,500)	3	→	Reading (17,464)	4
Range	2-12			1-8
Mean	5.2			3.5

Closing the Gender Gap, but Not the Salary Gap. The sample population of this study included the 114 superintendents that serve the public school districts Bucks, Chester, Delaware, Montgomery, Northampton, Lancaster, Lehigh, and Berks counties. In 2016, this reflected 70.2 % male (n = 80) and 29.8% female (n = 34). Table 11 represents the county breakdown of superintendents based upon gender. In comparison to the 2013 – 2014 school year, a growth in female superintendents occurred in six of the eight counties resulting in an overall 7.5 % increase in female superintendents. Lancaster County reflected the highest percentage of female superintendents at 35.3 % (n = 6) with Berks County closely following at 35% (n = 9) and

Montgomery County at 33.3% (n = 7). The highest male superintendencies were reflected in Northampton and Lehigh counties with both at 87.5% (n = 7). An upward trend exists in the hiring of female superintendents.

Table 11*: Superintendent Gender by Number and Percentage per County, 2016*

County	Superintendents	Male		Female	
	N	n	%	n	%
Bucks	13	9	69.2	4	30.8
Chester	12	10	83.3	2	16.7
Delaware	15	11	73.3	4	26.7
Montgomery	21	14	66.7	7	33.3
Northampton	8	7	87.5	1	12.5
Lancaster	17	11	64.7	6	35.3
Lehigh	8	7	87.5	1	12.5
Berks	20	11	55.0	9	45.0
Totals	114	80	70.2	34	29.8

Figure 10 represents the number of female superintendents hired in a given year per county in a stacked bar graph format to underscore the upward hiring trend of female superintendents. School boards hired twenty-one females in the past three years and this sum is greater than the number of females hired from the combined years 2000 – 2011.

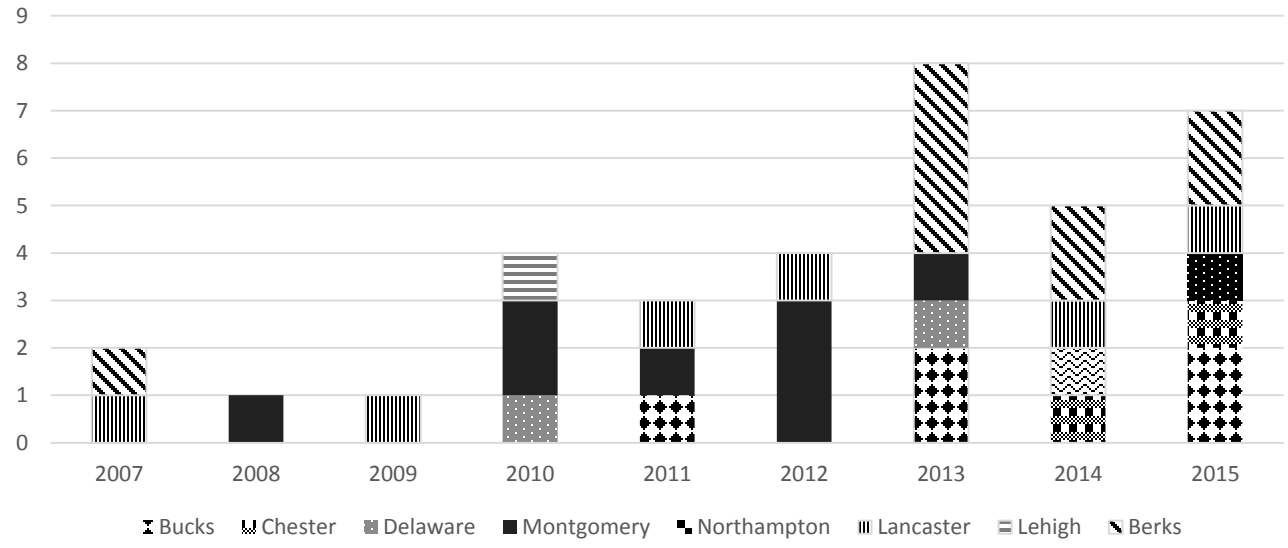


Figure 10. *Female Superintendent Year of Hire.*

Female superintendents are now represented in all of the eight counties in this study. The chart also reflects a spike in the hiring of female superintendents since 2013 across all eight counties in the focus of this study. Although the actual number of females hired in comparison to males is nominal the trend does reflect upward and evidences that more school boards are inclined to hire qualified female candidates for superintendent vacancies. Most importantly, this is a trend that is measurable across the counties in this study.

In addition, the female pipeline to the superintendency is consistent across the eight counties with the majority (n = 23) of females first serving as an assistant superintendent. Table 12 represents the female superintendent pipeline and challenges the belief that female superintendents take a different route to the superintendency than their male counterparts by assuming elementary principalships or curriculum-related positions.

Whereas female superintendents take the same route to the superintendency as their male counterparts, the compensation they receive is not equal. Table 13 represents female superintendents ranked by salary and takes into consideration level of education and is cross-referenced with overall ranking and years as a superintendent. Again, these figures represent the

Table 12*: Female Superintendent Pipeline, 2016*

County	Females	Superintendent	Assistant Superintendent	Director of Elem./Sec.
	N	f	f	f
Bucks	4	1	3	-
Chester	3	-	3	-
Delaware*	3	1	1	-
Montgomery*	7	2	5	-
Northampton	1	-	1	-
Lancaster	6	1	5	-
Lehigh	1	1	-	-
Berks*	9	1	6	1
Totals	34	4	23	1

*denotes that there is an unknown pipeline

most recent data from 2013 and since that time superintendent turnover occurred in Hempfield, Cheltenham, Quakertown, Centennial and Exeter school districts.

Of the top fifteen salaried female superintendents, five of the eight counties in this study were represented. What was most remarkable from the list of top fifteen paid female superintendents was their overall salary ranking. In comparison to male superintendents, the top fifteen paid female superintendents spanned overall rankings from one to eight-three and, like their male counterparts, years of service did not seem to play a role in their salary. For example, six out of the top fifteen salaried female superintendents, or 40%, were superintendents for five or less years. Eleven out of the fifteen, or 73.3%, were superintendents for 10 or less years. Interestingly, the most veteran female superintendent with twenty-three years' experience was the only female superintendent not to have earned her doctorate degree and earned the fourth highest female superintendent salary at $191,000.

Table 13: *Female Superintendents Ranked by Salary Noting Level of Education and Cross-Referenced with Overall Salary Ranking & Years as Superintendent, 2013*

Rank	County	District	Education	Overall Rank	Salary	Years
1	Montgomery	Abington	Doctorate	1	263,058	12
2	Delaware	Radnor	Doctorate	13	212,987	5
3	Montgomery	Colonial	Doctorate	18	201,681	16
4	Delaware	Ridley	Master's	25	191,000	23
5	Montgomery	Norristown	Doctorate	27	187,377	5
6	Montgomery	Springfield	Doctorate	29	185,000	1
7	Lancaster	Hempfield	Doctorate	32	181,900	6
8	Montgomery	Lower Moreland	Doctorate	33	181,825	7
9	Montgomery	Cheltenham	Doctorate	35	178,228	5
10	Bucks	Quakertown	Doctorate	38	176,712	6
11	Berks	Reading	Doctorate	41	175,000	1
12	Bucks	Palisades	Doctorate	53	167,475	6
13	Bucks	Centennial	Doctorate	64	158,100	7
14	Berks	Exeter	Doctorate	78	147,000	0
15	Berks	Oley Valley	Doctorate	83	145,000	3

Internal and External Superintendents. Given that turnover provided the means for transforming superintendent demographics in several school districts, it is important to investigate whether these differences also evidence a change in the hiring practices of school boards. Specifically, in addition to changes in demographic hiring are school boards broadening the location from which they select superintendents? In other words, are school boards choosing to hire candidates from within the school district or are they choosing qualified candidates from outside the district? If they are hiring outside candidates, what is the boundary of the search?

Table 14*: Percent of Internal & External Superintendent Hires, 2016*

County	N	Internal		Outside		Unknown	
		n	%	n	%	n	%
Bucks	13	4	30.8	9	69.2	-	-
Chester	12	1	8.3	8	66.6	3	25.0
Delaware	15	4	26.7	4	26.7	7	46.6
Montgomery	21	7	33.3	8	38.1	6	28.6
Northampton	9	3	33.3	4	44.4	2	22.2
Lancaster	17	10	58.8	5	29.4	2	11.8
Lehigh	7	2	28.6	3	42.3	2	28.6
Berks	20	5	25.0	13	65.0	2	10.0
Total	114	36	31.6	54	47.4	24	21.1

When analyzing school boards' practices to hire from within or to select an outside candidate for a superintendency vacancy, a universal trend for hiring outside became evident. Table 14 represents the percent of internal and outside candidates in 2016. A significant upward trend existed across five of the eight counties in this study to hire from outside. This was most evident in the three counties of Bucks, Chester, and Berks where outside superintendents constituted 69.2%, 66.6%, and 65.0% respectively of the superintendent population. The highest percentage of internal superintendents existed in Lancaster County where 58.8% of superintendents hailed from the same district where they served as assistant superintendent.

Whether this universal practice of school boards to hire from outside was the result of inside candidates not applying for the vacancy or it was board preference for an outside candidate remains uncertain; however, another variable to consider is the quantity of qualified candidates willing to serve as superintendent. Whether this is the much referenced "shallow pool" remains to be confirmed. Regardless, whether the pool of candidates is limited the end result was not a superintendent shortage. In fact, when looking at the pool of candidates, travel time to new positions yielded insightful data on the distance associated with superintendent searches, the boundaries of superintendent labor markets, and the willingness of qualified candidates to travel to secure a superintendency in a more desired school district.

Travel Time from Assistant District to Superintendent District. Travel time was also taken into consideration as a variable in the superintendent labor market as a means to measure the width of labor markets. Travel time as a factor was analyzed looking first at the amount of time an assistant superintendent was willing to travel to accept a superintendency as well as the distance a school board was willing to expand the search for a superintendent.

Travel time was based upon the distance from the home district central office to the new district central office based upon Google maps. Table 15 and 16 represent the travel time from the assistant superintendent district to the superintendent district from longest to shortest in 2013 and 2016, respectively and did not take into consideration those assistant superintendents who became superintendents in the same district. Comparison of two years provided the means to identify contrasts and emerging trends.

When comparing the two tables, the travel time from 2013 to 2016 had almost been cut in half with the average travel time decreased to 24 minutes from 40 minutes. Although inconclusive, it appeared that assistant superintendents may not be willing to relocate in order to

assume a superintendent position. Using sixty minutes as the maximum travel time for a superintendent to commute without relocating, it was noteworthy to compare that five assistant superintendents in 2013 were willing to accept a superintendent position beyond a sixty-minute commute as compared to two candidates in 2016. Turnover afforded the opportunity for qualified candidates to interview for vacancies and perhaps candidates were able to be selective in their application choices and eliminated districts that they perceived as being too great a distance to travel.

Table 15*: Travel Time from Assistant Superintendent District to Superintendent District (Longest to Shortest), 2013*

Assistant Superintendent District	Superintendent District	Travel Time (minutes)
Hatboro-Horsham	Manheim	85
Susquehanna	Coatesville	81
Bensalem	Saucon Valley	77
West Chester	Council Rock	63
Penn Delco	Upper Perkiomen	62
Neshaminy	Pennridge	45
Penn Manor	Manheim Central	43
Quakertown	Kutztown	37
West York Area	Columbia	31
Northwestern Lehigh	Catasaqua	29
Nazareth	Southern Lehigh	29
Upper Moreland	Upper Merion	26
Eastern Lebanon County	Conrad Weiser	20
Elizabethtown	Hempfield	19
Cocalico	Warwick	18
Lower Merion	Radnor	16
Parkland	Whitehall-Coplay	10
Average		40

Although the concept of an unwillingness to travel on the part of assistant superintendents to become superintendents is speculative, it does provide insight on the breath of superintendent labor markets and the distance of school boards' searches. Although assumptions cannot be made about those who applied but were not selected for the position, the fact that those who were

chosen and remained within an hour commute does provide evidence on the part of qualified candidates as to what is a reasonable, and unreasonable, commute expectation when pursuing a superintendent position. Relocation does not appear to be desirable and, perhaps, school boards are not willing to take a chance on those candidates who reside a substantial distance from the district. Proximity to and understanding of a school district culture may go hand in hand.

Table 16*: Travel Time from Assistant Superintendent District to Superintendent District (Longest to Shortest), 2016*

Assistant Superintendent District	Superintendent District	Travel Time (minutes)
New Haven, CT*	Lancaster	244
West Chester	Council Rock	74
Delco	Upper Perkiomen	71
Philadelphia*	Daniel Boone	69
Pennridge	Exeter	62
Wilson	Governor Mifflin	17
Pequea Valley	Solanco	28
Phoenixville	Great Valley	20
Average		24 (with outlier* removed)

Travel Time from Superintendent District to Superintendent District. Tables 17 and 18 represent the superintendent to superintendent travel time from 2013 and 2016, respectively. Again, travel time was based upon the distance from the central office home district to the new central office location based upon Google maps. When comparing the travel time from 2013 to 2016 two trends emerged from the data.

First, superintendent travel time decreased from a 97-minute average commute in 2013 to a 61 minute average commute in 2016. Second, less superintendents seemed to be willing to relocate in order to move into another superintendency. For example, in 2013 seven superintendents accepted another superintendent position in a district that was one hour from the home district. However, in 2016 only two superintendents accepted another superintendent position that was over an hour away from the home district.

Table 17: *Superintendent to Superintendent Travel Time (From Longest to Shortest), 2013*

District A	District B	Travel Time (minutes)
Connellsville Area	Spring-Ford	244
Curwensville Area	Cocalico	183
Caroline County MD	Reading	158
Pocono Mountain	Methacton	101
Riverside NJ	Oxford	88
Danville	Hamburg	76
Bridgewater-Raritan NJ	East Penn	66
Quakertown	West Chester	57
Wilson	Downington	49
Neshaminy	Lower Merion	40
Bensalem	Neshaminy (acting)	15
Average		97

Interestingly, a total of four New Jersey superintendents from 2013 and 2016 accepted positions that on average reflected an average two-hour commute with a range of forty-five minutes to four hours and thirty-one minutes. Although these superintendents most likely relocated to assume their new appointments, the reason is known. At least one superintendent noted New Jersey Governor Chris Christie's short-lived salary cap as the reason for accepting a superintendency in Pennsylvania (Clarke, 2015; D'Amico, 2015). This may have evolved as a win-win scenario in terms of Pennsylvania acquiring experienced superintendents and for the New Jersey superintendents earning a superintendent salary while, potentially, collecting a New Jersey pension simultaneously. Governor Christie's legislation also redrew boundary lines on the Southeastern Pennsylvania superintendent labor markets to include an inter-state market and evidenced qualified candidates' willingness to cross state lines in order to secure a desired superintendency and salary.

The Static Look of the Superintendency: Ethnicity. Where marginal growth was observable in the increase of female superintendents, the same cannot be stated about ethnicity as people of color remain marginalized in the superintendency. Table 19 represents superintendent

ethnicity and gender combined and illustrates the extremely low percentages of people of color in comparison to white colleagues.

Table 18: *Superintendent to Superintendent Travel Time (From Longest to Shortest), 2016*

District A	District B	Travel Time (minutes)
Milburn, NJ	Wissahickon	271
Stroudsburg	Upper Merion	86
Cherry Hill, NJ	Haverford	45
Neshaminy	Lower Merion	39
Lower Merion	Cheltenham	31
Bensalem	Centennial	26
Morrisville	Bristol Township	20
Interboro	Wallingford-Swarthmore	17
Bristol	Bensalem	16
Average		61

Table 19: *Superintendent Ethnicity and Gender by County, 2016*

County	Male				Female			
	W	%	B	%	W	%	B	%
Bucks	9	100	-	-	3	75	1	25
Chester	10	100	-	-	2	100	-	-
Delaware	11	91.6	1	8.3	4	100	-	-
Montgomery	14	85.7	2	14.3	6	90	1	19
Northampton	8	100	-	-	1	100	-	-
Lancaster	11	91.6	-	-	4	66.7	2	33.3
Lehigh	6	100	-	-	1	100	-	-
Berks	9	81.1	2	18.2	9	100	-	-
Totals	78	68.4	5	4.4	30	26.3	4	3.5

In the four counties of Bucks, Chester, Northampton, and Lehigh all male superintendents were white. The highest percentages of male superintendents of color were in Berks County at 18.2% (n = 2) and Montgomery County at 14.3% (n = 3). Male superintendents of color represented only 6% (n =5) of the total male population in this study (n= 83) and reflected no change when compared to 2013. In addition, no Hispanic or Asian males served as superintendents in any of the eight counties for the past decade with the exception of a Hispanic male who advanced to a position with the Pennsylvania Department of Education.

Table 19 includes female superintendents' ethnicity by percentage. Female superintendents of color represent 11.8% of the overall female population (n = 34) and this is a 5.7% increase from 2013; however, six of the eight counties in this study reflect 90% or higher white female superintendency. In fact, the five counties of Chester, Delaware, Northampton, Lehigh, and Berks reflected 100% white ethnicity for female superintendents. Female superintendents of color remained constant in Montgomery County (n = 1) and reflected increases in Bucks County (n = 1) and Lancaster County (n = 2). Although increasing, the appointment of superintendents of color still lag behind in relationship to the overwhelmingly homogeneous group of white superintendents. Similar to the category of male superintendents of color, no Hispanic or Asian females served as superintendents in the eight counties of this study.

The Status Quo of the Superintendency. When analyzing the top twenty-five school districts according to *US News and World Report*, nine from the focus of this study were reflected on the list. Table 20 represents these school districts and notes the overall ranking, county, superintendent demographics, size of the high school in students and teachers, and college readiness index.

Surprisingly, the tenure column did not support that higher years of service connotes a higher ranking on the *US News and World Report.* In fact, the average length of service for the superintendents on this list was 2.4 years and two were in their first superintendency. High school population size also varied with a range of 494 students to 1,832 students. Commonalities were rooted in gender, education, and the homogeneous socio-economics of middle to upper-middle class suburbia. All the superintendents on the top high school list were white males, with the exception of one black male, all earned their doctorate and all served in affluent suburban communities. Whether those districts formulated a socio-economic labor

market was not determined, nor was a reliance upon a specific university superintendent preparation program identifiable due to high turnover.

Table 20*: Superintendent & High School Demographics for Top School Districts (US News & World Report), 2015*

Rank	High School	County	Superintendent				HS Size	College Readiness
			Ed.D	Sex	Race	Tenure		
2	New Hope-Solebury	Bucks	Y	M	W	1	494	67.1
5	Radnor	Delaware	Y	M	W	4	1177	53.2
7	Great Valley	Chester	Y	M	W	1	1235	48.2
8	Unionville	Chester	Y	M	W	3	1334	47.2
10	Strath Haven	Delaware	Y	M	W		1168	47.1
12	Central Bucks	Bucks	Y	M	W	3	1496	46.2
15	Wissahickon	Montgomery	Y	M	W	1	1463	43.8
16	Harriton	Montgomery	Y	M	B	1	1184	42.8
17	Perkiomen	Montgomery	Y	M	W	7	1832	42.5
18	Lower Merion	Montgomery	Y	M	B	1	1259	38.2

Summary

Influences on the Southeastern superintendent labor market are numerous but underscore subtle changes that may be enduring. Levels of education continue to rise for both male and female superintendents with the overwhelming majority earning doctorate degrees. An upward trend in the hiring of female superintendents is apparent as evidenced in the representation of female superintendents in all eight counties of this study, but females are entering the position double the time of their male counterparts even though the majority are entering with experience as assistant superintendents and their salaries were not equivalent with male counterparts. Increased hiring of superintendents of color has been marginal and people of color remain underrepresented in the superintendent labor market. Experience did not play a major influence on the labor market as evidenced in US News and World Reports listing of top

high schools where the average years of service for the superintendents in these districts averaged only 2.4 years. In 2016, turn-over was a contributing factor as thirteen first time superintendents and thirty turnovers occurred in the eight counties of this study. School boards tend to hire outside candidates, prefer privately educated candidates, and offer broad ranges of salaries not necessarily based upon experience. Superintendents are spending less time traveling to their school districts and, possibly due to turnover, may be employed by a district of their choice.

Overview of Study Results

Strand 3: Exploratory Analysis of the Superintendent Labor Market Using SNA

In order to identify the extent to which an inter-changeable, or intra-changeable, superintendent labor market(s) exists in Southeastern Pennsylvania, the turnovers of superintendent appointments were tracked over a three-year period from 2013 to 2016. Using UCINET software (Borgatti, Everett, and Freeman, 2002) and social network analysis, this study mapped superintendent appointments and through visual representation identified the Southeastern Pennsylvania superintendent labor market(s).

Turnover. The high level of predicted turnover was evidenced through the density of superintendent appointments from 2013 through to the present. A comparison between 2013 and 2016 revealed less movement in 2015 but did not retreat from the fact that superintendent turnover remains at a high level. To reiterate, Jim Buckheit, Executive Director of the Pennsylvania Association of School Administrators, noted that by 2015 sixty percent of Pennsylvania school districts would have experienced a superintendent change. Speculation may be that now in 2016 the majority of turnover has occurred and more stability may become the norm.

Figures 11 and 12 map superintendent appointments in 2013 and 2015, respectively. Although figures 11 and 12 are informative in nature, both provide direction of relationship between and among the nodes. In both figures, the arrow points in the direction of the new district. The length of the line does not connote actual distance and no significance is attached to the lines. Both sociograms appear superficially complex; however, by mapping superintendent movement using UCINET an understanding of the interconnectedness of school districts as labor markets emerged. Moreover, the SNA graphing analysis produced results with a relational context to understand the Southeast Pennsylvania superintendent labor market(s).

Relational ties were either homophily or complementary, as evidenced when districts selected a similar, parallel, or in some cases, identical candidate to fill a superintendent vacancy resulting in a static appointment, or opposite as evidenced in a school board's decision to select a candidate with unlike qualities to the former superintendent resulting in a dynamic appointment. For example, in 2015 Lower Merion replaced its superintendent with a candidate that reflected the same gender, race, and educational level of the former superintendent. Another example of a homophily, or complementary, relationship was reflected in the school districts of Chichester, Marple Newtown, Upper Perkiomen, and Hempfield all of which replaced their superintendents with successors that were identical in race and gender, white females, all of whom possessed a doctoral degree. Counties as whole also evidenced complementary, or homophily, relational ties in the hiring of superintendents. For example, Bucks and Berks counties replaced while, male, doctorate superintendents with the same. In 2015, this was true for the school districts of Bensalem, Bristol, Council Rock, Morrisville, New Hope-Solebury, Governor Mifflin, Hamburg, Tulpehocken, and Wilson.

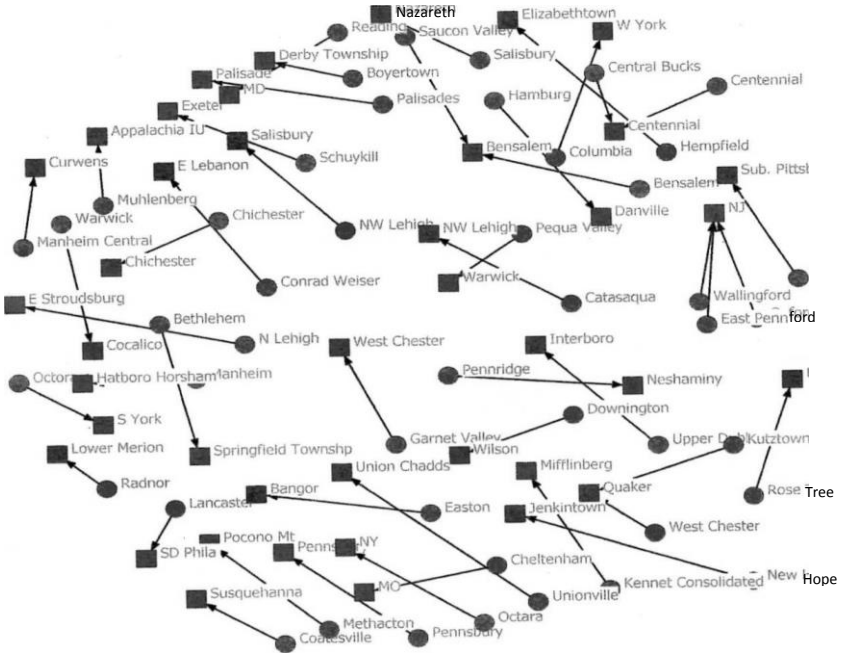


Figure 11. *Graph of superintendent movement in 2013 among the eight counties. Directional arrows point to the school district of origin.*

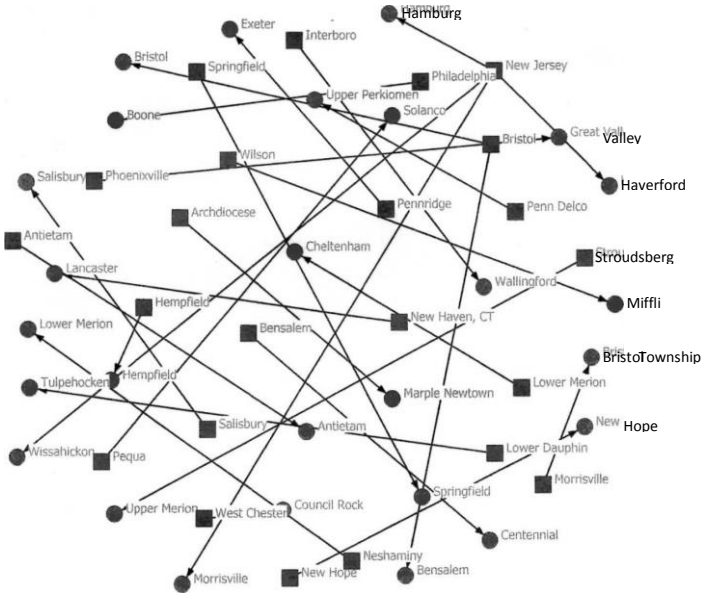


Figure 12. *Graph of superintendent movement in 2015 among the eight counties.*

Opposite relational ties were evident in flips of gender, race, educational levels, and origin. This was most evident in the three very different school districts of Cheltenham, Lancaster, and Daniel Boone. Cheltenham replaced a white, female, doctorate with a male of color and doctorate from an affluent Montgomery County school district. Lancaster replaced a Hispanic, male, non-doctorate, with a doctorate female of color from out-of-state. Boone replaced a white female, non-doctorate, with a male of color and non-doctorate from the School District of Philadelphia with no previous superintendent experience. These changes were outliers and reflected an unexpected labor market.

Interchangeable, Intrachangeable, and Internal Labor Markets. Table 21 represents the dissection of the 2013 superintendent sociogram to stratify the interchangeable, intrachangeble, and internal labor markets among the eight counties of this study. An interchangeable market, or a market within the same county, was common, but not the norm. Of interest were the nine examples of superintendent appointments from within the same counties of Bucks, Delaware, Berks, Lancaster, and Northampton Counties. Noteworthy, as well, was the inter-county labor market of Salisbury, Northwest Lehigh, and Catasaqua school districts.

Although in 2013 this inter-county example was singular in its existence, by 2015 numerous inter-county appointments supported the existence of expanding labor markets. Table 21 reflects the existence of an intrachangeable labor market among Neshaminy, Cheltenham and Lower Merion in Bucks and Montgomery Counties, and an interchangeable labor market among Bristol Township, Bensalem, Centennial, Morrisville, and Bristol Township in Bucks County. Embedded within interchangeable markets was the practice of school boards to hire within when filling a superintendent vacancy. Although school districts across counties have hired

superintendents within, the practice occurs more often in Bucks County in comparison to other counties.

Table 21: Interchangeable, Intrachangeable, and Internal Superintendent Labor Markets, 2013 - 2015

Interchangeable Labor Markets					
Districts				County	
Exeter	→	Schuylkill		Berks	
Centennial	→	Central Bucks		Bucks	
Neshaminy	→	Pennridge		Bucks	
Morrisville	→	Bristol		Bucks	
Bristol	→	Bensalem	→ Centennial	Bucks	
Phoenixville	→	Great Valley		Chester	
Warwick	→	Pequa Valley		Lancaster	
Elizabethtown	→	Hempfield		Lancaster	
Salisbury	→	NW Lehigh	→ Catasaqua	Lehigh	
Bangor	→	Easton		Northampton	
Intrachangeable Labor Markets					
Pennridge	→	Exeter		Bucks	→ Berks
Neshaminy	→	Lower Merion	→ Cheltenham	Bucks	→ Montgomery
West Chester	→	Council Rock		Chester	→ Bucks
Upper Darby	→	Rose Tree Media		Montgomery	→ Delaware
Internal Labor Markets					
Palisades	→	Palisades		Bucks	
Pennsbury	→	Pennsbury		Bucks	
Unionville	→	Unionville		Chester	
Chichester	→	Chichester		Delaware	

Intrachangeable and "Outlier" Markets. Intrachangebale markets, or markets that occurred between county boundaries occurred frequently from 2013 through 2015. Figure 13 represents the numerous superintendent appointments that took place 2013 – 2015 across county lines. These appointments were unilateral and did not evidence any explicit labor markets.

Mapping uncovered labor market trends particularly indicative of changes in the manner in which school boards choose candidates. Of note, the appointment of candidates with previous experience not aligned to the traditional climbing of the public school administrative hierarchy was evident. Location of previous employment revealed a sharp trend towards hiring from

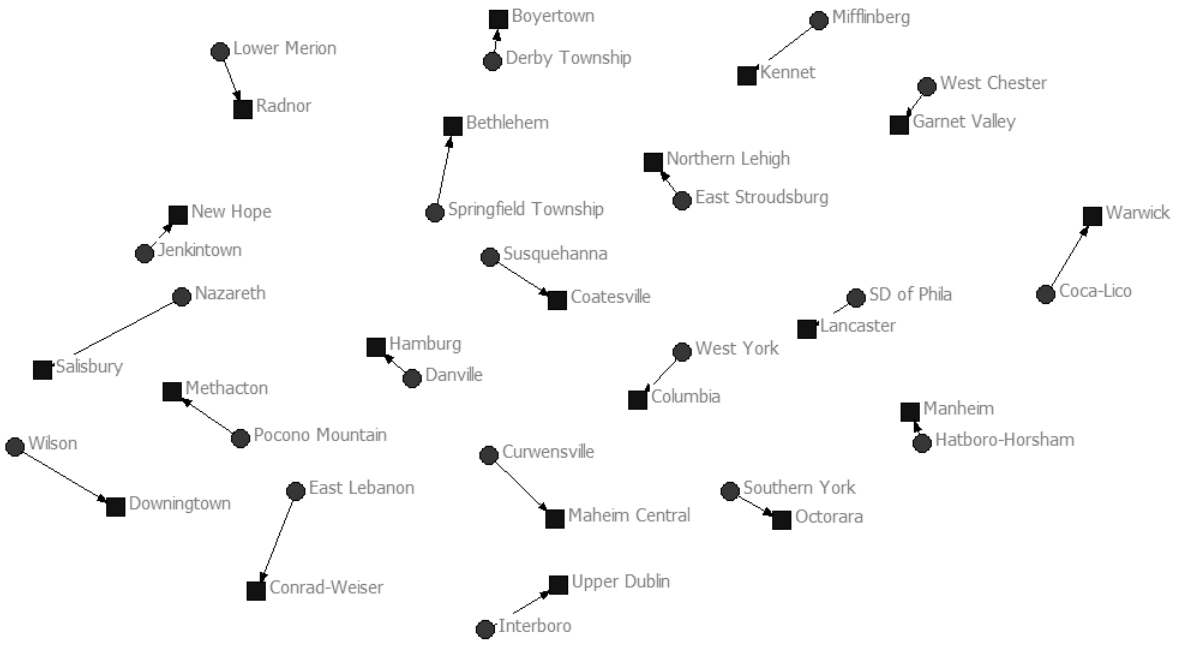


Figure 13. *Representation of unilateral superintendent appointments in 2013- 2015 that do not evidence any labor markets.*

outside the state or from outside the public school system. As a result, the expected appointment of a white, male doctorate candidate was not the norm in several appointment examples. Figure 14 represents and "outlier" superintendent labor market based upon out of state and non-traditional hires for superintendent vacancies. Although the focus of this study is southeastern Pennsylvania school districts, many school boards chose superintendents not from this geographical area but rather selected candidates from Connecticut, New York, Maryland, suburban Pittsburgh, and Missouri and thus created a separate labor market.

Included in this "outlier" labor market were examples of school boards that have selected candidates with non-traditional routes to the superintendency. These appointments included a director of facilities, an intermediate unit director, and those that were selected from the parochial school system. Examples such as these occurred in the varied school districts of

Lancaster, Marple-Newtown, Boone, Muhlenberg, Octara, Reading, Cheltenham, and Springfield. In addition, a comparative analysis of the 2013 and 2016 outlier labor markets also evidenced less turnover in 2015 than in 2013. This is true in the overall movement of superintendents as well as the out-of-state and non-traditional hires.

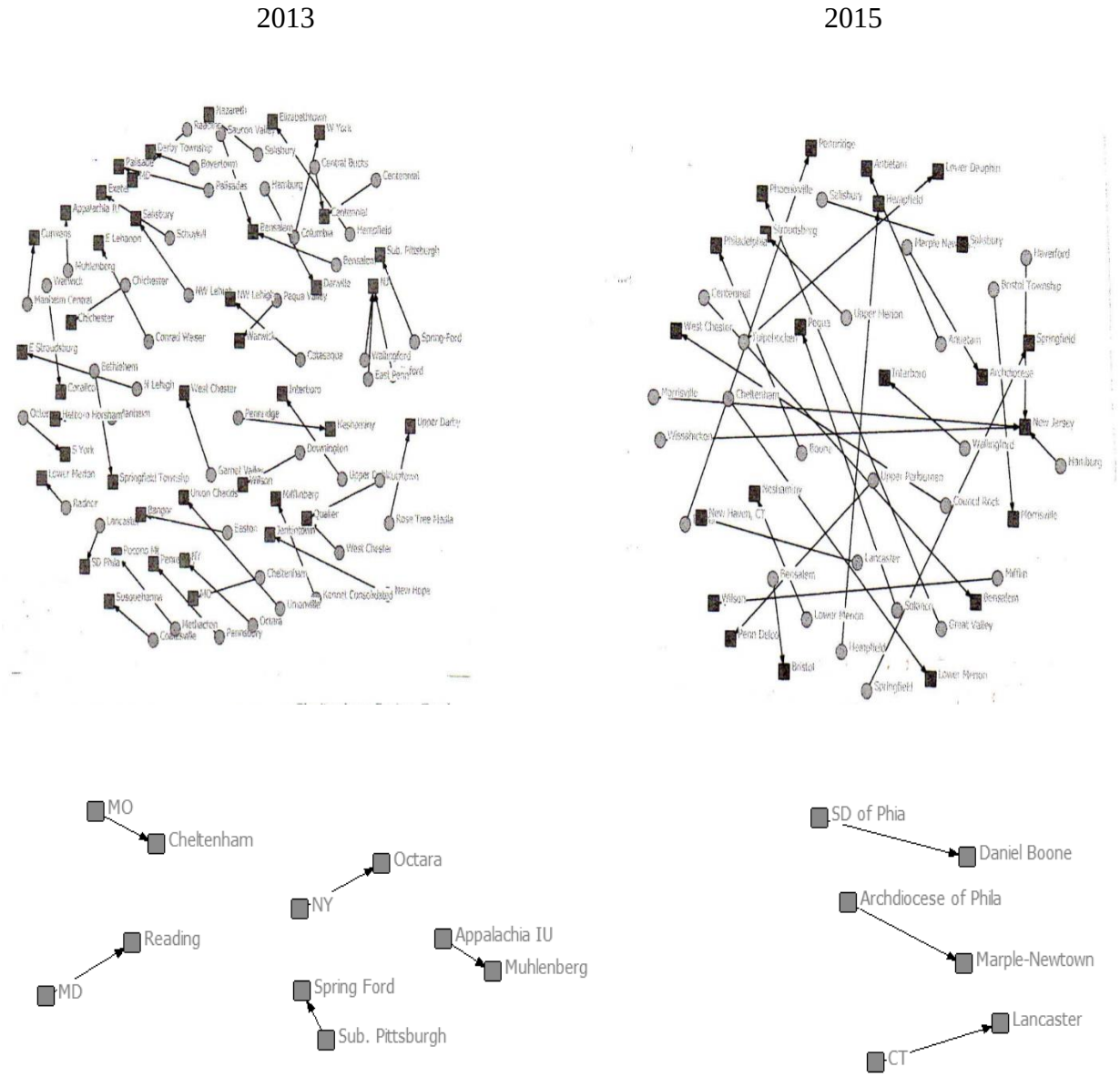


Figure 14. *2013 and 2015"Outlier" labor markets based upon out-of-state- and non-traditional hires.*

The New Jersey Labor Market Connection. Again, although the focus of this study was the region of southeastern Pennsylvania, the presence of a New Jersey connection to the superintendent labor market of this region was undeniable. Figures 15 and 16 represent the 2013 and 2015 Southeast Pennsylvania-New Jersey superintendent labor market, respectively. Placed within the historical context of New Jersey Governor Christie's legislature action to place a cap on the state's superintendents' salaries beginning in 2011 and until repeal in 2015, the incremental and widespread import of experienced New Jersey superintendents was understood. This loss of superintendents for New Jersey evolved into a separate Southeastern superintendent labor market and could be perceived as a win-win scenario as Pennsylvania school districts acquired experienced superintendents and the candidates themselves gained salaries that exceeded the restrictions placed by Governor Christie's legislation.

The extent of the influence of the New Jersey had on the Southeastern Pennsylvania superintendent labor markets was remarkable when mapped. Figure 17 represents the inclusion of the New Jersey factor and resulted in an intra-changeable market that revealed the complexities of the superintendent labor market that was not apparent on a superficial analysis. This sociogram extended the intended focus of this study and collapsed geographical miles and multiple school districts into a single superintendent labor market. Given its complexity, this was also the only identifiable labor market for which the density could be calculated using the formula n (n-1)/2 and yielded a density of 0.33 that did not represent a dense network; however, it did reflect a clustering pattern that revealed a labor market.

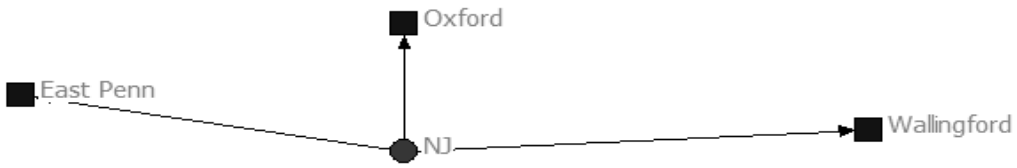


Figure 15: *2013 Pennsylvania appointments of former New Jersey superintendents.*

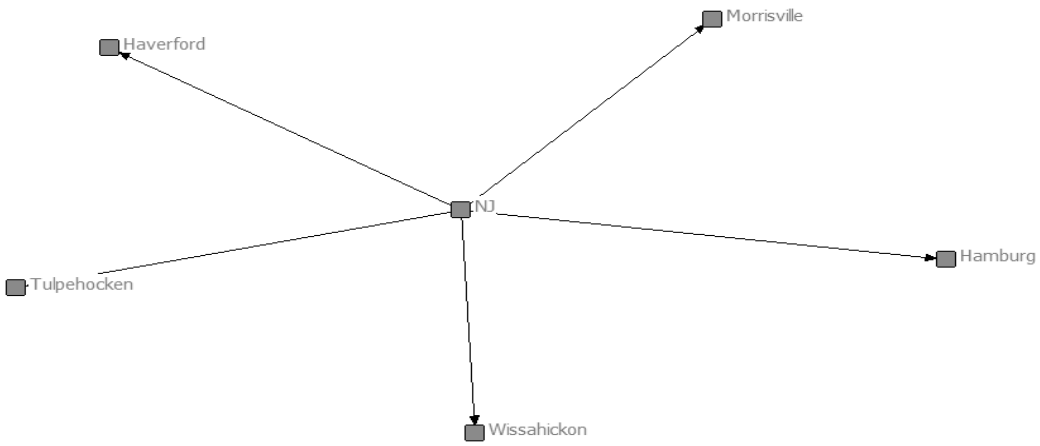


Figure 16: *2015 Pennsylvania appointments of former New Jersey superintendents.*

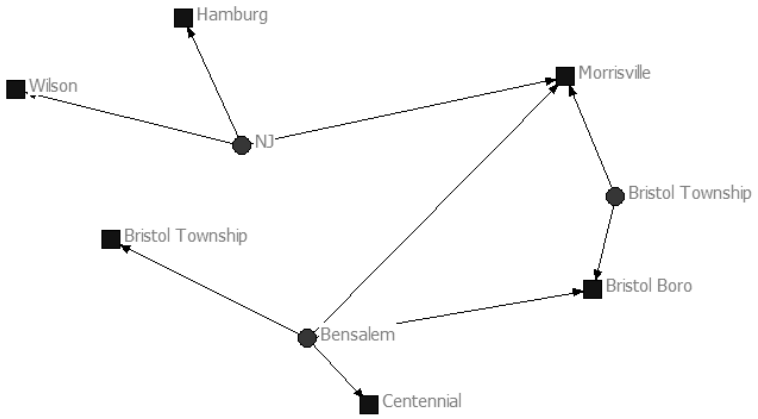


Figure 17: *Sociogram of the New Jersey-Pennsylvania superintendent labor market evidencing transitivity.*

Summary

Using UCINET software and social network analysis, this study sought to identify the extent to which an inter-changeable or intra-changeable superintendent labor market exists in Southeastern Pennsylvania. Comparing superintendent movement between 2013 and 2016 revealed a high level of turnover and evidenced several trends in the hiring of new superintendents. Interchangeable markets were common among counties but were not the norm. Embedded within interchangeable markets was the school board practice to hire an internal candidate. Intra-changeable appointments were frequent but did not evidence labor markets per se. Mapping superintendent appointments revealed changing school board practices when choosing a qualified candidate. This included the hiring of candidates with experience that did not reflect the traditional climb up the public school administrative hierarchy and a preference for candidates with private and Ivy League educations. Complementary relational ties were reflected especially in Bucks and Berks counties. Opposite relational ties were reflected in specific school districts such as Cheltenham, Lancaster, and Daniel Boone. Likewise, numerous out-of-state and out-of- the- public school system occurred and resulted in an "outlier" labor market. A New Jersey labor market also emerged with several experienced superintendents moving into Pennsylvania vacancies as a result of short-lived legislative salary caps.

CHAPTER V

Discussion and Recommendations

Introduction

This study was a modest first step to conduct research on the topic of public school superintendent labor markets. The initial goal of the study was to identify the existence of an echo effect chamber in superintendent shortage literature and to challenge the notion of shortages of qualified candidates to fill vacancies. Using bibliometric tools, this study provided sufficient evidence to identify an echo chamber effect. Given the presence of an echo chamber effect and the fact that a shortage never materialized in a fifteen-year time frame, the second goal of this study, using UCINET and a superintendent repository, was to conduct an exploratory analysis to identify the Southeastern Pennsylvania superintendent labor market(s) and to identify those variables that exercise influence.

Unraveling the superintendent labor market was challenging because of the high volume of movement associated with the predicted turnover rate by 2015. With this in mind, more patterns of movements and school board hiring practices were identified than labor markets per se. Nonetheless, valuable information was obtained. The good news is that vacancies continued to be filled by qualified candidates and a shortage never manifested. In fact, results from this study provided meaningful insights into school boards' current hiring practices and positive identified trends in the present superintendent labor market; namely, more hiring of women and people of color.

Extended Limitations

The nature of this research was exploratory and included a non-traditional methodology rooted in bibliometrics and social network analysis. These methodologies were selected as a

means to address the methodological limitations embedded in the superintendent shortage literature as evidenced through this research. With this in mind, this research sought test McFarland, Diehl, and Rawling's (2011) assertion that social network analysis is "a means for better capturing complex interdependencies and fluid dynamics than many current and more popular methods are able to (p. 3). Likewise, this research answered the call of Kretchmar et. al (2014) who called for "critical scholars to develop new theoretical and methodological tools capable of piecing together these powerful relationships" (p, 5).

Therefore, a strength of this research was to apply new methods to the persistent myth of a superintendent shortage in order to arrive at valid conclusions. Moreover, because this research was not dependent upon the traditional use of surveys to collect data, but rather relied upon demographical data arranged into a repository, the end result was conclusive evidence of the viability of the Southeastern Pennsylvania superintendent labor market.

Discussion

Very little research exists on the superintendency and even less research has been conducted on superintendent labor markets. The focus of superintendent research in the past fifteen years has been on the potential for a national superintendent shortage as qualified candidates seemed to be choosing not to pursue the position. This premise was based upon a small set of research and corroborated by dissertations that sought to test the hypothesis for a superintendent shortage.

Bibliometric tools were applied to these studies and an echo chamber effect was identified. Rather than promoting the superintendency as a viable career choice, these studies may have enabled a self-fulfilling prophecy and dissuaded potential qualified candidates from

the position. Given the low response rates and survey methodology that all these studies employed, hopefully, the impact of this small sect of studies was minimal.

Looking at the superintendency through the lens of the past fifteen years reveals that a shortage never materialized. In fact, turnover as a result of baby-boomer superintendents' retirements has provided the opportunity for school boards to select candidates that do not reflect the traditional superintendent profile and many newly appointed superintendents are outside this traditional norm. This is good news for woman and people of color who are interested in career advancement as a superintendent. Likewise, many newly appointed superintendents arrived to the position outside the expected trajectory of principal-assistant superintendent-superintendent suggesting school boards do not see this traditional trajectory as a necessary track.

Through data compiled in the superintendent repository, a widening of the pathway to the superintendency is evident as many newly appointed superintendents possessed varied backgrounds. School boards, it seems, are choosing candidates to meet specific school district needs and are selective to choose candidates that display talents outside the traditional managerial and curriculum roles of the superintendent.

Until now, studies have not been conducted to treat the superintendent labor market as a unit of analysis. Rather, the focus has been on qualified candidates' intention to pursue the superintendency in order to determine a potential shortage. This failure may be a major contributor to a possible echo chamber effect and has misinterpreted a superintendent shortage. In addition, the research reflects a logical flaw in not identifying the interconnectivity between the pipeline, a shortage, and embedded rewards when discussing administrators' pathway to the superintendency.

By ignoring the synergy embedded in a pipeline-shortage-rewards framework, research was limited, and myopic, in not considering other variables outside of principals' perceived intentions to pursue the superintendency. Methodologically, this dissertation sought to bypass perception and rely upon empirical data to identify superintendent labor markets and the factors that influence trends in superintendent movement and appointments.

Figure 18 identifies a conceptual re-framework that is absent from the research and that challenges the conclusions that a superintendent shortage exists. Although highly simplistic the framework has the ability to refocus future research by identifying the interconnectivity of shortage, pipeline, and reward. More sophisticated models could provide the means to reframe the research and analyze the superintendent labor market based upon data, and not perception. Figure 18 is a modest step in that direction and proposes relationships that could be the basis for analysis of the superintendent labor market. For example, placing an emphasis on reward challenges the notion of a shortage and highlights the need to examine labor markets rather than candidates per se.

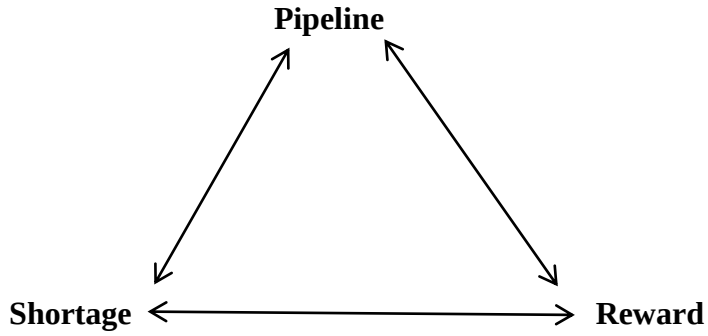


Figure 18. *Conceptual re-framework identifies the interconnectedness of shortage, pipeline, and reward and challenges the conclusions that a superintendent shortage exits.*

Multiple incentives, such as tuition reimbursement, salary increase, career advancement, and career options, exist to entice administrators to attain their superintendent certification. Tuition reimbursement offsets or eliminates the tuition cost associated with earning superintendent certification and thus promotes an administrator's decision to pursue superintendent certification. Once coursework and certification are completed, not only does the administrator possess the means for career advancement but gains an immediate salary increase for credits earned. Likewise, for those that pursue a doctorate in addition to the certification the attainment of the advanced degree provides multiple career options. Pursuing superintendent certification presents as a win-win scenario for the administrator. Incentives promote candidates' interest in pursuing superintendent certification and, in turn, imbue the pipeline. The perception of a superintendent shortage not only can be challenged but potentially can be rebuked as illogical.

Recommendations for Practice

Implications from this study debunk the notion of a superintendent shortage based upon an echo effect chamber. This study refocuses superintendent research not on shortages but rather on labor markets and the variables that influence market trends.

First, superintendent literature is an area of educational research that requires more attention and focus. The singularity of the position should not be a hindrance to research. An emerging field of research should continue to focus on superintendent job satisfaction, non-traditional pathways to the superintendency, and the means to attract more women and people of color to the position.

Second, labor market research needs to continue to evolve as a means to recruit qualified candidates to the superintendency. As this study revealed, superintendent labor markets are not

geographical or regional in nature. In other words, proximity played an insignificant role in identifying labor markets. Rather than inter-changeable or intra-changeable markets, candidate's specific experiences and backgrounds as they fit into the present needs of the school district as defined by the hiring board play a more significant role. Identifying these hiring trends revealed school boards' selectivity in terms of education, gender, ethnicity, and experience. In terms of recommendations for practice, this study provides the basis for school boards to understand the current hiring trends and characteristic variables that are influencing the superintendent labor market in Southeastern Pennsylvania many of which are incongruent with traditional past appointments.

Third, in order to promote equity in leadership among superintendent labor markets, the Pennsylvania Department of Education should establish guidelines for school boards in establishing superintendent contracts, including salary scales. Although a failure in New Jersey that resulted in an exodus of experienced superintendents, a more judicious approach and gradual adoption could result in positive results that would attract more women, people of color, and supply all school districts with highly qualified superintendents.

Lastly, PDE needs to create a statewide superintendent repository. Possessing such a database will provide valuable insight into the superintendent labor market across the Commonwealth. More importantly, analysis of the repository will yield identification of the characteristics that influence market trends.

Recommendations for Research

The concept of analyzing superintendent labor markets is new and one that is worthy of more exploration. Research has examined the pathway to the superintendency, but little attention has been given to superintendent labor markets. This study was an initial step in

promoting superintendent research and superintendent labor markets, in particular. However, in examining superintendent labor markets, other strands of potential research presented and are worthy of further exploration.

1. Turnover was a considerable variable in this study and placed a palpable force on the superintendent labor market (Berryhill, 2009; Glass, 2002; Melver, 2011; Shield, 2002). More research needs to be conducted to trace the impact and continued influence of turnover on the market. Questions that warrant consideration include: Is continued turnover to be expected or, as a result of the volume of turnover, is stability to be expected? If continued turnover is expected, has the perception of the superintendent turned into a dynamic position where candidates will evolve to become "career superintendents" in multiple districts as opposed to ascending the administrative hierarchy and then retiring? If career superintendents become the norm then what is the effect on learning and governance?
2. Similar to superintendent research, attention needs to be paid to school boards and hiring practices. The focus of this study was identifying superintendent labor markets and influences on the markets but research is needed to explore school board hiring practices and what variables they perceive as essential to determine the "right fit" candidate for their school district.
3. Likewise, the possibility exists that school boards are changing hiring practices as evidenced in the 33.9% of newly hired superintendents were women or people of color. A continuing are of superintendent research needs to focus on attracting and recruiting more women and people of color in order to increase their equitable representation among the superintendent population (Glass, 2000; Grogan & Brunner, 2005;

Simmons, 2005). Tracking this trend to hire outside the traditional superintendent profile is worthy of further investigation and research, especially as it relates to school board's interest in non-traditional candidates.

4. In addition, research needs to be conducted on whether the hiring of younger superintendents will increase the average length of service and curtail turnover rates. Similarly, career paths of these young superintendent needs to be charted to determine if a generation of "career superintendents" is unfolding and to what extent this is having on public education.
5. As no shortage materialized another strand of research to explore is the connectedness of pipeline-incentives-shortages. School districts themselves may be creating a "shortage" in terms of highly qualified candidates not applying for vacancies because incentives are not being offered or are being perceived as paucity by the candidates. Research needs to be conducted to explore to what extent incentives play in a candidate's decision to pursue the superintendency. This might provide a valuable resource to school boards who want to attract top candidates to their school districts.
6. Along with new areas of research, it is important to continue to investigate and expand superintendent job satisfaction. More positive findings will only continue to strengthen the pipeline and build qualified candidates' confidence to pursue vacancies.
7. Likewise, research should continue to explore the widening of the pathway to the superintendency and identify "outlier" labor markets that do not reflect the traditional route to the superintendency. This, too, would be valuable information for superintendent preparation programs to revise program offerings to balance leadership

theory and pragmatics (Björk 2001; Björk & Gurley, 2005; Browne-Ferrigno & Glass, 2005; Glass, 2004; Kowlaski & Keedy, 2005; Winter, Millay, Björk & Keedy, 2005).

8. Research should continue to focus and explore superintendent labor markets using non-traditional methodologies such a social network analysis. Such non-traditional approaches may continue to yield insights not readily apparent or obvious through traditional research.
9. The possibility exists that superintendent labor markets are defined by socio-economic metrics as evidenced in the status quo of superintendents at top-paying school districts and the number of inter- and intra-changeable markets among districts with similar socio-economic characteristics. Research should explore the extent to which threat rigidity exists in the hiring practices of school boards, especially those with high socio-economic characteristics.
10. This research evidenced that assistant superintendents assuming a superintendent position and superintendents changing districts are not willing to travel beyond an hour commute to the new district. Research needs to explore whether other variables, beyond time, such as socio-economics, play a role.
11. Similarly, research needs to define school board "must-have" criteria when hiring new superintendent in terms of educational and professional experience and affect. Since no common thread existed among the qualifications of newly hired superintendents at top school districts research needs to be conducted to examine school board practices when it comes to identifying potential candidates for interviews and the thought process that governs the eventual recommendation for hire for the candidate of choice.

12. Unlike professionals in higher education positions who relocate to obtain desired positions at colleges and universities, research needs to explore why superintendents or aspiring superintendents do not typically relocate. Research needs to identify whether this is a local phenomenon or if travel beyond an hour posits a larger superintendent labor market comprised of larger or med-size metropolitan cities such as New York, Philadelphia, Chicago, and Los Angeles.

Conclusion

This study concluded that an echo chamber effect existed in the superintendent shortage literature. More importantly, this study also identified the trends and variables that influence the superintendent labor markets in Southeastern Pennsylvania school districts. This study was unique in its focus on superintendent labor markets and the application of social network analysis to guide the identification of, and influences upon, the labor markets.

Results from the study reflected that boundary labor markets, whether inter-changeable or intra-changeable, based upon geographical proximity are not the norm. This may be the result of the effects that a predicted high turnover had on superintendent labor markets. Due to high turnover, school boards had the opportunity to select candidates outside the traditional pool of applicants. This is most reflective in the numerous out-of-state hires, female hires, people of color hires, and the hiring of candidates with non-traditional backgrounds.

These appointments evidence positive trends in superintendent hiring that are aligned with recommendations in the literature regarding the sustainability of the superintendent pipeline. Namely, these appointments step outside the traditional applicant pool and recognize the untapped "oughtabes." Looking through the lens of superintendent labor markets this is encouraging and hopefully marks the beginning of a permanent trend.

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