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# The Impact of Superintendent Turnover on Student Achievement in Rural Districts

## Abstract

The field has gained knowledge in the area of superintendent influence on student achievement; however, more research on superintendent turnover and its impact on organizational performance in a rural context is needed. Student achievement measures have become the primary indicator of school, principal, teacher, and student success (New York: Race to the Top State Scope of Work, 2011) and has become a measure of the superintendent's performance. Using time series data analysis with twelve years of district data across the 21 schools studied, results indicated that superintendent turnover did impact student achievement. The motive of the superintendent, examined in this study through Carlson's (1961) theory of internal versus external hire, suggested that superintendents hired from inside the district increased rural student achievement by 10.8 percent more than external hires. The means of the superintendent, examined in this study through Boyne and Dahya's theory of Executive Succession, suggested that dependence of a school district on state aid served as a moderator. Student achievement in districts that are reliant on state aid as a revenue source were less impacted. The smaller the school, the less change in passing rates across succession events was observed.

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The Impact of Superintendent Turnover on Student Achievement in Rural Districts

By

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Submitted in partial fulfillment  
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Ed.D. in Executive Leadership

Supervised by

Dr. Michael Wischnowski

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Dr. Bruce Blaine

Ralph C. Wilson, Jr. School of Education  
St. John Fisher College

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## **Dedication**

To my family, Joel, Alyssa, Andrew, and Austin Chenaille: my love for you is endless.

For I know the plans I have for you," declares the LORD, "plans to prosper you and not to harm you, plans to give you hope and a future. Jeremiah 29:11

## **Biographical Sketch**

Rebekah Chenaille currently serves as the Director of Instruction at Mt. Morris Central School District in Mt. Morris New York. Mt. Morris is a rural school with enrollment just over 500 in Kindergarten through grade 12. Prior to accepting this position Rebekah worked as a School Improvement Coordinator for the Genesee Valley Educational Partnership. The Partnership is a Board of Cooperative Educational Services situated in a region mostly comprised of rural schools. Rebekah's work in the region served as the catalyst for this study.

Rebekah received her undergraduate degree in education from Roberts Wesleyan College in 2001. She began her teaching career shortly after. Rebekah was awarded a Master's of Science in Education from SUNY Brockport in Educational Administration in December of 2004. In August of 2007, Rebekah received a Certificate of Advanced Study in Educational Administration from SUNY Brockport. She is certified by the New York State Department of Education as a School District Leader.

In May of 2010, Rebekah began her doctoral journey at Saint John Fisher College. The program awards an Ed. D in Executive Leadership. During her time in the program Rebekah was inducted into Kappa Delta Pi. Rebekah's commitment to rural schools and her experiences with superintendent turnover led her to study the effects of turnover on student achievement. Dr. Michael Wischnowski served as Rebekah's dissertation chair.

## **Abstract**

The field has gained knowledge in the area of superintendent influence on student achievement; however, more research on superintendent turnover and its impact on organizational performance in a rural context is needed. Student achievement measures have become the primary indicator of school, principal, teacher, and student success (*New York: Race to the Top State Scope of Work*, 2011) and has become a measure of the superintendent's performance.

Using time series data analysis with twelve years of district data across the 21 schools studied, results indicated that superintendent turnover did impact student achievement. The motive of the superintendent, examined in this study through Carlson's (1961) theory of internal versus external hire, suggested that superintendents hired from inside the district increased rural student achievement by 10.8 percent more than external hires. The means of the superintendent, examined in this study through Boyne and Dahya's theory of Executive Succession, suggested that dependence of a school district on state aid served as a moderator. Student achievement in districts that are reliant on state aid as a revenue source were less impacted. The smaller the school, the less change in passing rates across succession events was observed.

## Table of Contents

Dedication.....	ii
Biographical Sketch.....	iii
Abstract.....	iv
List of Tables.....	vii
List of Figures.....	viii
Chapter 1: Introduction.....	1
Introduction.....	1
Significance of the Study.....	9
Purpose of the Study.....	24
Theoretical rationale.....	26
Research Questions.....	31
Chapter Summary.....	32
Chapter 2: Literature Review.....	35
Introduction and Purpose.....	35
Review of the Literature.....	35
Chapter Summary.....	57
Chapter 3: Methodology.....	60

Introduction .....	60
Data and Sources of Data .....	64
Data Analysis Procedures.....	67
Chapter Summary.....	69
Chapter 4: Results.....	70
Introduction .....	70
Research Questions .....	70
Data Analysis and Results.....	70
Summary of Results .....	81
Chapter 5: Discussion .....	83
Introduction .....	83
Implications of the Findings.....	83
Recommendations .....	92
Limitations and Implications for Future Study .....	98
Conclusion.....	100
References.....	102
Appendix.....	108

## List of Tables

<b>Item</b>	<b>Title</b>	<b>Page</b>
Table 4.1	Origin of Replacement Superintendent.....	71
Table 4.2	Average Length of Superintendent Tenure by Origin, Aid level, and School Size.....	72
Table 4.3	Superintendent Tenure Statistics .....	72
Table 4.5	ELA Percent Passing by Superintendent Succession Type .....	74
Table 4.6	Impact of Tenure on Percent Passing NYS ELA 8.....	75
Table 4.7	Impact of Tenure and Aid Level on NYS ELA 8.....	76
Table 4.8	Impact of Turnover on ELA Percent Passing by Level of Aid.....	78
Table 4.9	Impact of Origin and Aid Level on ELA Percent Passing.....	78
Table 4.11	Origin of Superintendent and School Size as a Moderator for Impact of Turnover on Percent Passing .....	80

## List of Figures

<b>Item</b>	<b>Title</b>	<b>Page</b>
Figure 2.1.	Characteristics and attributes of successful and effective rural superintendents. ....	53

## **Chapter 1: Introduction**

### **Introduction**

There always has been political and social tension over the role of the school superintendent (Hoyle, Bjork, Collier, & Glass, 2005). When public schools were first established, they were governed by state and local boards of education. As funding increased, the need for a full-time state superintendent became apparent. The job of the state superintendent of education was to oversee the expenditure of public funds, a job that had grown too burdensome for local volunteer committees. The first community superintendency was created in the same way. The superintendency was originally created to supervise classroom instruction and ensure equity in curriculum delivery (Hoyle et al., 2005).

By the 1900s, researchers had conducted studies on the preparation of school superintendents, and schools shifted from hiring superintendents with political connections to hiring those with educational qualifications. During the 1920s, power shifted from local school boards to the local superintendent. Local school boards were content to give authority to these highly educated school leaders, and instead came to view the board's role as supporting the superintendent. This era, named The Scientific Management Era (Hoyle et al., 2005) placed emphasis on improving staff productivity. The superintendent was responsible for the system output, and schools were run like a business. The civil rights movement of the 1960s and 1970s created a decentralization of decision making with the introduction of teachers' unions. Boards of education became

more involved in decision-making and the perception of its role changed from supporting the superintendent to scrutinizing administrative decisions. The Educational Reform Era of the 1980s and 1990s placed a greater burden on the superintendent to be a leader and focus on improvements in teaching and student achievement (Spring, 1994).

The history of the school superintendency has been a fitful journey from manager to leader. The role has evolved from an ad hoc response to local needs for school management to leading a complex community learning enterprise. It is a position that is widely influential but narrowly understood (Houston, 2006, p 1).

To understand the role of the superintendent this section will examine the roles, responsibilities, and duties of the office.

**Collaborate with the Board of Education.** The primary role of the superintendent of a school district in the twenty-first century is to work with the board of education and community to provide the best possible education for children (Bard, 2006). The superintendent is the Chief Executive Officer (CEO) of a school district. The superintendent's responsibilities include (a) implementing board policy, (b) establishing organizational structures, (c) developing strategic plans, (d) recommending new hires, (e) implanting the budget, (e) creating positive relationships with the community, (f) creating a culture of continuous improvement, and (g) advocating for students. Superintendents also work alongside state and local political leaders to advocate for school funding (Bard, 2006). They manage "complex issues of budgets, personnel, information technologies, product accountability, and competition" (Hoyle, et al., 2005, p. ix). The role of the superintendent has become entwined with every facet of a district to address the mission of student achievement.

**Enforce state laws and regulations.** The New York State Education Law section 1711 (2) outlines the statutory powers and duties of the school superintendent. According to the law, the superintendent has the right to speak on all matters before the board of education, but not to vote. Furthermore, section 1711 (2) states it is the responsibility of the superintendent to enforce all provisions of the law and rules and regulations as set by the New York State Education Department. Additionally, the superintendent is to prepare the content of all courses approved by the board of education, recommend lists of textbooks to be used, and supervise all persons “employed in the management of the schools or other educational activities of the district authorized by [the education law] and under the direction of the board of education” (Hoyle, et al., 2005 p.194). As part of employee supervisor, the superintendent has the authority to transfer teachers and suspend employees for insubordination. The superintendent is also responsible for the supervision of children including “their courses of study, examinations, promotion, and all matters pertaining to the playground, medical inspections, recreation and social center work, libraries, lectures, and all other educational activities under the management, direction and control of the board of education” (Hoyle, et al., 2005 p.195). In addition to the state mandated duties, local boards are able to add to the roles and responsibilities of the superintendent as part of their local negotiation. The following is a sample from the Chappaqua Central School District board policy 9055 (2010):

As chief executive of the Chappaqua Central School District, the Superintendent is responsible for achieving District objectives and carrying out policies established by the Board of Education; for the overall planning, direction, control

and evaluation of District activities; and for managing those activities aggressively and imaginatively so as to maintain and improve the quality of the District through continuous school improvement initiatives (p.1).

**Create district vision and culture of improvement.** As the example illustrates, superintendents often are required by local boards to be visionary and to maintain a constant culture of improvement (Chappaqua Central School District, 2010). This strategic leadership requires that a superintendent have knowledge of and be able to establish a district culture that supports innovation and imagination. Creating a collective district vision is the responsibility of the superintendent. Vision statements are written to capture the future of the system in an effort to allow for long-range planning. Vision work requires that the superintendent have an understanding of a global society and the implications a global economy has on the future of educating America's youth. Education is not a standalone industry; global issues influence it. Superintendents who are leading districts into the future have to identify problems, frame them well, and be skillful at problem solving. This type of leadership has to promote rigorous classroom instruction and give staff the professional development necessary to meet educational demands while maintaining passion for equity. Superintendents have to understand the demands of state and national exams and help teachers and students envision district success on these measures. Since the culture in a school should exist in a space of cognitive dissonance, defined as the space where learning is constant, the superintendent has to know how to assess and analyze the district culture to keep it healthy (Hoyle et al., 2005). Superintendents have to empower staff and students to reach high levels of success.

**Enforce Board of Education policies and rules.** Superintendents play a role in school governance by enforcing policies and rules established by the board of education. To govern, the superintendent as CEO must be able to (a) describe the system of public school governance in our democracy; (b) establish working relationships with the board and teachers union; (c) be able to formulate policy and communicate it internally and externally; (d) ensure that local policy is in line with state and federal regulations; and (e) function within the rules and regulations of federal, state, and local governance to avoid all civil and criminal liability (Hoyle et al., 2005). Research has shown that management of student behavior and staff expectations consume a school leader's time (Cuban, 2001). To address this issue, a superintendent can help building administrators shift focus from management to instructional leadership through governance. Furthermore, superintendents can recommend new behavior policies and reallocate funds to give a leader support with student management either through staffing or professional development to reduce conflict. A final aspect of the superintendency is to establish a culture in which all professionals are held to high expectations. As such, communicating the vision, mission, and values of the organization and expectations for employees has become the central function of an effective superintendent (Waters & Marzano, 2006).

**Serve as the public face of the district.** Similar to Chief Executive Officers (CEOs) in the private sector, superintendents, in concert with the school board, serve as the public face of the school system. Superintendents are encouraged to join community organizations both to contribute and to advocate for the priorities of the school system. It is the job of the superintendents to build consensus, communicate well, and design a system that meets the needs of the community. Superintendents, also need to be

politically astute. In order to represent the district, the superintendent must be able to: (a) articulate the district's mission, vision, and values to the community and generate buy in; (b) use words and actions to build trust with the community; (c) use tools to collect data both internally and externally; (d) communicate effectively; (e) identify with and belong to the community; (f) understand the community well enough to act on its behalf; (g) create partnerships with local businesses and political offices; (h) solve problems and resolve conflict; and (i) have school-community pride and spirit (Hoyle et al., 2005). Being able to establish vision and communicate it well to constituents, inspire participation, and empower constituents are possibly the most important function of school leadership (Hoyle et al., 2005; Waters. & Marzano, 2006).

**Articulate curriculum.** Curriculum articulation is a key function of the office of superintendent according to New York State Law (Article 35-1711). Curriculum and instructional planning are the core of educational administration. According to Heinz-Dieter (2009), when curriculum is centralized or controlled by the office of the superintendent, quality and consistency of the curriculum is higher. As such, an executive leader should know how to (a) develop curriculum and design systems for delivery, (b) create developmentally appropriate curriculum and instructional practices, (c) assess students' present and future learning needs, (d) rely on research during the creation of curriculum including state standards, (e) align curriculum from one year to the next to promote critical thinking and depth of content, (f) evaluate and refine the core and extra-curricular curriculum, and (g) use technology to enhance curriculum creation and delivery (Hoyle et al., 2005).

Superintendents have the means to create structures within a school that encourage high quality curriculum. They are able to structure faculty meetings, team meeting times, and department meetings, superintendent conference days, and teacher release time. Providing the time and resources as well as emotional support to accomplish high quality curriculum are all within the superintendents' role. Keeping a curriculum current and geared toward the future is the foundation for continuous school improvement.

**Manage instructional resources.** Also essential to continuous improvement is the superintendent's ability to manage instructional resources. Improving student achievement requires a solid curriculum and the right staff members to deliver it. In order to support student achievement, staff development, and an overall climate for learning, superintendents must know how to develop, implement, and monitor initiatives that require change. Inspiring change is hard work and is one of the key roles of a superintendent. Additionally, superintendents have to understand children and their social and emotional needs as they make decisions about programs and staffing. To do so, superintendents need to have a process in place to analyze and evaluate the effectiveness of programs and ensure that instructional resources are available, cost-effective, and equitably applied. These understandings are essential if the allocation of district resources is to effectively support student achievement (Hoyle et al., 2005).

**Oversee the budget.** Although the depth and breadth of the role of a superintendent removes the leader from the daily instructional process, discretion over budgetary expenditures offers the superintendent a means for influencing the day-to-day work of education. Though much of the process of building the district budget is public,

and its final approval is the prerogative of the school board, identifying the core elements of that budget is largely the responsibility of the superintendent who is charged by the board to provide data and guidance to support budgetary decisions. In the end, it is the superintendent who defines a budget that maintains educational programming and acquires the resources needed to meet the board goals all while being fiscally acceptable to the local taxpayer. Typically the district employs a school business official who is an expert in municipal law and whose responsibility is to govern the expenditure of tax dollars. This business official offers guidance and support to the superintendent during the budget creation.

In order to fulfill the district's goals, superintendents allocate funding to areas of priority. In doing so, it is sometimes necessary to drop or cut back on initiatives that are not aligned with the goals (Waters & Marzano, 2006). Budget development and planning are areas no superintendent can afford to neglect. As resources decline and accountability increases, superintendents have to be visionary in their planning to protect the overall education of the students in their schools (Hoyle et al., 2005). Budget creation, future planning, and being familiar with a system and its funding streams are all areas of financial management that influence quality of schooling, and the superintendent must set high expectations.

**Supervision and evaluation of staff.** In addition to establishing high expectations within the district, superintendents have supervisory and evaluative responsibilities. The office of the superintendent is directly under the board of education on the organizational chart and above all other titles, giving the superintendent the responsibility of supervising and evaluating all staff. In districts with an administrative

team, the superintendent delegates these responsibilities to building leaders, but ultimately the superintendent is responsible for recruiting, selecting, and continuing the employment of all staff. The superintendent is also responsible for establishing the evaluative criteria and negotiating the process with the bargaining unit (union) and administrators. The superintendent is also responsible for auditing programs to ensure that human resources are being effectively utilized (Hoyle et al., 2005).

**Summary of roles and responsibilities.** The superintendent is ultimately responsible for leading an efficient and effective organization. The outcome measures of a superintendent's success are both fiscal and academic. School boards pay close attention to the superintendent's ability to keep the local tax levy under control while providing a world class education for the students. Since passage of the Elementary and Secondary Education Act in 1965, tying federal funding to student achievement as measured by standardized tests, student scores have become a primary metric for assessing the quality of an educational system. Since the superintendent is responsible for so many aspects of the education system's programs and processes, decisions made by the superintendent impact student achievement.

### **Significance of the Study**

This section examines the nature of the rural superintendency in order to frame the significance of the study.

**Rural superintendent role in context.** The rural superintendent tends to have responsibilities beyond those mentioned in the previous section. The rural context in itself creates a difference in the superintendent's role. Rural communities are close-knit, and the majority of those who live in rural places have been life-long residents. Families

are deeply rooted having been part of the community for generations (Lamkin, 2006). This creates a strong sense of community—a “we take care of our own” approach (Budge, 2006). The school system in rural areas tends to be the largest employer. This makes the superintendent as CEO a vital component of the economy, adding economic commitment to the superintendent’s formal role. Rural superintendents who value the community as much as the residents do gain the respect and admiration of its members.

The struggle to understand rural communities and their schools is complicated by the differences that exist between one rural place and another (Arnold et al., 2007). However, rural places do share similar challenges such as attracting and retaining highly qualified teachers and leaders (Arnold et al., 2005; Arnold et al., 2007). Specifically, for the past two decades rural communities have been experiencing a “hollowing out—that is, losing the most talented young people at precisely the same time that changes in farming and industry have transformed the landscape for those who stay” (Carr & Kefalas, 2009, p. 2). Superintendents in rural communities have to understand the influence schools have on the community.

Rural superintendents must establish trust and respect in the community as they seek to increase student achievement, but relationship building takes time. While studying successful rural superintendents, Chance and Copeland (1996) found that community members feel admiration for the superintendent. Rural schools with high poverty and high student achievement had commonalities. They all had superintendents with longevity in the position and the pillars in the community described them as highly respected (Syracuse University, 2003).

Isolation is an obstacle in many rural schools. The lack of population density has caused many small school to consolidate into one larger community school. Rural schools are classified as rural based on being at least an hour's drive from an urban center (Arnold et al., 2007). This distance tends to lessen opportunities for students . However this same goeographic isolation provides a landscape filled with opportunitites to hunt, fish, hike, and enjoy the tranquility of nature—a separation from the “rat race” and the “traffic” (Budge, 2006, p. 5).

If a rural school has a large enough student body, there may be principals, a business offical, and a pupil services director to assist the superintendent. However, if the student population is low, the superintendent may be the only administrator. This requires the superintendent to be a “jack of all trades” (Lamkin, 2006; Winand & Edlefson, 2008). One rural superintendent described the work as “putting a puzzle together” (Lamkin, p. 21). In many cases, the lack of administrative structure requires the superintendent to be a manager, but this same limited structure provides the superintendent with a great deal of opportunity to influence achievement since it allows the superintendent to be more involved with the day-to-day instruction of students. For instance, the lack of administrative structure requires a superintendent to be collaborative and share roles and responsibilities with teacher leaders. Moreover, the ability to implement reform initiatives and see transformation is more tangible for a rural superintendent. Whereas large school districts have sought to reorganize themselves into small schools to create the same family-like feel of rural schools, those conditions are already in place for the rural superintendent, who has the ability to directly implement reform initiatvies and see the transformation (Sergiovanni, 1994). “Michael Tierney, an

activist working in rural West Virginia said, ‘There is something very powerful about the sense of place in rural communities that helps them transcend the challenges of poor infrastructure and few resources’” (Budge, 2006, p. 2).

The smallness of rural schools and connectedness of rural communities to their school creates a “fishbowl” in which administrators act (Budge, 2006, p. 8). The superintendent has no “private life and comes under scrutiny for everything they do both at school and in other settings” (Lamkin, 2006, p. 1). With few other professionals in the area, it is hard for rural superintendents to make friends or have a life outside of the school. This difference between rural superintendents and their counterparts makes the role of the superintendent more difficult for many. Leaders must be willing to be “highly visible, accessible, approachable” and make a strong case for school efforts (Budge, 2006, p. 7). Superintendents in rural school districts are never off the clock. Everyone knows them well and feels comfortable calling them at home or asking them a question in the grocery store.

It is counterintuitive to fill a vacancy for a rural superintendency with a novice. However, rural superintendents seem to be the bottom rung of the administrative farm system (Jacobson, 1988). It has been implied that relative to the position in other locales, the rural superintendency is easier and is a place to start a career. In this view, a rural superintendent’s service “falls at the bottom end of the ‘pecking order’: superintendents new to the role were encouraged to ‘begin’ in rural districts and subsequently work their way ‘up’ to suburban and urban districts” (Lamkin, 2006, p 21). For the 11.6 million students enrolled in a rural school (Arnold, 2005) this notion of their school districts as a “starting place” creates inequity.

If the decisions superintendents make influence student achievement, and rural superintendents are responsible for so much more, rural superintendents may have closer links to student achievement outcomes than their peers in other contexts. As the levels of accountability increase under the Race to the Top agenda of the Obama Administration, superintendents will feel an increased burden to raise student achievement on standardized measures. Since rural superintendent decisions have a more direct impact on the systems they lead, the pressure on the rural superintendent to increase achievement while losing financial support from the state has exacerbated the tension already inherent in this demanding role.

**The superintendent's role in school reform.** The role of a superintendent has become more challenging in the age of accountability. School accountability based on standardized student achievement tests can be traced to the Elementary and Secondary Education Act of 1965. The Elementary and Secondary Education Act (ESEA) (P.L. 89-10) was enacted as part of the “War on Poverty” during the Johnson administration. The law was written to end the inequalities in education that became visible during the civil rights movement (Landsberg, 2004). There are six titles that exist in the law: (a) Title I describes the guidelines and allocations of federal funds to aid schools with high numbers of educationally disadvantaged children, (b) Title II provides funding for library resources and audio visual equipment, (c) Title III provides funding for programs that support students at risk of school failure, (d) Title IV funds colleges and universities, (e) Title V provides funding to individual state departments of education, and (f) Title VI outlines the general provisions of the law (Landsberg, 2004). The passage of the ESEA created “definitive entry” into K-12 public education for all (Whilden, 2010).

A groundbreaking study titled *A Nation at Risk*, published by the Reagan administration in 1983, claimed that public education was failing to meet the needs of the nation. Statements such as, "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" and "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war." (National Commission on Excellence in Education, 1983, p. 1) are representative of the message the report delivered to the nation. The political pressure on superintendents to have a district outperform neighbor and state averages on standardized assessments has driven decision making and has made data analysis and school improvement initiatives central to a superintendent's daily duties.

Pressure for continued improvement has continued to increase over the past decade. The No Child Left Behind Act (NCLB) was passed into law on January 8, 2002 as a reauthorization of ESEA. NCLB required states which receive Title I funding to (a) test yearly in grades 3-8 in English Language Arts and Mathematics, (b) measure academic progress toward the goal of becoming 100% proficient by 2013-2014, (c) create report cards that report out the achievement of all subgroups within a district which are accessible to the public, and (d) put highly qualified teachers, defined as certified and proficient, in every classroom (Editorial Projects in Education, 2004). As part of the law, the formula for Title I allocation was changed to target resources to schools in order to better serve poor children (United States Department of Education, 2011). The goal of NCLB was for every child to be proficient in English Language Arts (ELA) and

mathematics by 2014, “however, 37% of America’s schools today are not meeting their annual targets mandated by NCLB” (Duncan, 2011b, p. 2).

Despite being embedded in educational policy, NCLB has remained controversial. Birkland (2010) argued that “As a policy NCLB was not realistic” (p. 274). An analysis of student achievement data before and after implementation of NCLB showed that NCLB did not increase the performance of socioeconomically disadvantaged students (Neal & Whitmore, Schanzenbach, 2007). This is significant in that rural schools are typically small and a majority of their students come from poor families (Arnold, 2004; Carr & Kefalas, 2009), a subgroup that historically underperforms on standardized measures (Jimerson, 2005).

The Obama administration, under Secretary of Education Arne Duncan, urged Congress to reauthorize ESEA (Duncan, 2011b). However, because schools across the nation have continued to struggle to meet the goal of becoming NCLB goal of 100% proficiency by 2014, states have been asking the federal government for flexibility. In response, the Obama administration has been granting waivers to states and school districts working to increase student achievement through reform efforts (Duncan, 2011a). Flexibility has been created for states that are focusing on three critical areas of reform: (a) transitioning to college- and career-ready; (b) developing systems of differentiated recognition, accountability, and support; and (c) evaluating teacher and principal effectiveness and support improvement (Duncan, 2011b). Once these criteria have been met, states can request a waiver from the NCLB goal of 100% proficient designation.

The *American Recovery and Reinvestment Act of 2009 (ARRA)*, Section 14005-6, Title XIV, (Public Law 111-5), provided grants to states to create innovative education reform (United States Department of Education, 2011). Obama's education reform initiative, named Race to the Top (United States Department of Education, 2011) involved a "re-envisioned federal role in education" (p.1) by setting priorities around four areas: (a) improving teacher and principal effectiveness to ensure that every classroom has a great teacher and every school has a great leader; (b) providing information to families to help them evaluate and improve their children's schools, and to educators to help them improve their students' learning; (c) implementing college- and career-ready standards and developing improved assessments aligned with those standards; and (d) improving student learning and achievement in America's lowest-performing schools by providing intensive support and effective interventions (Duncan, 2010). The 2009 federal stimulus bill allotted \$330 million dollars to improve student assessments that align with the Common Core Standards adopted by 45 states (United States Department of Education, 2010). This investment in education moves the United States closer to national standards and assessments.

The allocation of federal funds in education were awarded to states whose education departments met the criteria established by the law. The New York State Education Department was awarded nearly \$700 million dollars in federal funds by adopting the reform initiative. New York has signaled the intent to meet the reform through four key assurance areas: (a) world class curricula including formative, interim, and summative assessments aligned to internationally benchmarked standards; (b) a robust data system; (c) rigorous teacher and principal evaluation systems that include

student achievement measures and redesigned teacher and principal preparation programs focused on clinical practice; and (d) coordinated and aligned interventions and supports for the lowest achieving schools. The third assurance area of teacher and principal evaluation will be met through the creation of a system predicated on standardized assessment results. While school systems have always been held accountable for student achievement, the Race to the Top reform places that accountability on teachers and principals within the system and requires superintendents to set higher expectations for performance (SUNY, 2011). The new regulation will create an added demand on the superintendents' role as supervisor and evaluator and create another data set for boards of education to scrutinize.

**School reform and the rural superintendent.** While NCLB has implementation barriers for all schools, rural schools have been struggling with depopulation, which creates a decrease in school funding, which makes it even harder for rural districts to meet the demand of the law. Jimerson (2005), a policy analyst for The Rural Schools and Community Trust, believes that NCLB is a suburban-urban law with little concern for the needs and problems of schools in rural contexts. Specifically, the small student population leaves rural schools vulnerable to calculation flaws that land them on their state list for improvement—a designation under NCLB requiring school choice and supplemental education services—both of which are inaccessible to rural families because of school size and geographic isolation. The law also requires districts to purchase scientifically based programs to ensure student success. This presents a dilemma for rural schools because the research that forms the basis for scientifically based programs was not tested in rural settings (Arnold, 2004).

According to the Council of State Governments, rural schools are at a significant disadvantage under the Obama administration's *Blueprint for Reauthorization* of NCLB (2010). "Funding is and has continued to be a huge issue in rural education policy... rural schools and districts are at a significant disadvantage and receive significantly less from federal formulas, than all other districts" (Patterson, 2010, p. 1). The reliance on competitive grants and innovation in the *Blueprint* limit the ability of rural schools to benefit from the reform because "lack of infrastructure, staff, and relatively small student populations leave rural schools ill-equipped to compete" (Patterson, p. 2). Patterson further identified how the Race to the Top initiative puts rural schools at a disadvantage by stressing areas that rural schools are ill equipped to address.

"The two largest increases to educational funding have been under the American Recovery and Reinvestment Acts' Race to the Top initiative and the Investing in Innovation (I3) programs. Both of these programs put much stress on innovation, on utilizing non-traditional ways of teaching students, on using funds to cater to large groups of students and on community and non-profit collaboration. Moreover, in the coming year, funds for these innovative programs will increase while all other formula grants will receive \$5 million less (Patterson, 2010, p. 19).

Furthermore, the federal government has allocated targeted grant monies based on a per-pupil basis, leaving small and rural schools at a disadvantage (Patterson, 2010). Based on an example outlined by the Rural Trust, Patterson suggested that a rural student may count as one-third of an urban student due to weighted formulas. Additionally, two other federal formulas have proven to be prohibitive for rural schools

to be adequately positioned to meet the demands of Race to the Top. Title I grant monies are direct to large cities thanks to the concentration formula. The formula accounts for the increased cost required to educate children who live in poverty. The formula is weighted for districts that have an enrollment above 6500. As a result, these grants are rarely awarded to rural districts (Patterson, 2010). The second formula involves the Education Finance Incentive Grants, which are proportional to the amount a state spends per-pupil. States that spend more per-pupil receive weighted scores in the allocation of these grants. Patterson (2010) argued that the issue is not about equity but is a symbol of a state's priorities. The federal government needs to seek equity in distribution.

The *Blueprint for Reauthorization* outlined accountability measures for schools that do not make progress on standardized measures (Duncan, 2010). There are four models schools can follow if they are identified as not making progress. The transformation model requires failing schools to (a) replace the principal, (b) institute research-based instructional programs, and (c) extend learning time. The turnaround model requires schools to (a) replace the principal and 50% of staff, (b) institute research-based instructional programs, and (c) extend learning time. The restart model requires a school to (a) close and reopen or (b) be converted under a charter operator. The last intervention model is the school closure model where the school is closed and students are enrolled in higher-performing schools within the district (Duncan, 2010). These four models have been based on the assumption that attracting and retaining highly effective educators and leaders are nonissues; however, these are significant issues for rural schools (Arnold, 2004; Arnold et al., 2005). The models also assume

that charter schools are an option and that districts have multiple schools within the district to provide choice. All of these assumptions are urban-centric (Patterson, 2010).

Rural schools have continued to struggle to meet the demands of NCLB (Reeves, 2003). Small student populations tend to make standardized test scores more volatile, thus it is likely that rural schools will be labeled ‘school in need of improvement’ under NCLB (Reeves, 2003). Being so labeled creates political tension for the superintendent and a heightened expectation for keeping the district on track. Whether a school is on ‘the list’ or not, the heightened accountability puts a heavier emphasis on the superintendent’s role as instructional leader (Lashway, 2002). Furthermore, for rural superintendents the added pressure does not come with an increase in funding to purchase the required research-based programs or staff necessary to meet the demand of interventions (Lashway, 2002; Patterson, 2010). Instead, the reauthorization of ESEA under the Obama administration places emphasis on grants and competition as a source of funding along with the heightened expectation of college and career readiness for every student, which is a priority rarely found in the rural context (Arnold, 2004). These pressures have made the rural superintendency much harder to navigate than in the past.

**Impact of superintendent turnover.** The superintendent is the Chief Executive Officer of a school district, and the position is defined by roles and responsibilities that encircle the mission and vision of public education. On top of the formal roles and responsibilities rural school superintendents share with their peers, they also must mesh with the rural community and harness the influence that is afforded the position once trust has been established. Since a superintendent wields influence

within a community, turnover in the position is unsettling to the community at best, and constant change can completely disrupt the system and impact effectiveness of the school system.

In 1985, Miskel and Cosgrove examined superintendent turnover. They concluded that the “Replacement of . . . superintendent is a disruptive event because it changes the lines of communication, realigns relationships of power, affects decision-making, and generally disturbs the equilibrium of normal activities” (pg. 88). The research on succession planning is dense, with Carlson’s (1961) research serving as the anchor. According to Carlson, there are two ways that a district can replace a leader: hire from within or hire an outsider. Generally, insiders are hired when a school board and community are pleased with the direction that the district is headed. Outsiders are hired to bring change. Either way, Carlson contended that “organization cannot be cast aside; it must be maintained” (p. 217). Therefore, the only way to change course is to change leadership. With new leadership comes “a jolt to the system” (Miskel & Cosgrove, 1985, p. 88) along with new ideas and new ways of communicating and new relationships to build,

According to Leithwood, Louis, Anderson, & Wahlstrom (2004), leadership is second only to teaching when ranking factors that effect student achievement. In 2006, Walters and Marzano conducted a meta-analysis of research on school district leadership and found a positive correlation of .24 between the independent variable, district leadership, and the dependent variable, student achievement. More importantly, the meta-analysis suggested that the length of a superintendent’s tenure in a district has a

positive correlation of .19 on student achievement. The study concluded that not only does the superintendent matter, but continuity in the position matters.

The longevity of a superintendent is directly linked to student achievement in a school district. According to *Leadership and School District Success: A Statewide Study of Rural School Districts* (Syracuse University, 2003), attributed success within rural schools to a long-term superintendent. These rural schools thrived from “currency of leadership” and the “concept of “social capital,” which refer to relationships built within tight communities (p.70). Trust and investment has appeared to play a strong role in the success of rural schools.

However, recent research suggested that superintendent turnover is not as significant as sources suggested. In 2001, the Council of Urban Boards of Education (CUBE), commissioned a study that examined 77 CUBE districts. The report suggested that the national average for superintendent tenure is 5 years. As part of their meta-analysis Waters and Marzano (2006) drew on the work of Whittle who examined the relationship between the success of an organization and the average tenure of its CEO. Whittle’s work lead Waters and Marzano to suggest that “If the stability of superintendents was to approximate the stability of CEO leadership... the performance of school districts would be enhanced” (p. 21). Specifically, tenure for CEOs of successful corporations ran from 11-35 years, which is far longer than the national average of school superintendents (Waters & Marzano, 2006).

Waters and Marzano stated, “positive effects appear to manifest themselves as early as two years into a superintendent’s tenure” (p. 14). Superintendents new to the district spend more time building relationships each week than attending to important

issues like student achievement (Byrd, Drews, & Johnson, 2006). Moreover, the constant turnover of superintendents not only breaks trust, it impedes a district's ability to establish long-range goals. The top two correlates of student achievement and superintendent responsibilities are (a) non-negotiable goals for achievement and instruction; and (b) board alignment with and support of district goals (Waters & Marzano, 2006).

**Rural superintendent turnover.** Rural superintendents have been leading in unfair policy environments. The unique challenges they face have contributed to decisions to voluntarily exit their positions. In 2007, Stephenson conducted a study across New York State to determine the factors that influenced rural school superintendents to exit their positions. Superintendents who left rural districts reported the struggles they faced financially, including limited resources, inadequate administrative support, low pay, inability to provide programming beyond the basics, and a depressed local economy. Superintendents also reported the strain of leading in small communities where they lived in a 'fish bowl'. According to the New York State Council of Superintendents (2009) the average superintendent's tenure is five years, but studies of superintendent turnover or longevity have not compared tenure across district types. While turnover in the rural superintendency has been talked about as a dilemma, there is no national or state data source to support those claims. The studies of successful rural schools indicate that all share the characteristic of longevity in the superintendency. Therefore, if longevity in the superintendency matters, then turnover hurts.

## **Purpose of the Study**

If the role and responsibilities of the rural superintendent are vast, and organizational outcomes are attached to decisions, it is important to whether superintendent turnover has ramifications on student achievement?

When a superintendent is replaced, succession, or the handoff of power, occurs between the existing and new superintendent. The succession literature suggested “replacement of ...[a] superintendent is a disruptive event because it changes the lines of communication, realigns relationships of power, affects decision-making, and generally disturbs the equilibrium of normal activities” (Miskel & Cosgrove, 1985, p.88). Student achievement in rural schools may be more directly effected by turnover because rural superintendents are closer to the front lines than their counterparts in larger systems. Research in the public management literature suggested that leaders who are ‘twin-hatted’ have a great deal of political power, which gives them control over resources and organizational performance. “It has been argued that duality creates clear-cut leadership, which permits a sharper focus on company objectives and promotes more rapid implementation of decisions” (Boyne & Dahya, 2002). Research also suggested that leaders who serve multiple roles acquire a great deal of knowledge that leaves the organization when they do, resulting in a disadvantaged school system (Carr & Kefalas, 2009).

The notion of understanding the rural context suggests that turnover may have a larger impact on smaller systems based on the necessity of social capital (Syracuse University, 2003). For instance, rural superintendents cite acculturation as a challenge to leading rural schools (Lamkin, 2006). Furthermore, given the nature of rural schools and

communities, succession is more of “a jolt” (Miskel & Cosgrove, 1985, p. 88) to a rural school than it is to a large urban district. Moreover, the short tenure of rural superintendents fits the pattern of rural brain drain (Bard, 2010; Jacobson, 1988). Successful rural superintendents are quickly noticed and sought after by suburban school districts that can pay them higher salaries (Bard, 2010). To preserve their communities rural school districts need superintendents who envision a role in stopping the drain of the “high fliers” (Carr & Kefalas, 2009, p. 4).

Using a large bank of data on superintendent tenure and student achievement, O’Toole & Meier (1999), O’Toole & Meier (2003), Hill (2005), and Juenke (2007) researched the influence of the superintendent on student achievement. O’Toole and Meier’s study suggested that there is a relationship between superintendent stability and the performance of sub-groups on standardized assessments. Sub-groups are established as a marker in district data when a minority group reaches a size large enough to report on. Sub-groups can be students with disabilities, African-American boys, bi-racial students, the hearing impaired—any group of students who share similar traits and/or ethnicity. In their 2003 study, O’Toole and Meier found a relationship between the behaviors of top managers, top manager quality, and teacher and manager stability on student achievement. They found that the dependence on an intergovernmental structure also increased the effect stability has on student achievement. This finding suggested that rural schools, which on average receive 75% of their funding from the department of education (New York State Council of School Superintendents, 2010), will be negatively affected by superintendent turnover, which will result in lower student achievement. Hill (2005) specifically noted that the further a district gets from a succession event, the

stronger the relationship between the leader (independent variable) and student achievement (dependent variable). This finding suggested that longer tenure of the superintendent should have a positive influence on student achievement. However, empirical evidence of the effect rural school superintendents have on student achievement is nonexistent. The dissertation study examined turnover in the superintendency as it relates to increasing organizational performance. Organizational performance, as defined in the dissertation study, is student achievement on standardized literacy assessments. The impact of superintendent turnover on student achievement as measured by other assessments is not known.

### **Theoretical Rationale**

The theory of Executive Succession is a relatively new theory having been first published by Boyne and Dahya in 2002. The theory was created for analyzing the impact of executive succession on public organizations. It claimed that managerial succession affects organizational performance. Three concepts define the theory: (a) the *motives* of the chief executives, (b) the *means* at their disposal, and (c) the *opportunities* available for influencing performance (Boyne & Dahya, 2002). These characteristics are easily adapted to create a theoretical rationale for understanding the effect of superintendent succession on school performance. The next sections explore these three concepts in more depth.

**Motives.** To measure the motives of rural school superintendents the dissertation research examined the relationship between superintendent change and student achievement. Motives were measured by examining the origin of the new chief executive. The specific variable was whether the superintendent was hired from within the district or

from the outside. This variable was selected because according to Carlson (1961) during a succession event, there are only two options for replacement: choose an insider or hire from the outside. The origin of the hire is important because, as Carlson contended, change in the superintendency has a different effect on the organization if the successor is an insider versus outsider because the motives of each are different. Insiders tend to value place while outsiders value career development (Carlson, 1961; Nestor-Baker & Hoy, 2001). The difference in motives of the superintendent, according to the theory of executive succession, impacts decision-making, which in turn impacts student achievement.

***Motives of the external successor.*** To better understand the outsider, Carlson (1961) examined the professional pathways of superintendents who fit the following description: an outsider actively seeking the role of superintendent and applying for positions based on the desire to hold the position. The career of a superintendent who seeks the position is typically “spread over two or more school systems. Ordinarily his career does not stop with one superintendency” (Carlson, 1961, p. 211). Carlson contended that the decision to leave a familiar system and seek the superintendency requires a different set of priorities than those of an insider. The motives of the outsider are guided by the need to prove success and prepare for the next position, typically in a larger district (Nestor-Baker & Hoy, 2001). Since the motive of the outsider is to increase student achievement, superintendents hired from the outside tend to make dramatic changes to the system quickly after taking office (Carlson, 1961).

***Motives of the internal successor.*** Carlson described the insider as a leader who worked his way up through the school system. Thus, insiders value place. They are

committed to the school system and community. The literature referred to these superintendents as place-bound. Ordinarily, superintendents promoted from within complete their career in the home district. The motives of a superintendent hired from the inside lean toward maintaining the status quo. These leaders rarely see themselves as a change agent; instead, they work hard to shelter the system from change (Nestor-Baker & Hoy, 2001).

The notion that insider/outsider succession has an effect on system outcomes has been studied in both the public and private sector management literature. For public school settings, the local board of education's feelings toward the outgoing superintendent predicts insider or outsider selection. Carlson contended that boards of education who are happy with the direction of the school system and are pleased with the leadership of the outgoing superintendent promote from within. The decision to promote from within sends the signal to the internal hire to maintain the direction of the system. The opposite also holds true. If the board has been dissatisfied with the direction of the system, an outsider will be hired. This sends the message that the board wants to see change thus allowing the outsider to make major changes.

**Means.** The ability of an executive to carry out their motives requires means. Means examine the formal and informal roles of the superintendent through "power, personal characteristics, and managerial "fit" with the organization (Hill, 2005, p. 587). Formal roles come in the form of policy, procedure, and detailed responsibilities (Boyne & Dahya, 2002). However, the roles and power afforded public sector executives are often informal and "vague" (Boyne & Dahya, 2002, p. 187). "The way in which this role is performed rests far more heavily on the personality and charisma of the postholder than

any legal or traditional rights” (Travers, Jones, & Burnham, 1997, p.121). This implies that the organizational outcomes (student achievement) are affected by the superintendent’s vision and goals for the system—two of the most important roles of a superintendent (Waters & Marzano, 2006). With each succession, there is room for a new executive to shape the role to fit his or her personal priorities, beliefs, educational philosophy, or motives.

Leaders have to find ways to maximize the means at their disposal. There are three main strategies that executives can use to influence organizational performance. These include reforming internal structures and processes, budgetary priorities, and personnel. Executives promote changes by drawing comparisons between the new structures and organizations considered ‘leading-edge’ (Boyne & Dahya, 2002). The second strategy that executives can use to influence performance is to change processes. A process change usually takes the form of strategic planning. This allows new executives to reset organizational goals, increase performance (Boyne, 2000), and secure control (Van Gunsteren, 1976). The third strategy employed by new executives is to control the budget. Shifts in funding between departments can change performance significantly (Boyne & Dahya, 2002). The executive can clearly communicate the new direction of the organization by reallocating funds.

For the purposes of the dissertation study, means was measured by examining the effect of state aid allocations on student achievement. Although the amount of state aid to a district is not under the control of the superintendent, identifying priorities for the allocation of funding is at the discretion of the superintendent in their function as manager of instructional resources. In New York State school aid is determined by a

district's wealth, and Free and Reduced Price Lunch (FRPL) is one of the measures used to determine level of poverty in each school district. New York State also uses the Combined Wealth Ratio (CWR), which is based on income and property wealth, to determine a school district's ability to collect local revenue for school funding (Alliance for Quality Education, 2011). Because rural schools educate some of the nation's poorest children (Arnold, 2004), and the economies of rural communities are slowly eroding (Carr & Kefalas, 2009), rural schools have become dependent on state aid.

In recent years, the changing nature of school funding has had major ramifications for rural schools. Specifically, in 2007, New York State enacted a historic commitment to fulfill its obligations under the Campaign for Fiscal Equity in order to provide all students with access to the "sound basic education" or "meaningful high school education," which is their constitutional right (Campaign for Fiscal Equity, 2003, p. 2). In 2007, there was a \$1.1 billion investment in Foundation Aid, the state's equitable operating aid, which prioritizes high needs school districts. In 2008, there was a \$1.2 billion investment in education, but in 2009, education funding was frozen. In 2010 and 2011, cuts to education in New York State reached \$2.7 billion. The cuts made to foundation aid effected rural schools because of their low wealth ratio. In other words, the dollars lost through cuts cannot be made up by local levy. With major increases and decreases in state aid allocations, superintendents and boards of education have to make judicious decisions about where to add to the system to increase student achievement and where to cut in an effort to protect achievement. Avoiding cuts that effect students is difficult in rural schools where staffing is already low, and the majority of the budget consists of salaries and benefits (Glover, 2011).

The superintendent is ultimately responsible for the impact his decisions have on student achievement. The *means* afforded to the superintendent are actualized in the theory of Executive Succession by the decisions they make about budget, staffing, and maximizing human capital. Since all rural superintendents are feeling the pressure of unpredictable state aid, looking at their ability as a leader to navigate *means* and increase achievement were examined.

**Opportunities.** Executives may have motives and means, but to influence organizational performance they must also maximize opportunities by making decisions that affect achievement. External constraints may interfere with an executive's ability to influence performance. External constraints could be legal issues, financial issues, or even environmental issues. External constraints, like central government agencies, policy, regulation, and revenues, limit an executive's autonomy. These constraints are not lifted when a succession event occurs, but new executives may see these issues with "fresh-eyes" and find new ways of navigating the issues thus creating an opportunity to direct organizational performance (Boyne & Dayha, 2002, p. 191). Opportunities were not examined by the dissertation study.

### **Research Questions**

The research and analysis was guided by three questions.

Question 1: Does motive of the superintendent moderate the impact of succession on rural student achievement?

Question 2: Does the aid level moderate the impact of succession on rural student achievement?

Question 3: Does school size moderate the impact of superintendent turnover on rural student achievement?

### **Chapter Summary**

The main proposition of the theoretical rationale is that executive succession makes a difference to the performance of public organizations (Boyne & Dahya, 2002). The motives of the chief executives, the means at their disposal, and the opportunities available for influencing performance are the independent variables of the executive succession theory. The fundamental aspect of the theory is that executives have different outlooks and motive(s) for taking on the role of superintendent. With each change or succession, the motives of the new executive differ from the previous executive. The theory suggested that executives have multiple strategies for improving an organization. Each executive chooses differently or employs more than one strategy at a time. With each decision, an executive has the ability to guide performance. The theory acknowledged that external constraints can limit an executive's impact, but suggested "fresh-eyes" might be able to navigate around constraints (Boyne & Dahya, 2002, p.191). The effect of executive succession is dependent on "the successful pursuit of a variety of strategies" (Boyne & Dahya, 2002, p.193). The theory also suggested that frequent turnover in the top executive position weakens the executive's ability to impact performance; thus, the impact of rural superintendent turnover on student achievement was examined through the theory of executive succession.

According to the literature, the role of a superintendent has an effect on every aspect of the school system. The superintendent's responsibilities include (a) implementing board policy, (b) establishing organizational structures, (c) developing

strategic plans, (d) recommending new hires, (e) implementing the budget, (e) creating positive relationships with the community, (f) creating a culture of continuous improvement, and (g) advocating for students. Superintendents also work alongside state and local political leaders to advocate for school funding (Bard, 2006). Superintendents manage “complex issues of budgets, personnel, information technologies, product accountability, and competition” (Hoyle et al., 2005, p. ix). With the amount of responsibility superintendents have over the school system, it is important to understand the effect of a succession event.

An empirical look at the state of the science as it pertains to rural superintendent turnover and its influence on organizational performance was conducted. In order to look at the effect of leadership on organizational performance, the literature in public management was used. The work of Boyne and Dahya (2002) and Meier and O’Toole (2002) created a base for researching this topic. Since school superintendents are considered the chief executive officer of a school district, and public schools have been held to a new level of accountability with standardized assessments, this portion of the public sector has become data rich for public management study.

A review of the literature revealed a gap in research on rural superintendent turnover and the link between turnover and organizational performance. Rural school superintendents have been studied in the literature specifically to identify what makes their role different from their counterparts in other environments. The researchers identified character traits of successful rural superintendents, and success, in these empirical studies, was defined by long tenure. The majority of the most recent empirical research are qualitative studies and include a phenomenological study and a longitudinal

case study. These studies implied that it is rare to find a rural school that has stability in leadership and whose data suggest trends that outperform state averages. One quantitative study examined 339 superintendents, but generally the research on rural superintendencies involved small sample sizes.

The studies that sought to measure the effect of the superintendent on organizational performance measured some of the concepts around rural schools based on their criteria for qualification in the study, but the rural setting was not the focus of the research. These studies looked at the impact of management complexity in systems that relied more heavily on governmental funding. One study specifically looked at the impact of turnover. Both of the mixed-methods studies confirmed their hypothesis when the samples studied were rural or small schools. These studies used state assessment and school report card data as the measure of success. Using system outcome data as a measure of superintendent impact on the system shifts the focus to student achievement.

The private and public management literature and empirical research offer new ways of testing for management's ability to leverage organizational performance. The theory and tools generated in the cited studies allowed the dissertation study to test the executive succession theory in a rural setting. The dissertation study adds to the body of knowledge on the impact of superintendent turnover on student achievement.

## **Chapter 2: Literature Review**

### **Introduction and Purpose**

The effect of superintendent succession and its impact on the organization has been studied and theories have been generated to describe the phenomena. In 1961, Carlson laid the ground work for examining the effect superintendents have on an organization based on whether the replacement was hired from inside or outside the system. This chapter reviews the literature on the role of the superintendent and its influence on student achievement. Then, since the role of superintendent is far-reaching, the literature on turnover in the superintendency is examined. Sections in this chapter are also dedicated to a review of the literature on rural superintendent roles and studies examining the effect of turnover on rural systems.

### **Review of the Literature**

In order to determine the state of science on rural superintendent turnover and its influence on student achievement, empirical research was reviewed from 2001 to the present. The empirical evidence from the public sector literature examined the superintendency and local governing bodies, like municipalities, and considered the superintendent to be the public sector equivalent of the private sector Chief Executive Officer (CEO). A few empirical studies that were conducted before 2001 have been included in this chapter. The older research met one of three criteria (a) the author of the study was mentioned in many other studies on the topic; (b) the findings refuted previous logic; or (c) the study represented a historical trend in the literature.

The literature search, conducted using Proquest and Google Scholar, included the following terms: impact rural superintendent turnover, chief executive officer turnover, impact chief executive organizational performance. The articles selected for review were from the *Journal of Public Administration Research and Theory*, *Educational Administration Quarterly*, *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Ethnographic and Qualitative Research*, *Journal of Public Administration Research and Theory*, *Public Administration*, *The Rural Educator*, *Strategic Management Journal*, and a research report commissioned by the New York State Department of Education. Articles that examined elements of organizations or subgroups within schools that did not have connections to the impact of superintendent turnover on student achievement were excluded.

**The superintendent as instructional leader.** Superintendents have a set of roles and responsibilities linked to the performance of the organizations they lead. In this section two major studies that connect the skill of the superintendent as an instructional leader to student achievement are examined. The studies indicated that curriculum and instruction, goal setting, and the strategies employed by the superintendent guide the performance of students on standardized measures of achievement.

Petersen (2002) conducted a mixed-methods study to examine the perceptions principals and school board members have of their superintendent as an instructional leader. Of the roles and responsibilities a superintendent has, instructional leadership is the most directly related to student achievement. Due to the nature of the job, finding superintendents who focused on this aspect of the work was difficult. Petersen conducted interviews and generated a list of superintendents deemed instructional leaders by their

peers and by university faculty. The list was narrowed by school district data on performance, dropout rates, and percentage of students going on to college or vocational training. Five districts met the research criteria as academically successful. The 46 principals and 32 school board members who participated completed the 52 item Instructional Leadership Personnel Survey (ILPS), and their responses were analyzed using a factor analytic investigation. Five factors emerged from the analysis: (a) superintendent vision, (b) organizational mission, (c) program and personnel evaluation, (d) principal influence in decision making, and (e) school/community relationship. These five factors were seen as having the most influence on student achievement.

Descriptive statistics were applied to summarize the characteristics of the sample and the ratings for each and Pearson product moment correlation coefficients were calculated to test the strength and “the relationship of five components of the model of superintendent perceived behaviors in district curricular and instructional promotion” (p. 164). The study found that there are five dimensions of superintendent leadership that are highly correlated. If one factor appears, the others will appear as well. The study was unorthodox in that Peterson attempted to predict vision from the other four factors. Peterson suggested that the best two predictors of vision were (a) organizational mission and (b) program and personnel evaluation.

Peterson’s (2002) study demonstrated the importance of a well articulated instructional vision by the superintendent. In order for principals, school board members, and community members to engage in school improvement and increase student achievement, there has to be a clear vision and guidance from the superintendent.

However, the results of Peterson's (2002) study are not generalizable because the study was too small.

Fernandez (2005) examined the ability of leaders to impact educational performance using an integrative framework developed and tested in the study. Eight variables were identified based on literature on leadership and a model was developed. The variables included (a) the amount of time spent managing the organization's internal activities, (b) managing external environment, (c and d) two forms of political support, (e) task difficulty, (f) the leader's experience, (g) leadership style that delegates, and (h) leadership style that promotes change.

The model was tested using a data set generated from Meier and O'Toole (2002) through a survey of superintendents across the state of Texas and overall pass rates for the Texas Assessment of Academic Skills (TAAS) collected from the Texas Education Agency. The study found that time superintendents spent managing the organization's external environment increased the passing rate on the TAAS by 2.2%. A superintendent's ability to foster community support had the potential to increase the overall TAAS rate by 9.7%. Tasks that a superintendent rated as difficult had a strong correlation to student achievement leading to a decrease of 11.5% on the overall pass rate on the TAAS. A superintendent's decision to actively promote change had a negative effect on achievement unless the strategy was used in an underperforming system. In total, the independent variables accounted for two thirds of the variance in performance.

The Fernandez (2005) study suggested that experience is related to task difficulty and task difficulty negatively effects achievement by 11.5% overall performance on the TAAS. The study also suggested that superintendents impacted achievement by 9.7% by

engaging the community, a task the literature on rural schools argued is difficult for rural superintendents.

Program implementation provided superintendents with new avenues for strategically directing the organization's performance. Meier, O'Toole, Boyne, and Walker (2006) set out to test Miles and Snow's (1978) position that management is a consistent response to problems or environmental challenges and can be measured. Two data sources were used. Meier and O'Toole (1999) surveyed over 1,000 Texas public school superintendents responding to questions about management style, goals, and how they spent their time. This data was reused in the Fernandez (2005) study. All other data was collected from the Texas Education Agency.

The survey asked superintendents to report on their managerial styles. The data set was created by asking superintendents to rank the importance of increasing scores on the TAAS, focusing on college-bound students, emphasizing vocational education and improving bilingual education based on the priority they place on each. Emphasis in these areas was labeled the *defender strategy*. Some managers react to outside influences. This strategy, known as the *reactor strategy*, was measured by asking the superintendents to respond to their influence on the creation of policies that guide the school including those from the Texas Education agency. Some managers seek opportunities. To measure this strategy, known as the *prospecter strategy*, superintendents were asked how often they initiate interaction with the Texas Education Agency, local leaders, parent groups, teachers' associations, other superintendents, state legislators, and federal officials. For the study, organizational performance was measured using TAAS and Texas Assessment of Knowledge and Skills (TAKS) scores, attendance

rates and dropout rates. The substantial literature on educational production functions was used to develop eight variables for the analysis. The literature predicted that Black, Latino, and poor students who are eligible for free lunch should negatively relate to performance. Since the production literature suggested schools with more resources do better on standardized tests, five measures of resources were controlled for as well.

Strategies are not exclusive; managers can pick and choose and use more than one at any time. According to the Fernandez (2005) study, the defender strategy had a strong positive relationship to student achievement measures. Specifically, two standard deviations in defending led to slightly less than one-point change in the TAAS. The prospecting strategy had a negative effect on performance, especially for the sub-population of Black students. Since the TAAS has such weight in its evaluation of the district, including its impact on funding, it appeared that it is beneficial for superintendents to focus on the core tasks of the organization and spend time prospecting only once these tasks are under control. Networking, management stability, workforce stability, and management quality all had positive correlations to organizational outcomes.

The Fernandez (2005) study examined the managerial styles that superintendents can employ and their ability to generate student achievement. The study found the defender strategy was the best management strategy for increasing measures of student achievement. A superintendent who used the defender strategy focused the organization on important goals and efficiency and effectiveness in attaining those goals. These leaders spent their time on TAAS pass rates, dropout prevention, college-bound students, emphasizing vocational education, improving language acquisition for English as a

second language learners, and supporting extra-curricular activities. Superintendents who placed high priority on passing rates, drop-out prevention, increasing college and career readiness, supporting English Language Learners, and encouraging students to get involved in extra-curricular activities increased student achievement on standardized measures.

The two studies discussed in this section suggested that superintendents impact student achievement by placing high priority on performance. The superintendents who dedicated time and resources to scores on the TAAS, focused on college-bound students, emphasized vocational education, and improved bilingual education saw gains in achievement. In that each leader brings a different skill set and list of priorities to an organization, it was hypothesized that turnover effects the performance of the organization. The impact of superintendent turnover on achievement was examined through the dissertation study.

**Impact of superintendent turnover.** Research on executive succession generated a theory of the insider/outsider successor. The theory holds that performance of the organization and the governing body's contentment with the organization's direction warrant an internal replacement for the outgoing chief executive (Carlson, 1961). The opposite holds true as well. If the governing body is discontented with the status quo, an external replacement is hired. Carlson set out to identify the relationship between the origin of the successor and the organizations they lead. Four school systems were studied, using observation and interviews, to determine the nature of insider/outsider selection by the board. The data collected, along with 36 other documented accounts, showed that boards who found the current administration

satisfactory hired from within. There was no evidence of an insider appointment in the presence of board dissatisfaction with the outgoing administration.

As part of developing the theory, Carlson (1961) examined the actions of the new superintendent based on origin. According to Carlson's theory, if an insider is promoted to superintendent, the message sent by the board is to keep the organization headed in the same direction, whereas external hires are appointed with an obligation to make change. Carlson (1961) found that external hires spent 85% of their time adding new rules and procedures. They also added new central office positions. In the study, 100 of the largest school districts in California were studied looking specifically at the effect of external successor on central office administrative increases. Of the districts studied, 35 new superintendents appointed 17 new positions in the central office, and superintendents who were external hires made 14 of those 17 appointments. Thus, the data show that external hires increase central office administration.

Carlson's (1961) study also suggested that tenure after appointment was predictable based on the the origin of the replacement superintendent. Superintendents hired from the outside were more likely to leave the organization, suggesting that turnover rates are higher when outside succession occurs. Outsiders reported a willingness to move on and insiders reported a desire to serve the organization, and the data suggested they were less likely to turn over. Succession patterns were determined from the data analyzed. When Carlson (1961) analyzed 103 succession events over the course of 32 years in 48 city school systems in California, he found that insider-to-insider succession was the least likely pattern of succession.

Carlson's (1961) study suggested that school boards use the replacement of a superintendent as a strategy. They select from the inside if the message they intend to send is one of "stay the course" and from the outside if the performance of the organization is in question. Carlson's (1961) finding suggested that school boards have historically expected change and increase in system performance. The study also highlighted the difference in system thinking by contrasting the decisions made by outsiders versus insiders. The evidence indicated that decision to replace a superintendent with an insider or outsider influenced organizational performance. The large sample size in the Carlson study and the replication of findings in states other than California has made Carlson's work a foundation for further research.

**Qualitative differences between internal and external hires.** Other studies used Carlson (1961) as the basis for further study. Nestor-Baker and Hoy (2001) looked at the careers of 44 Ohio public school superintendents who were either internal or external hires. Descriptive statistical analysis indicated that 32 (73%) of the superintendents studied were external hires and 12 (27%) of them were internal. As part of Nester-Baker and Hoy's (2001) qualitative methodology, each superintendent was asked to share stories that characterized their arrival to the current position. Qualitative analysis revealed 21 clusters that represented themes within the data. Externally and internally hired superintendents had similar and different clusters describing their experience. The largest theme identified by both external and internal superintendents was building board relations (19% and 24% respectively). Managing organizational goals and goal achievement was the theme most directly linked to increasing student achievement and both groups weighted this category at the same level of importance. Handling public

relations was another area of similarity between the two groups. Differences between the groups appeared in the areas of building personal performance and inter- and intrapersonal relationships. Personal performance was more important to externally hired superintendents than those hired from the inside (16% compared to 3%). This finding confirmed Carlson's (1961) hypothesis that insiders are constrained when it comes to authority. Additionally, superintendents hired from the outside placed higher emphasis on inter- and intrapersonal relationships (16% compared to 7% of internal hires).

Nester-Baker and Hoy (2001) found notable differences between externally and internally hired superintendents in several areas. One was the quality of tacit knowledge. Strengthening the role or image of the superintendent was a theme identified only by superintendents hired from outside. The data in this category demonstrated the external superintendents' need to establish his or her authority. Sharing mission and goals was another theme exhibited by superintendents hired from the outside. The data suggested that external superintendents focus on having the support of the board. There were six categories unique to superintendents hired from within: (a) encouraging external outreach, (b) responding to perceptions, (c) upholding personal standards, (d) meshing staff and organization, (e) maintaining board unity, and (f) developing administrators (Nester-Baker & Hoy, 2001).

The study by Nester-Baker and Hoy (2001) confirmed Carlson's (1961) claim that insider/outsider successors have different motivations and different effects on an organization's performance. However, all superintendents regardless of origin reported goal setting and attainment, which are both directly linked to student achievement, as

critical aspects of their role. However, the superintendents differed in the strategies they employed to achieve desired goals.

According to Nester-Baker and Hoy (2001), superintendents hired from the outside placed higher value on board approval, which is consistent with the prospecting strategy as described by Meier, O'Toole, Boyne, and Walker (2006). However, superintendents hired from within followed the defender strategy. The defender strategy was identified by Meier et al. (2006) as the most effective strategy for reaching the primary mission of the organization. These findings suggested that a succession event influenced the performance of schools with internal hires focusing more on protecting the organization from outside pressures and external hires focusing more on resume building. The finding also suggested that superintendents hired from within the district have a greater positive effect on student achievement.

**Impact of superintendent turnover on achievement.** O'Toole and Meier (2003) researched the impact of superintendent turnover on organizational performance as measured by student achievement on the Texas Assessment of Academic Skills (TAAS). The findings suggested that the absence of turnover in the superintendency resulted in a three percentage point increase on the overall pass rate. Superintendent stability was positively and significantly related to performance ( $t$ -score = 2.27). Increasing the time between succession events increased the TAAS passing rate by one to three percentage points. The pass rate among Black students and students categorized as low-income showed that lack of turnover in the superintendency plays a role in achievement. The study's results suggested that decreasing turnover in the superintendency can increase overall pass rates by one to three percentage points and contribute to gains among

students in various subgroups. This is be an important finding to consider when examining the effect of rural superintendent turnover because lack of turnover has been shown to contribute positively to school district performance.

Turnover in the superintendency has a negative effect on student achievement in the short term. Hill (2005) used a quantitative study design to test his hypothesis that a change in superintendent has a negative effect on organizational performance in the short-term. A survey was sent to every superintendent in Texas. The survey results were collected along with five years worth of Texas state assessment data and were analyzed using traditional ordinal least squares multiple regression analysis. The TAAS tests were used to measure organizational performance and served as the dependent variable. A “dummy” variable called managerial change was added to any district that experienced a succession event during the five year period of data. That same variable was coded for an internal or external hire. The findings suggested that superintendent succession did not have a relationship to district performance in the first year. However, the external hire variable had a consistently negative impact on achievement suggesting that replacing a superintendent with an external hire had a negative impact on short-term performance. Analysis showed that the relationship between superintendent succession and school achievement shifted from negative to positive as time progressed. The greater in time from a succession event an organization was, the stronger the relationship between the new leader and student performance. Hill’s (2005) study suggested that changing superintendents has been shown to have a positive effect on the system over time, and that school districts need to be patient if they expect to see increases in outcomes after a succession event.

***Impact of length of time in district on district performance.*** According to the research, length of time in a district affects a superintendent's ability to influence performance. Juenke (2005) conducted a quantitative study using survey results from 570 school superintendents and Texas state assessment data to determine if superintendents' time-in-position was related to school performance. The dependent variable was the Texas Assessment of Academic Skills (TAAS). Juenke (2005) found that when controlling for all other variables, superintendents who had been in the district for nine years increased performance on the TAAS by 1%. According to the study results, tenure of seven years or longer creates the environment necessary for a manager to influence the system. Networking and tenure, when combined, created leverage for superintendents to guide organizational performance.

Hill (2005) and Juenke (2005) use of the same data set spanning the state of Texas suggested that tenure in the position of superintendent matters for achievement. Specifically, turnover has a negative effect on achievement when the superintendent is hired from the outside. Juenke's (2005) findings also suggested that it takes seven to nine years for a superintendent to influence student achievement on a standardized measure. Both studies demonstrated the importance of the superintendent and how time spent in the system directs achievement. The findings also indicated that the further from a succession event a district gets, the more likely student achievement will increase.

***Summary.*** Carlson (1961), Nestor-Baker (2001), O'Toole and Meier (2003), Junke (2005), and Hill (2005) all concluded that turnover in the superintendency has a negative impact on organizational performance in schools. Carlson (1961) laid the ground work to discuss superintendent turnover based on differences in the origin of the

replacement. Turnover mattered for organizational performance because internally and externally hired superintendents make different decisions. Nestor-Baker and Hoy (2001) supported Carlson's finding by noting the qualitative differences between superintendents hired internally versus externally. O'Toole and Meier (2003) found that the absence of turnover in the superintendency increases student achievement on standardized measures and that the achievement of sub-groups of students is effected by turnover. Hill (2005) and Junke (2005) contributed to the research by recommending a time frame for superintendent tenure. According to their independent research, it takes seven to nine years in the position for a superintendent to influence achievement.

The research indicated that superintendents generate organizational performance based on the skill set they have, the strategies they employ, their origin as insiders or outsiders, and their experience in the job. Student achievement has been shown to be directly affected by the superintendent's vision, ability to engage the community, and commitment to the district. Consideration of the findings from the body of research literature leads to the proposition that if tenure has a positive effect on student achievement by affording the leader time to employ a vision and the strategies required to get there, then turnover should have a negative effect on student achievement. Since rural schools experience superintendent turnover frequently, the dissertation study examined the impact of superintendent turnover in rural districts on student achievement using the New York State 8<sup>th</sup> grade English Language Arts Exam.

**The rural superintendent as instructional leader.** The rural superintendent tends to have roles and responsibilities beyond those of their counterparts in urban and suburban settings. The six studies in this section illustrate the similarities and the

distinctions of the rural superintendent and how the role has been studied. Most of the research on rural superintendents has focused on personal characteristics and morals. However, successful schools used to study the superintendency have been selected based on student achievement outcomes.

Peterson, Sayre, and Kelly (2006) investigated teachers' perspectives on superintendents' influence on curriculum and instruction by conducting a concurrent mixed-methods procedure including semi-structured ethnographic interviews with superintendents. Districts included in the study were successful schools regardless of their location and economic challenges. The Public Education Evaluation Report (PEER) pairs districts based on similarities of size, demographics, and location. For the study, Peterson et al. (2006) selected seven successful schools. Superintendent tenure, student enrollment, per-pupil expenditures, free and reduced lunch, high school graduation rate, and meeting annual yearly progress for all student groups served as measures of success. The average districts size was 722, and average superintendent tenure was 10.7 years in the current position. The data was generated from the use of a questionnaire given to all certified teachers, teacher aides, and other school personnel in all seven schools districts (N = 279). The questionnaire was designed to capture the perception of the superintendents' capacity in shaping curriculum, instruction, and assessment practices. Teachers were also asked to comment on their personal views of teaching and learning. Semi-structured focus group interviews were conducted as well.

According to Peterson et al. (2006), teachers in the seven districts reported staff development opportunities that included new learning, which changed their view of teaching, caused them to research, and changed their practice. There was a moderate to

strong correlation between superintendent instructional leadership and teacher professional development and instructional practice. Teachers' perceptions of the superintendent's capacity to foster instructional capacity and the staff development and instructional practices had a moderate-to-strong relationship. There was a high correlation between instructional leadership of the superintendent and his/her role in fostering instructional capacity. The strategies a superintendent can use to influence curriculum and instruction and ultimately student achievement are vision and leadership, organizational structures and management, teacher collective commitment, access and use of professional knowledge, and resource allocation and management. These themes became the topics for focus group discussion. Then findings were compared across domains. The study implied a connection between a rural superintendent's role as instructional leader and the success of the district.

School success, regardless of the setting, is defined by student achievement outcomes. In 2001, the Rural Education Advisory Committee (REAC) awarded a grant to Syracuse University Office of Professional Development to research successful rural school leadership. The study titled *Leadership and School District Success: A statewide study of rural school districts* was published in 2003. This phenomenological study provided case studies of nine rural school districts that consistently outperformed the state averages on the following measures: ELA 4 and 8, math 4 and 8, percentage of students graduating with a diploma, percentage of students going to college, percentage of students scoring a 65 or higher on the Math 1 Regents, a percentage of Average Grade Enrollment (AGE), percentage of students scoring an 85 or higher on the Math 1 Regents exam (AGE), and percentage of students scoring a 65 or higher on the eleventh grade

English Regents exam (AGE). The nine schools selected were consistently in the top quartiles of achievement on these measures. Data from the case studies revealed commonalities of leadership practice in all nine schools. The REAC (2003) findings claimed that successful leaders understood the symbolic frame and were aware of the issues that influence the system. Furthermore, the study found that the leaders supported continuity and made changes only after careful examination of the organization's past and future, because each district had a set of core values and operated closely to them. Finally, empowered leadership and collaboration were key pieces of each culture.

The REAC (2003) study suggested that rural leaders need to know about the community they serve, how it operates, and what the community expects from the school district. The study highlighted dissent toward program adoption in rural schools. As such, the findings suggested that for rural communities, leaders should focus on student achievement, not on programs that worked in another school. Additionally, superintendents had long tenure in all of the schools studied. Overall the study suggested that leadership preparation programs consider the differences in training for this setting and that school leaders in high performing rural schools with high ratios of low-wealth, need to understand the role of social capital in the community.

Many research studies attempted to understand the characteristics a rural superintendent needs in order to be successful. Baker and Kennedy (1987) conducted a nationwide survey of school board presidents to identify the qualities they sought most in a rural superintendent. The quantitative study was designed to capture the characteristics a rural superintendent needs in order to be successful and the traits board members look for during hiring. The research was conducted in states with schools enrolling fewer than

300 students, and sent surveys to 339 school board presidents from 42 states of whom 106 participated. The trait most school board presidents were looking for in a rural superintendent was a desire to live in a small community (92% and 93%). The second trait, high moral and religious values, was selected by 86% and 93% of respondents. According to the study results, successful rural superintendents have the ability to create strong interpersonal relationships and effectively communicate with stakeholders. The study suggested that rural school district leadership seek the aforementioned personality traits or characteristics in their superintendent, which are traits the researchers claimed are not specifically taught in preparation course work.

A longitudinal case study conducted by Chance and Copeland (1996) captured the stories of four successful rural superintendents. Success was defined by time in office and perceptions of the school community. In an effort to capture the characteristics or attributes of successful rural superintendents, interviews were conducted with the superintendent, community members, and others within the district. The researchers were looking for the relationships that existed between successful long-term superintendents and his or her stakeholders. The initial sample included all superintendents in rural Oklahoma who had been in their position for fifteen or more years. From there, the sample was split to represent each cross section of the state. Random selection was used to select the principals and teachers who would participate. The school board president and one of the board members were also selected. Community leaders representing each cross section were interviewed (the mayor, head of the Chamber of Commerce, bank president, or chief-of-police). Semi-structured interviews along with district publications, financials, and policies were used to

triangulate data. The results showed that the four superintendents shared many characteristics. The most important dealt with leadership traits and an awareness of the community served. Each of the four were considered ‘pillars in the community’ and ‘stewards of the school’ (Chance and Copeland, 1996, p.27). Table 2.1 contains the complete list of leadership traits identified by Chance and Copeland (1996).

Sound Financial Manager	Good listener	Accepted as one of the community
Fair in dealing with others	In-charge and in control	Supportive of all school activities
Involved in the community	Good interactions	Made adequate provisions for staff
Hired quality people	Good personality	Happiness with job
Available and Accessible	Student oriented	Well Organized
Deliberate on Decisions	Christian	Delegated Authority
Related well to others	Pride in School and Community	Assertive
Mutual respect	Provides Stability	Knowledgeable
Mutual trust	Conscientious and hard worker	Markets school and programs
Progressive	Genuinely cares for others	Granted professional freedom

*Figure 2.1.* Characteristics and attributes of successful and effective rural superintendents. Adapted from Chance and Copeland (1996). Items not rank ordered.

The studies by Baker & Kennedy (1987) and Chance and Copeland (1996) were included in the literature review to illustrate the ways rural superintendent success has been defined historically. Although there have been a number of quantitative measures examining the effect of superintendents on achievement, rural school superintendents have been examined based on the belief that the rural context is different from urban or suburban contexts (Arnold et al., 2005). The nuances of rural leadership appear to have created more attention on the personal attributes, characteristics, and personalities of

superintendents. Both of the seminal studies suggested that the success of rural schools hinges on the hiring of a leader who possesses the aforementioned attributes.

In an attempt to build grounded theory on the notion of the unique challenges rural superintendents face, Lamkin (2006) conducted a qualitative study. Fifty-eight superintendents from New York, Pennsylvania, and Tennessee were selected to participate based on their 'ruralness'. Each state's superintendent association assisted the selection process, and the 58 superintendents who participated were volunteers. The superintendents studied led districts that had populations of 550 or less. The goal of the study was to uncover the challenges that consumed most of the superintendents' time. The study revealed the following challenge: inadequate training for specific tasks within school law, finance, personnel, government mandates, and district and board politics. The rural environment also is a challenge. Rural schools have had small administrative teams and have lacked resources. Another theme among rural superintendents is the personal relationships with the community and the intense visibility of the superintendent role within those communities. Furthermore, the rural superintendents felt personally responsible for student achievement and fiscal accountability.

The findings of Lamkin's (2006) study suggested that rural superintendents do not have time to commit to strategies essential for increasing student achievement. If this is the case, then turnover in the position should have little to no influence on achievement. The sample size for Lamkin's (2006) study was small in relation to the overall population of rural superintendents.

Adding to the notion that rural superintendents need certain skills to be successful, Palladino, Grady, Haar, and Perry (2007) conducted a qualitative case study

of successful rural female superintendents. The objective of the study was to identify the characteristics that paved the way for success. The 11 participants expressed the importance of the relationships they formed in and out of the school environment. The finding was of interest to the researchers because it suggested that survival or resilience as described in the literature on rural female superintendents did not fit with successful female superintendents. Each woman's ability to form and sustain relationships was a skill that came with them to the role of superintendent, and none of them employed the skill as an effort to sustain her role and keep employment. The researchers contended that relationship building for these successful leaders was a result of their cognitive and behavioral engagement which leads to self-efficacy.

The research on rural superintendents and their effects on organizational performance have centered on personal attributes. Most of the studies have been qualitative and have had a small sample size. Given the large data set created by the 2001 reauthorization of the Elementary and Secondary Education Act, the impact of rural superintendent turnover on student achievement can be examined quantitatively.

**Impact of rural superintendent turnover.** Alsbury (2008) conducted an empirical study on the rate of superintendent and school board turnover and the ramifications on student achievement. The mixed methods study used surveys, interviews, and quantitative analysis using turnover rate and student test scores to determine whether student achievement was affected by superintendent and board turnover. Data was collected through a double postcard survey sent to every superintendent in Washington State. The postcards used a forced-choice design with predetermined reasons for school board member turnover. Statewide data on

superintendent turnover was collected from the Washington Association of School Administrators to determine (a) a relationship between superintendent turnover and student test scores; (b) a relationship between politically motivated board turnover and test scores; and (c) a relationship between board turnover and student test scores. Washington State has 23 urban schools, and 273 rural locations, and Alsbury's (2008) findings pertain to the rural school districts.

Organizational structures of the schools were categorized using Maguire's (1989) methods for characterizing school size by organizational structure (OS). Every OS structure puts another layer of separation between the superintendent and the classroom. Alsbury (2008) hypothesized that superintendents closest to the classroom would have a greater influence on performance. Student achievement was measured using data from the Washington Assessment of Student Learning (WASL) required for all 4<sup>th</sup>, 7<sup>th</sup> and 10<sup>th</sup> graders. The data showed no significant association between school board turnover and student achievement except in districts of 500 or fewer students, and in those cases turnover had a negative effect on achievement. More specifically, politically motivated turnover was associated with a decrease in test scores.

O'Toole and Meier (2004) surveyed over 1,000 Texas school administrators on their management style, goals, and how they spent their time. They used five years of student achievement data as the dependent variable and included control variables. The results showed a statistically significant relationship between the behaviors of the superintendents, superintendent quality, and teacher and administrative stability on student achievement. The results also showed that networking among top managers had a greater influence on student outcomes when the school was dependent on state aid. The

dependence on an intergovernmental structure increased the effect superintendent stability had on performance as well. The high-aid districts experienced increases in outcomes with the superintendent stability measure, and managerial quality mattered more in low-aid districts than high-aid districts.

In that rural schools are highly dependent on state aid and grant funds due to the inability to raise funds with a tax levy, the O'Toole and Meier (2004) study suggested that rural school student achievement is affected negatively by superintendent turnover. The relationship between student achievement outcomes and stability in organizations that depend heavily on state-aid suggest rural schools should be more concerned about turnover.

### **Chapter Summary**

The Texas Education Agency's data portal generated most of the empirical evidence reviewed. The No Child Left Behind Act of 2001 has led to massive amounts of student achievement data, and Texas created a dynamic system for housing the information. The student achievement data along with a state-wide survey of all superintendents conducted in 2000 and again in 2001 by O'Toole and Meier (2004) created a data set that allows for the testing of leadership variables and the impact of each on organizational performance. Researchers have used the massive data set to test hypotheses of leadership and its impact on organizational performance. Those quantitative and mixed-methods studies made up more than half of the empirical evidence on the topic. Those studies indicated that superintendent managerial style, the priorities set, skill level, and instructional leadership abilities all influence student achievement. Evidence also showed that stability in the position leads to higher

achievement. These findings lead to the conclusion that turnover in the rural superintendency effects achievement.

The work of Boyne and Dahya (2002) and O'Toole and Meier (2003) have created a base for researching the impact of rural superintendent turnover on student achievement. Since school superintendents are considered the chief executive officer and public schools have been held to a new level of accountability with standardized assessments, this portion of the public sector has become data rich for public management study. Using the New York State school report card and public source data on district financials, the dissertation study examined the impact of turnover on achievement in 21 rural school districts in New York State.

Rural school superintendents have been studied in the literature specifically in search of what makes their role different from their counterparts in other environments. The researchers have focused on identifying character traits that successful rural superintendents possess. Success, in these empirical studies, was defined by long tenure. The majority of the most recent empirical works are qualitative studies and include a phenomenological study and a longitudinal case study. These studies have implied that it is rare to find a rural school that has instability in leadership and whose assessment data trends outperform state averages.

Some of the studies in the rural superintendent section of the literature review were because the districts fit the definition of rural. However, none of the studies examining the rural context used quantitative methods. The private and public management literature and empirical research has offered new ways of testing for managements' effect on organizational performance. Looking for the impact of

superintendent turnover on organizational performance in a rural context has added to the body of knowledge on rural school improvement. The dissertation study employed time series data analysis to examine the impact of rural superintendent turnover on student achievement.

The effect of the superintendent's role on student achievement has not been studied deeply in the literature. The gap that exists widens when the rural context is added. Therefore, the dissertation study asked, what is the impact of rural superintendent turnover on student achievement?

## Chapter 3: Methodology

### Introduction

While researchers have examined the superintendency, they have focused more on the longevity of the position and issues around tenure dating to the early 1900s. More recently, the focus has turned to the superintendent's ability to impact organizational performance using measures of student achievement (O'Toole & Meier, 2001; Hill, 2005; Junke, 2005; Waters & Marzano, 2006). Although the field has been gaining knowledge in this area, there has been little research on superintendent turnover and its effect on organizational performance in a rural context. In the new era of school accountability, student achievement measures have become the primary indicator of school, principal, teacher, and student success (*New York: Race to the Top State Scope of Work*, 2011). The influence of the superintendents' role on student achievement has not been studied deeply in the literature. The gap that exists widens when the rural context is added.

In the quantitative study described in this dissertation, the unit of analysis was an academic year. Using New York State English Language Arts (ELA) standardized test results for grade 8, the amount of general aid granted to each school district each year, and the data on superintendent turnover, the study used time series data analysis to describe the impact of superintendent turnover on student achievement. The dependent variable in the study was student achievement scores on the 8<sup>th</sup> grade English Language Arts (ELA) assessment administered yearly across New York State (NYS). The results of these assessments are used to compare districts across New York State, and lists are

created to publicize schools that accomplish high overall results and to draw attention to those who are not meeting the state requirements for growth across student sub-groups. The data is shared publically on the school report cards which districts are required to mail to every taxpayer. For the purpose of the dissertation study, within each school district, the average percentage of students passing the exam each year with a score of 3 or 4 served as the measure of organizational performance.

The independent variable was superintendent change. Boyne and Dahya (2002) predicted that the window for superintendents to increase performance is three to ten years. The 12 year period studied (2000-2012) allowed for the analysis of multiple succession events within typical districts. The motives of the superintendent, a moderating variable was tested by a “dummy” variable that identified the superintendent as being an internal or external hire. The information on internal and external hire was gathered from the district superintendent from the Board of Cooperative Education Services (BOCES). The means provided to the superintendent was measured using the percent of the districts’ funding that comes from state aid. These figures were available from the New York State Department of Education State Aid unit. Funding from state aid was tested as a moderating variable.

Since there has not been a study looking specifically at the effect of superintendent turnover on rural school achievement, the question of impact on achievement in general needs to be answered before further studies are conducted. The method described in this dissertation identified trends in the data and analyzed any relationships between student achievement data and superintendent turnover.

Chapter 3 includes the context of the study. In 1948, The New York State Department of Education established the Board of Cooperative Educational Services (BOCES) to serve as a Lead Educational Agency (LEA) over public school systems within a geographic boundary (BOCES of New York State, 2012). According to BOCES (2012), there are 37 Boards of Cooperative Educational Services across New York State. This study will examine the rural school districts that organize around a BOCES.

This chapter introduces the research context and demographics of the region studied. Since the dissertation focused on data that is both historical and public record, Chapter 3 details the sources and the means for acquiring that data. Lastly, this chapter outlines the methods used to analyze the data.

### **Research Context and Participants**

The study took place across the Genesee Valley Educational Partnership (GVEP) region. The Partnership is comprised of 22 component schools covering 1,680 square miles across three counties: Livingston, Wyoming, Genesee, and a small portion of Steuben County. The schools serve over 27,000 children in kindergarten through twelfth grade programs. Of the 22 schools in the region 21 are rated as rural or rural-distant under federal codes. One school is coded as small-city and therefore was eliminated from the study,. Approximately 70% of the students living in the region qualify for free or reduced lunch..

According to the New York State Center for Rural Schools, each of the counties that make up the region consist of districts whose federal locale codes identify them on a continuum of town-remote to rural distant. Locale code assignments are based on the place's population size and distance from a populous area (National Center for Education

Statistics, 2011). The region studied has schools that range from 167 to 1800 students K-12. Each of the school districts has experienced decreased enrollment by nearly 300 students per district over the last ten years. The data showed a decline of 2500 school aged children per county over the last 10 years. The counties studied have approximately 17% of children between the ages of 0-17 living in poverty (The New York Center for Rural Schools, 2012). Accompanying the decline in enrollment and the number of students living in poverty, was an increase of the number of students categorized as English Language Learners (ELL). The ELL populated has increased by nearly 200 students per county over the last decade. In the districts studied, the per-pupil allocation ranged between \$16,000 and \$17,000 per pupil per year across 10 years.

Based on the rural nature of the region being studied, the schools have relied on the New York State Department of Education for funding. According to the New York State Center for Rural Schools, these districts can only collect 14 -18% of their operating budget from local property taxes. The combined wealth ratios of the districts have hovered around .5%. Since school aid is driven by socioeconomics and property value, schools in the region have received at least 75% of their funding from state aid (New York State Department of Education). In some cases, state aid nearly doubled over the last 10 years (Cornell University, 2012). Across ten years of regional data, the range of school aid provided from the New York State Education Department to each school started at slightly over 2 million dollars per year in one school and reached 20 million dollars per year in others (Cornell University, 2012).

Each of the schools included in the study has a superintendent and a business official, although two of the schools studied shared a business official. There are eight

Directors of Curriculum and four administrators assigned the duties of Director of Curriculum who also serve as an elementary principal. Two districts combined the Director of Special Education Services and Director of Curriculum duties. In the absence of a Director of Curriculum, the superintendent and business official have been the only central office administrators. Two of the schools in the study have had only one other administrator, and one of the districts has a Principal/Superintendent with no other administration.

### **Data and Sources of Data**

Three data sources were used in this study.

1. Student achievement scores from the New York State Education Department
2. Superintendent succession data
3. General aid allocation

**Student achievement scores.** The first data source was the New York State Department of Education School Report Card. The School Report Card for every school district in New York can be accessed by visiting the Information and Reporting Services School Report Card page on the Education Department's website. Each district is also required to share the report card data with their taxpayers during budget season.

The New York State Report Cards provide enrollment, demographic, attendance, suspension, dropout, teacher, assessment, accountability, graduation rate, post-graduate plan, career and technical education, and fiscal data for public and charter schools, districts, and the State. The report cards consist of three parts: Accountability and Overview Report (AOR), Comprehensive Information Report (CIR), and Fiscal Accountability Supplement. For each reporting year, a

companion database containing data statewide and by county, Need/Resource Capacity Index, district, and school in many of the above areas is also provided for statistical analysis purposes (New York State Report Cards, 2012).

The data in the school report card is submitted by local school administration, and the superintendent is always given the opportunity to verify that the data is accurate and complete (New York State Report Cards, 2012). For the dissertation study, the percent of students who scored a 3 or 4 on the New York State ELA assessment in grade 8 was collected from the school report card. This data was used as the measure of organizational performance.

Specifically, student achievement on the eighth grade English Language Arts test was used. In order to ensure validity, equating was used. “Equating is a statistical process that is used to adjust scores on test forms, so that those scores can be used interchangeably” (Kolen & Brennan, 2004, p.2). Equating addresses the flawed nature of raw scores.

A reported score (also called a scale score) is different from a raw score. A raw score is simply the number of points obtained on the test by a student; that is, the number of multiple choice questions answered correctly plus the number of points earned on open-ended items. Scale scores derived from the equating process are designed to accurately reflect student's achievement level regardless of which test form was taken, whereas raw scores reflect performance only on the particular test form taken and do not generalize to other test forms. This is precisely why equating is performed and scale scores are reported (The University of the State of New York The State Education Department, 2005).

The equating procedures used in the New York State testing program comply with standards for scales, norms, and score comparability as outlined by the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). Equating procedures are required when studying longitudinal data so that scores can be compared from one year to the next and thus accurately reflect changes in student achievement.

The English Language Arts test was designed to measure concepts, processes, and skills taught in schools in New York. The exam is a standards-based criterion referenced test composed of multiple-choice (MC) and constructed-response (CR) items. Reading proficiency was chosen as the measure for the dissertation study since it has been shown to be a predictor of high school graduation and college attendance (Child Trends, 2010).

The school report card also reports on the total student enrollment for the district. Based on the total enrollment, the effect of turnover was examined for schools with enrollments of 499 or less compared to those with 500 or more. This data allowed the third research question to be examined: does school size moderate the effect of turnover on rural student achievement?

**Superintendent succession data.** The second data source was a matrix kept and updated by the Board of Cooperative Educational Services (BOCES) representing superintendent turnover across the region. The matrix, referred to as the Superintendent History, documents all the superintendent changes by district including interims. Identifying the superintendent's origin was done based on the researcher's insider knowledge as a regional administrator. The data was used to measure a superintendent's

influence on organizational performance using Boyne and Dahya's (2002) theory of executive succession by examining the motives of the superintendent and the means available.

**General aid allocation.** The third data source was the state aid data unit at the New York State Department of Education. The mission of this unit is "to determine and distribute the correct amount of state aid to public school districts and BOCES in a timely manner, and provide accurate and timely data for use in state aid projections" (State aid, 2011). The unit offers an online search tool that allows public access to seven years of aid data. In an effort to streamline the collection of this data, the unit is able to send a file containing data for every school district in the state using Microsoft Excel and email. To conduct the dissertation study, the schools to be studied were identified and a request was made to pull the appropriate data from the database. The data was used to separate the districts into tertiles. In that New York State aid allocations are highly correlated to the wealth of the district, the variable often has been controlled for in studies of student achievement (Hill, 2005).

### **Data Analysis Procedures**

This study assessed the effect of superintendent turnover on student achievement by examining whether there was a change in achievement surrounding a succession event. For each succession event, this was done by averaging the district's ELA scores for the years beginning with the prior succession event (or 2001) as a pre-succession mean and comparing that to a post-succession mean. The means were the average ELA score for the years in that superintendent's tenure. The difference between pre-succession and post-succession mean ELA scores, characterized as a change in the

percentage of students passing, was used to evaluate the effects of superintendent succession. Walters and Marzano (2006) found a correlation between the superintendent's role and student achievement. More salient to the dissertation study, Walters and Marzano's (2006) meta-analysis suggested a positive correlation between superintendent tenure and student achievement. Furthermore, Hill (2005) suggested that turnover in the superintendency has a negative impact on achievement in the short term, and the further from a succession event the stronger the positive relationship between the leader and student achievement.

Carlson (1961) contended that origin of the superintendent has an effect on the organization. The motives of an outsider are guided by the need to prove success and prepare for the next position, typically in a larger district (Nestor-Baker & Hoy, 2001). Superintendents hired from the outside tend to make dramatic changes to the system quickly after taking office (Carlson, 1961). Hill (2005) suggested that external hires always have a negative effect on achievement in the first year. As the motives of the superintendent hired from the inside lean toward maintaining the status quo, insiders rarely see themselves as a change agent (Nestor-Baker & Hoy, 2001). Categorizing superintendents as internal versus external hires is a simplistic way to measure a diverse group of people. Therefore, this measure did not capture all of the variability that occurs in succession; however, it did serve as a broad tool for capturing the impact of insider versus outsider hires on student achievement.

To test the second research question, a year between 2001 and 2010 was selected to examine the percent of revenue each district received from state aid. Using the districts in the upper and lower tertiles, superintendent turnover was examined. The

percent change, measured from pre-succession to post-succession, was compared across high aid and low aid districts to determine whether aid served as a moderator.

The third research question examined whether or not school size was a moderator for the effect of turnover on student achievement. The districts were divided into two categories: districts with 499 or fewer students enrolled and districts with 500 or more students enrolled. Superintendent turnover was examined. The percent change, measured from pre-succession to post-succession, was compared across districts with fewer or more than 500 students to determine whether school size was a moderator.

### **Chapter Summary**

Chapter 3 outlined the methods that employed to examine the effect of superintendent turnover on student achievement. All of the data examined is historical and retrieved from the New York State Department of Education website and the Genesee Valley Educational Partnership (BOCES) databases. The study examined the effect of rural superintendent turnover by focusing on one BOCES region in upstate New York where all but one of the school districts are coded rural. In Chapter 4, the data is analyzed, and Chapter 5 contains a discussion of the findings.

## **Chapter 4: Results**

### **Introduction**

The purpose of this study was to determine whether superintendent turnover has an effect on student achievement as determined by the district's New York State English Language Arts (ELA) grade 8 assessment. The study was intended to examine whether superintendent motivation, aid level, and school size moderate the effect of turnover on rural student achievement.

### **Research Questions**

The research and analysis was guided by three questions. This chapter examines the data in light of these questions.

Question 1: Does motive of the superintendent moderate the impact of succession on rural student achievement?

Question 2: Does the aid level moderate the impact of succession on rural student achievement?

Question 3: Does school size moderate the impact of superintendent turnover on rural student achievement?

### **Data Analysis and Results**

Chapter 4 begins with the data analysis on superintendent turnover. An examination of each research question follows. The appendix contains matrices displaying all data collected.

**Superintendent turnover and tenure data.** The districts selected for this study were organized under a Board of Cooperative Educational Services (BOCES). The region was selected because it has 21 rural schools with variability in student achievement scores. Over the 12 year period studied, there were a total of 37 succession events. Table 4.1 displays the number of turnover events and whether the replacement was internal or external. External superintendents (hired from outside the district) accounted for 26 of the turnovers and 11 resulted in the hiring of an internal superintendent (hired from within the district).

Table 4.1

*Origin of Replacement Superintendent*

Type of succession	N
External	26
Internal	11
Total succession events	37

As shown in Table 4.2, the average length of tenure for the superintendents represented in the sample was 3.93 years. There was no difference in length of tenure based on origin of the superintendent or school size. However, length of tenure did vary across districts when level of aid is examined. Table 4.2 displays the tenure of all superintendents in the data set by years of service across the three moderators of origin, aid level, and school size.

Districts heavily dependent on New York State for school aid experience more turnovers in the superintendency than other districts. In the data set used for the

dissertation study, superintendent tenure in high aid districts was nearly two years shorter than tenure in low aid districts. Origin of the superintendent and school size did not show wide variance in length of tenure. Table 4.3 displays the tenure in years for the superintendents in the study.

Table 4.2

*Average Length of Superintendent Tenure by Origin, Aid level, and School Size*

Moderator	Variable	Average length of tenure in years	Range in years
Origin	External	4.03	1 - 10
	Internal	3.82	1 - 8
Aid level	High Aid	2.92	1 - 9
	Low Aid	4.90	1 - 5
School Size	=>500	4.24	1 - 10
	=<499	4.00	1 - 8

Table 4.3

*Superintendent Tenure Statistics*

Tenure in Years	Number of Superintendents
1-2	13
3-4	10
5-6	8
7-8	4
9-10	3

There are four succession patterns that can occur during a turnover event.

1. An externally hired superintendent replaces an externally hired superintendent.
2. An externally hired superintendent replaces a superintendent hired from within the district.
3. An internally hired superintendent replaces an internally hired superintendent.
4. An internally hired superintendent replaces a superintendent hired from outside the district.

Only the succession events represented in the data set were examined. There were 37 turnover events studied, but patterns of succession were visible in the data for only 26. Superintendents hired prior to 2001 were not noted in the data set as internal or external hires. The succession data is represented in Table 4.4.

Table 4.4

*Patterns in Succession Events by Origin of Superintendents*

Pattern	Number of Succession Events
External to External	15
External to Internal	7
Internal to External	2
Internal to Internal	2

External to external succession events were prevalent in the data set. Replacing an externally hired superintendent with an internal candidate during a succession event was the second most prevalent pattern. Of the 37 turnover events, only 11 were internal

hires making it less likely to see succession patterns of internal to external or internal to internal successions.

**Research Question 1.** Does motive of the superintendent moderate the impact of succession on rural student achievement? To make the determination, the district percent passing for ELA 8 was averaged from pre-succession to post-succession for every turnover event. The change in percent passing was used to determine the direction of change and the effect each superintendent turnover event had on student achievement. This data is displayed in Table 4.5.

Table 4.5

*ELA Percent Passing by Superintendent Succession Type*

Succession Type	Mean Percent Change	Range
External	.39	-17.00 to 14.89
Internal	5.42	-10.50 to 27.8

*Note.* Data presented in percentage points

The passing rate on the New York State ELA 8 was increased by .39 percentage points on average when an external superintendent was hired. The percent passing on the New York State ELA 8 was increased by 5.42 percentage points on average when a superintendent was hired from within the district. Superintendents hired from within the district increased rural student achievement by 5.03 percentage points more than external hires. A 5.42 percentage point increase in percent passing on the grade 8 English Language Arts assessment is not a large gain. This increase, based on the enrollment in grade 8 across the data represented here, could be an additional one to ten students passing the exam. Based on this same data, external hires may not help an additional

student, and at best only five students reach proficiency. Superintendents hired from inside the district positively influenced student achievement five percentage points more than external hires.

In order to examine the influence length of tenure has on student achievement, length of tenure was divided into two categories. Tenures ranging from one to six years were compared to tenures ranging from seven to ten years. The data suggested that tenure of eight years or more, regardless of the superintendent’s origin as insider or outsider, increased student achievement on the eighth grade New York State ELA 8 assessment. To examine the interaction between origin, tenure, and aid level, the same data set was analyzed. The data are shown in Tables 4.6 and 4.7.

Table 4.6

*Impact of Tenure on Percent Passing NYS ELA 8*

Origin of superintendent	Tenure range in years	Change in percent passing
External	1 to 6	.33
	7 to 10	6.04
Internal	1 to 6	2.81
	7 to 10	27.88

The data suggested that length of tenure has an influence on student achievement. Superintendents with tenure ranging from one to six years increased rural student achievement by .25 percentage points on the NYS ELA 8. Superintendents with tenures ranging from seven to ten years increased rural student achievement by 11.62 percentage points on the same standardized measure. Superintendents hired from outside the district who served as the district superintendent between seven and ten years increased student

achievement on the 8<sup>th</sup> grade ELA by 5.71 percentage points more than those who served between one and six years. Superintendents hired from inside the district with length of tenure ranges between seven and ten, increased percent passing on the grade 8 ELA assessment by 25.07 percentage points more than those who had shorter tenures. Regardless of superintendent origin, tenure ranging from seven to ten years had a greater influence on student achievement, though internal replacement superintendents appeared to increase student achievement more than external hires.

Table 4.7

*Impact of Tenure and Aid Level on NYS ELA 8*

Origin of Superintendent	Tenure in years	Aid Level	Change in Percent Passing
External	1 to 6	Low	-4.50
		High	-7.43
	7 to 10	Low	12.14
		High	n/a
Internal	1 to 6	Low	2.99
		High	5.67
	7 to 10	Low	27.88
		High	n/a

*Note.* Data are average change in percent passing

There was an interaction between superintendent origin, length of tenure, and aid level. Superintendents hired externally with tenure between one and six years decreased students' achievement regardless of aid level. However, the decline in student achievement was 2.93 percentage points higher in districts with more dependence on

state aid than those less dependent. Remarkably, superintendents hired from inside the district increased student achievement when tenure ranged from one to six years. The internally hired superintendents in this data increased student achievement in high aid schools by 5.67 percentage points. This finding was 2.68 percentage points higher than the increase experienced in low aid districts that hired internally. No conclusions can be drawn about the interaction between tenure ranging seven to ten years because the region studied has not had a superintendent with that length of tenure in a high aid district. There has been only one superintendent with tenure in the seven to ten year range who was hired internally, and only two with this tenure range were hired externally. Although the numbers were small, the data show a connection between superintendent origin, tenure and aid level. The internally hired superintendent increased student achievement by 27.88 percentage points. This increase is 15.48 percentage points higher than the average external hire.

**Research question 2.** Does the aid level moderate the impact of succession on rural student achievement? To make the determination, the 21 districts were divided into tertiles based on the percent of revenue the district generated from New York State aid in the 2005-2006 school year, which was a mid point in the data set. Using the upper and lower tertile, the district average percent passing for ELA 8 was calculated from the prior succession event or 2001 and compared to the post-succession average. The change in percent was used to determine the direction of change and the effect each superintendent turnover event had on rural student achievement. To examine if origin of the superintendent and aid level interacted to affect achievement, the same data set was analyzed. The data is displayed in Tables 4.8 and 4.9.

Table 4.8

*Impact of Turnover on ELA Percent Passing by Level of Aid*

Level of Aid	Change in Percent Passing	Range
High Aid (61%-71%)	.33	-17.00 to 13.47
Low Aid (35%-54%)	5.42	-9.50 to 27.88

Table 4.9

*Impact of Origin and Aid Level on ELA Percent Passing*

Origin of Superintendent	Aid level	Change in Percent Passing
External	High	.74
	Low	3.3
Internal	High	5.67
	Low	39.3

*Note.* Data are percentage points

When dividing the districts into tertiles, the data suggested that aid is a moderator for the effect of superintendent turnover on rural student achievement. While the number of turnover events was similar across the twelve years studied in that high aid districts had twelve succession events and low aid districts had eleven succession events, the data suggested it is harder to influence student achievement in districts dependent on state aid. Superintendents taking over in a district highly dependent on state aid should not expect to see student achievement improve rapidly. The average increase in percent passing across succession events is less than one student moving to proficiency on the exam.

Districts less dependent on state aid can expect to see one to ten students on average moving into proficient levels.

The origin of the superintendent and the level of aid a district receives from the New York State Department of Education did interact to affect achievement. It is important to note that the effect of superintendent turnover on student achievement in high aid districts, when examining all succession events, resulted in a .33 percentage point change. This small increase, described above, appears troubling for superintendents taking on the role in districts highly reliant on state aid. Although superintendents taking jobs in high aid districts should expect less growth on the New York State ELA 8 assessment, the interaction between these two variables suggested those hired from inside the district increased achievement by 4.93 percentage points more than those hired from the outside. An increase of 4.93 percentage points was not a large gain. This increase, based on enrollment, could result in a range from one to ten students moving to proficiency. Externally hired superintendents in high aid district increased achievement by .74 percentage points. This increase would result in few if any students moving to proficient levels. Thus the data indicate that internally hired superintendents in high aid school districts have a greater influence on student achievement. The same finding is true when examining the interaction between superintendent origin and districts considered low aid. Internally hired superintendents increased achievement by 36.07 percentage points more than those hired externally. Regardless of aid level, superintendents hired internally had a greater influence on rural student achievement.

**Research question 3.** Does school size moderate the impact of superintendent turnover on rural student achievement? To determine this, the 21 schools in the study

were divided into two categories: (a) schools with enrollment of 500 or more, and (b) schools with enrollment of 499 and less. The cut-off point was based on Alsbury's (2008) claim that superintendent turnover had no effect on student achievement except in districts with enrollments less than 500. Tables 4.10 and 4.11 show the data on school size as a moderator.

Table 4.10

*School Size as a Moderator for Impact of Turnover on Percent Passing*

School Size	Change in Percent Passing	Range
=>500 (808-1852)	11.33	-17.00 to 18.17
=<499 (128-499)	7.16	-1.00 to 27.88

Table 4.11

*Origin of Superintendent and School Size as a Moderator for Impact of Turnover on Percent Passing*

Origin of Superintendent	School Size	Change in Percent Passing
External	Small	3.00
	Large	.17
Internal	Small	9.93
	Large	3.73

*Note.* Data are percentage points

Of the 21 districts studied, three have student enrollments of fewer than 500. The data suggested that the effect of superintendent turnover on student achievement was moderated by district size. Student achievement on the New York State ELA grade 8

was increased by 11.33 points in schools larger than 500. Districts with enrollment of fewer than 500 increased achievement by 7.16 percentage points. District size did moderate the effect of superintendent turnover on rural student achievement. The change in percent passing for districts larger than 500 was equivalent to the addition of seven to seventeen students moving to proficiency on the exam. Districts with fewer than 500 students should expect one to four students moving to proficiency. These effect sizes were small. Superintendent effect on rural student achievement is larger in districts with enrollment greater than 500.

This same data set suggested a different finding when examined for an interaction between origin of the superintendent and school size. Overall, smaller schools see a greater increase in achievement, regardless of superintendent origin. Superintendents hired internally increased student achievement in small schools by 9.93 percentage points which represented the movement of five students to proficient levels on the NYS ELA 8. This increase was 6.93 percentage points more than those hired externally. External superintendents increased the achievement of one student in a small school. Internally hired superintendents increased achievement in large schools by 3.56 percentage points more than those hired externally. Superintendents hired internally moved three or more students to proficient levels while superintendents hired externally may have moved one.

### **Summary of Results**

Data analysis indicated that superintendent turnover did effect student achievement. The motive of the superintendent, examined in this study through Carlson's (1961) theory of internal versus external hire, suggested that superintendents hired from inside the district increased rural student achievement by 10.8 percent more

than external hires. The dependence of a school district on state aid served as a moderator. It appeared to be more difficult to influence student achievement in districts that are reliant on state aid as a revenue source. However, when the data set was analyzed for interactions between dependence on aid and origin of superintendent, internally hired superintendents increased achievement at rates higher than superintendents hired from outside the district. Lastly, the smaller the school, the less change in passing rates across succession events. The interaction between superintendent origin and school size showed a larger increase in student achievement when districts hired from within. The increases were largest in small schools that chose to hire from within. In the rural region studied, internally hired superintendents increased student achievement more than externally hired superintendents irrespective of tenure, dependence on state aid, or school size.

In Chapter five, a summary of the study and a discussion of conclusions drawn from the findings, and implications for the field are discussed. Chapter 5 connects the findings set forth in Chapter 4 to the literature presented in Chapter 1 and 2. Additionally, recommendations for further study are suggested and limitations are considered.

## **Chapter 5: Discussion**

### **Introduction**

The research described in this dissertation employs time series data analysis to examine the effect of superintendent turnover on rural student achievement. The methods result in data that allows the effect of superintendent turnover on student achievement to be examined and hypotheses tested. Chapter 5 contains a discussion of the findings of the study and implications of those findings for the field. Using the body of theoretical and research literature discussed in Chapters 1 and 2, Chapter 5 adds to, confirms, or refutes previous studies on the topic of superintendent turnover. The limitations of the study are outlined with recommendations for future research on this topic.

### **Implications of the Findings**

Overall, the data indicate that superintendent turnover effects are small. When examining the effects superintendents have on student achievement, two models should be considered. Either superintendents are not effective at influencing student achievement or their effect is diluted in the system. Superintendents hired from within the district increased student achievement by five percentage points on average more than those hired from outside the district. This finding suggests that motive of the superintendent matters very little for achievement. Rural student achievement increases at a greater rate when the tenure of the superintendent reaches seven to ten years; especially if the replacement superintendent is an internal candidate. This finding is

limited since only one superintendent in the data set was internally hired and had tenure longer than seven years. Superintendent turnover has little effect in districts that rely heavily on state aid; turnover resulted in little to no change in the percentage of students passing the exam. Lastly, superintendent turnover increases rural student achievement by a mere 7 percentage points in districts with enrollment fewer than 500 and by 11 percentage points in districts with enrollment greater than 500. Superintendent turnover does have an effect on rural student achievement, but the effect is small with few students moving to proficient levels.

**Motives.** The influence of each superintendent on student achievement in this study ranges from superintendents decreasing rural student achievement by 17 percentage points to superintendents who increase rural student achievement by 27.88 percentage points. These data confirm the theory of executive succession (Boyne & Dahya, 2002). The theory suggests, “the fundamental source of succession effect is that the top manager arrives with an outlook and motives that differ from those of the previous incumbent” (Boyne & Dahya, 2002, p. 192). Each superintendent turnover effects student achievement because every superintendent has different priorities or motives (Boyne & Dahya, 2002).

Using Carlson’s (1961) definition of motivation as a way to test the theory of executive succession, the effect of superintendent turnover on rural student achievement is examined by comparing the change in percent passing between superintendents hired externally from another district and superintendents hired internally. Superintendents hired from within the district increase student achievement on the NYS ELA 8 assessment by 4.70 percentage points more than superintendents hired from outside the

district (external). This finding suggests that the motives of the superintendents moderate the effect of succession on rural student achievement. The data in this study confirm Boyne and Dahya's (2002) theory that each change in executive effects organizational outcomes. In this study, each turnover in the superintendency has an effect, some positive and some negative, on rural student achievement.

Carlson (1961) discusses the predictable pattern of succession events and the origin of the replacement superintendent. Carlson suggests board of education satisfaction with the outgoing superintendent as a key driver in the decision to hire externally or internally. The most prominent pattern was external to external replacement superintendent and the second most prominent was external to internal (Carlson, 1961). These prominent patterns of succession are confirmed by the dissertation study. Of the 26 succession patterns identified, 15 are external to external replacements and seven of are external to internal replacements. There are only two internal to external events and only two internal to internal replacements.

**Means.** The theory of executive succession also says that in order to impact organizational outcomes, an executive must have means at their disposal. Means are measured by examining the effect of superintendent turnover in districts with high versus low dependency on state aid. To test school aid as a means, student achievement is examined by dividing the rural districts studied into tertiles based on the level of aid received from the New York State Department of Education. Comparing the average percent change from pre to post succession events between high aid and low aid districts, the dissertation study suggests that rural student achievement in districts more dependent on state aid is harder to influence. Succession events in high aid districts resulted in a .33

percentage point increase in rural student achievement on the NYS ELA 8 assessment. Succession events in low aid districts influenced student achievement by 5.42 percentage points on average. This finding suggests that turnover may make it harder to increase rural student achievement in districts largely dependent on state aid. When examining the data to test the interaction between origin of the superintendent and level of aid, the study suggests that internally hired superintendents increase student achievement by 4.93 percentage points more than those hired externally. Although the impact on achievement results in low numbers of students moving into the proficient category, it is worth noting that internal superintendents appear to maximize the means at their disposal. The executive succession theory suggests that organizational performance can be increased or decreased based on executive decisions. The data indicate motives of and means afforded to the superintendents do play a role in the effect they have on student achievement.

**Opportunities.** The theory of executive succession defines opportunities as constraints in the system that new leaders with fresh eyes may be able to navigate around and create opportunity for improvement. Since this study was designed to use historical data and no data exists on opportunities, this portion of the theory was not examined.

**Connections to the research literature.** In this section, literature discussed in earlier chapters will be re-examined through the data analyzed. Consistent with the literature, the dissertation study found that superintendents who were hired from within increased student achievement while external candidates did not increased achievement. This finding confirms Nestor-Baker and Hoy's (2001) study. The data also suggests that school size moderates the impact of turnover on student achievement. Specifically, the

smaller the school, the less increase in achievement occurs during turnover. This finding refutes the claims of Alsbury (2008) and Lamkin (2006).

*Length of tenure.* In his 2005 study, Hill examined the impact of turnover on student achievement using data collected across Texas. Hill's (2005) findings suggest that turnover has a negative effect on student achievement in the short term. Moreover, the relationship between superintendent turnover and student achievement shifts from negative to positive as tenure increases. Hill says the further a district gets from a succession event, the stronger the relationship between the new leader and student achievement. Although sample size of the dissertation study was smaller than Hill's, the findings confirm that superintendent tenure (length of time in current position) begins to increase rural student achievement after seven years. Superintendents with tenure ranging from one to six years increased rural student achievement by .25 percentage points on the NYS ELA 8. This increase is so small it is hardly worth noting. Superintendents with tenures ranging from seven to ten years increased student achievement on average by 11.62 percentage points on the same standardized measure. Although neither increase is large, the internally hired superintendents are achieving gains larger than their externally hired counterparts.

In their 2003 study, Meier and O'Toole (2003) found a connection between tenure and increases in achievement. Specifically, they claimed that the absence of turnover in the superintendency was positively and significantly related to student performance on standardized measures. Though the dissertation study population sample is significantly smaller than Meier and O'Toole's (2003) examination of superintendents' impact on achievement using the full state of Texas, the findings support the conclusion Meier and

O'Toole (2003) draw about the relationship between tenure and achievement.

Specifically, superintendents with short tenure increased rural student achievement by .25 percentage points on the NYS ELA 8 while superintendents with longer tenures increased student achievement by 11.62 percentage points on the same standardized measure.

Juenke (2005) takes the work of Meier, O'Toole, and Hill one step further when he suggests that length of time in a district affects a superintendent's ability to increase student achievement. Juenke (2005) researched 507 school superintendents from Texas and found that tenure of seven years or longer creates the environment for a superintendent to influence the system outcomes. Though the population examined in the dissertation study was smaller than Juenke's, the data confirm Juenke's argument that tenure of seven years or longer is related to increased achievement. Superintendents with tenures of seven to ten years increased student achievement by 11.62 percentage points on the same standardized measure. The increase is 11.37 percentage points higher than superintendents whose tenure was shorter.

Although the dissertation study did not set out to examine the effect of tenure on student achievement, findings on tenure are noticeable and confirm the 2003 study of successful rural schools conducted by Syracuse University. The length of tenure does have an effect on rural student achievement. The average tenure of superintendents examined in this study was 4.02 years. This average does not account for superintendents who exited the position and were replaced for a short time by interim superintendents. To examine the effect of tenure on rural student achievement, the data set was divided into two categories based on origin of the replacement superintendent (internal and external). Within each of these categories, the average tenure was calculated for tenures

ranging between one and six years and seven to ten years. Replacement superintendents hired internally with tenures of seven to ten years increased student achievement by 27.88 percentage points on the NYS ELA 8 assessment. In this study, there was only one superintendent who was both internally hired and had tenure longer than seven years. Thus, the small population tempers the finding. Replacement superintendents hired externally who had tenure between seven and ten years increased student achievement by 6.04 percentage points. Superintendents with tenure between one and six years increased achievement on the NYS ELA 8 assessment by 30.78 percentage points less than those with longer tenures. This finding is limited because only three superintendents across the data set had tenure longer than seven years. However, superintendent tenure of ten years or longer are common among rural districts with high student achievement (Syracuse University, 2003).

Peterson, Sayre, and Kelly (2006) investigated seven non-rural schools that, despite their location and economic challenges, were successful. The average superintendent tenure was 10.7 years and the average enrollment of these schools was 722 students, which is similar to the size of the districts in the dissertation study. The theme of tenure impacting rural student achievement is present in this study and confirmed in the data set.

***Internal hiring.*** Nestor-Baker and Hoy (2001) conclude that both internal and external replacement superintendents place priority on increasing student achievement. They argue that superintendents hired from the outside placed higher value on board approval, which is consistent with the prospecting strategy as described by Meier, O'Toole, Boyne, and Walker (2006). Nestor-Baker and Hoy (2001) posit that

superintendents hired from within follow the defender strategy. The defender strategy is noted by Meier, O'Toole, Boyne, and Walker as the most effective strategy for reaching the primary mission of the organization. These findings suggest that a succession event affect the performance of schools with internal hires focusing more on protecting the organization from outside pressures and external hires focusing more on resume building. This finding also suggests that superintendents hired from within the district have a greater effect on student achievement. This finding is confirmed by the data in the dissertation study. Superintendents hired from outside the district increased student achievement by .39 percentage points while superintendents hired from inside the district increased achievement by 5.09 percentage points.

*School size.* Alsbury (2008) hypothesizes that superintendents closest to the classroom have a greater influence on performance. The dissertation study did not compare superintendents across varying organizational structures, but rural superintendents do fit the description of being close to the classroom based on organizational structure. The data show that superintendent turnover does influence rural student achievement on the NYS ELA 8 assessment, a finding that confirms Alsbury's (2008) claim. Alsbury (2008) also suggests that superintendent turnover does not have an effect on student achievement except in schools with enrollment less than 500. The findings from the dissertation study and other studies examined in the literature conflict with Alsbury's claim. Specifically, the data show districts with enrollments fewer than 500 students that experience superintendent turnover increase student achievement after a succession event by 7.16 percentage points. Districts with enrollment of 500 or more that experienced turnover in the superintendency experience increased student achievement

by 11.33 percentage points. Thus, although school size is a moderator for the impact of succession on student achievement, the data show that districts with enrollment of fewer than 500 students experience less of an increase in achievement during turnover than larger districts.

An examination of the data to understand the interaction between superintendent origin and school size, revealed that internally hired superintendents increased student achievement at rate higher than externally hired superintendents. School districts examined in the dissertation study whose enrollment was less than 500 students experienced a 9.93 percentage point increase when the replacement superintendent was internally hired. Externally hired superintendents in the same small schools increased achievement 6.93 percentage points less. The difference in achievement is paralleled when examining the effect internal hires make in achievement for schools with enrollment higher than 500. The data indicate that internally hired superintendents increase achievement on the NYS ELA 8 by 3.56 percentage point more than those externally hired.

Lamkin's (2006) study of 58 rural superintendents uncovers the challenges that consumed superintendents' time. Rural superintendents report small administrative teams and lack of resources to be the greatest challenge (Lamkin, 2006). Lamkin's (2006) study suggests that rural superintendents do not have the time to commit to strategies that are essential for increasing student achievement because of these challenges; therefore, turnover should not influence student achievement. The sample size for the Lamkin study was similar to the dissertation study, but the dissertation study suggests that superintendents can increase rural student achievement. Although the data in the

dissertation study show a range of effect with some superintendents decreasing student achievement with others increasing it, every turnover event was shown to have an effect on rural student achievement.

## **Recommendations**

This section discusses the recommendations for various stakeholders based on the study's findings.

Board of Cooperative Educational Services (BOCES) and Superintendent search consultants. The District Superintendents (DS) of the Board of Cooperative Educational Services (BOCES) conduct many of the rural superintendent searches. The notion that length of tenure matters for student achievement should be a significant factor when screening applicants. Rather than viewing rural districts as a “farm system” that prepares superintendents for positions in suburban and urban communities, (Jacobson, 1988), rural places need superintendents who come to their districts to stay committed to place long enough to increase student achievement.

***Increasing contract length.*** The dissertation study was situated in a rural BOCES region where superintendent tenure averages 4.03 years, not including interims, and regional student achievement has stalled at an average of 50% passing on the NYS ELA 8. If, as the research indicates, tenure of seven to ten years can increase rural student achievement by 27.88 percentage points in a district, the BOCES DS should pay close attention to the regional tenure average and encourage superintendents to stay long enough to make a difference. Furthermore, in that the BOCES DS often assists superintendents as they work through contract negotiations, the DS should encourage contracts that span longer than the average contract length of three years of service

(Terranova, Rogers, Ike, & Fale, 2009). Doing so is possible because New York State allows superintendent contracts for five years. In fact, longevity bonuses have been built into 25% of the contracts in New York State (Terranova et al., 2009). Thus, contract length is a potential area for increasing superintendent longevity.

***Hiring internal candidates.*** District Superintendents (DS) of BOCES and superintendent search consultants who conduct searches on behalf of the boards of education should be cautioned not to overlook an internal candidate. While the literature suggests that superintendents hired from outside the district make positive gains in student achievement and internal hires hold the district in status quo, that was not the case in the districts examined in the dissertation study. The data show that internal candidates are better equipped to increase achievement irrespective of aid level or school size.

***Holding training academies.*** The BOCES DS should also consider creating a rural superintendents training academy. Superintendent Academies exist across New York State at the BOCES and Collegiate levels to assist aspiring superintendents in gaining the skills necessary to be successful. While the rural superintendency is offered to participants as a place to start a career (Jacobson, 1988), superintendents new to a rural locale often come in with little knowledge or understanding about the nuances of leading in the environment or the importance of understanding place (Budge, 2006).

***Create regional pool of candidates.*** The BOCES DS also should consider broadening the definition of insider to encompass a regional pool of candidates. Although every organization is different, rural schools across a region have similar demographics and constraints. If a principal from within the district is not ready to step into the superintendency, the DS should consider the 42 other principals across the

region, the Directors of Instruction, the Pupil Services Directors, and the Business Officials. Many of the leaders in a region who hold these titles are certified district administrators, which qualify them for the superintendent position. By the nature of rural school districts, all of the leaders within them have delivered on the duties of their title along with many other aspects of school governance. Generating leadership from within a region could help the DS with the mission to increase length of tenure.

**New York State Department of Education.** The data collected for the dissertation study was historical in nature and publicly available. By using the same methods and collecting more data, the BOCES DS could closely monitor the impact of superintendent turnover. Student achievement should be going up steadily over time, and using the data points as a dashboard, the DS would be able to lead the region toward a steady and constant increase in achievement. Furthermore, the data could signal regional initiatives and afford rural superintendents with training in the areas they feel under prepared to handle. Doing so would address the need of rural superintendents express for more job training (Lamkin, 2006). This is especially important in that Fernandez (2005) suggests that tasks superintendents find difficult have a direct effect on student achievement outcomes. Fernandez (2005) also claims that experience is relative to task difficulty and task difficulty negatively effects student achievement by 11.5 percentage points.

***Collect actionable data.*** With the amount of research literature on the challenges and pressures of the superintendent in the twenty-first century, collecting actionable data to encourage system performance and determine professional development needs of superintendents has the potential to positively effects student achievement. As such, the

BOCES DS should play a vital part in monitoring student achievement across the region. Furthermore, the Commissioner of Education should add this level of data analysis to the DS end of year summative evaluation. This recommendation could be applied to school boards as well. Evaluations of the superintendent should be driven by student achievement measures over time.

*Address state aid and funding issues.* Another recommendation based on the study findings is that attention should be placed on the struggle to increase student achievement in districts largely dependent on state aid. Even though the number of turnover events was almost equal, superintendent turnover impacted student achievement by only .33 percentage points in districts that heavily rely on state aid, although internal replacements were far more successful. Districts that can raise revenue through the tax base are less dependent on state aid and superintendent turnover impacted achievement by 5.42 percentage points.

*Address rural poverty.* Like their urban counterparts, rural superintendents are dealing with issues of poverty. It appears superintendents have not yet discovered the best ways to educate students of poverty. This measure could be considered a constraint according to the theory on executive succession (Boyne & Dahya, 2002). In this case, a constraint is a factor that requires new ways of thinking to break through and increase organizational outcomes. Thus, more energy should be placed on solving issues of rural poverty. Specifically, policy makers should pay closer attention to the barriers rural schools face when seeking grant funds, supporting preschool education, and providing access to resources such as medical centers within schools that are often available to inner city youth. It is also important to note that tenure interacts with level of aid. In the

region studied, no data exists to analyze the effect of longer tenure on districts heavily dependent on state aid. It is clear superintendents with tenure between seven and ten years increase achievement at much greater rates than those with fewer years in the position. While working to solve the issues of rural poverty, increasing the tenure of rural superintendents cannot be overlooked.

***Data collection and analysis.*** The New York State Department of Education is currently working to reform public education and increase student achievement. The Obama administration's Race to the Top reform agenda awarded New York State nearly \$700 million dollars in federal funds to adopt the reform initiative. The initiative requires New York State add a principal and teacher evaluation process connected to student achievement on standardized assessments; however, the reform has neglected to connect the superintendent in the evaluation process. New York State soon will have a large data bank that will allow data on teacher and principal effectiveness to be collected. Superintendents should not be left out of this data collection. As a starting point, the department should maximize the Basic Educational Data System (BEDS). Every school year, the department requires districts across the state to submit basic demographic information about all school employees, their certifications, and courses taught, course and school enrollment, along with many other data points. During the data collection the department should ask for demographic data on the superintendent. Specifically, they should collect length of tenure in the current position and origin. This data currently is uncollected. Collecting this data would afford researchers more opportunity to study the superintendency using the theoretical framework of executive succession.

**School board members.** School boards and superintendent search consultants should use standards-based tools to help hire replacement superintendents. There are a few options on the market and research in the area is growing. Educational Services has a tool copyrighted in 2012 that assesses a prospective superintendent's knowledge and skill in educational leadership, instructional leadership, administrative leadership, and utilizes a case study to assess the ability to apply knowledge. Those seeking a rural superintendency also should be required to bring examples of success at raising student achievement. Asking superintendent candidates to bring evidence of their success in the areas of interest to the board would create a stronger hiring process.

In their book, *School District Leadership that Works: The Effect of Superintendent Leadership on Student Achievement*, Waters and Marzano (2006) bring the effective schools research into a third generation. They identify ten measurable correlates to establishing an effective school (Waters & Marzano, 2006), and school boards should monitor the data as identified by Waters and Marzano. By doing so, the board would become aware of areas in need of growth and thus seek a superintendent with the skills necessary to move the organization in the desired direction.

Boards of education should focus on student achievement measures as part of their governing responsibility. When boards are dissatisfied with a superintendent, they should consider the effect of turnover on rural student achievement. Personality and fit are often given too much weight in decisions. Boards should establish a score card that would allow them to track data points, such as the grades 3 - 8 New York State assessment scores in integrated algebra mastery, Regents English mastery, as well as graduation rates to keep the school district moving in the right direction. Furthermore,

they should examine other elements of effective schools such as school culture and parent participation.

The dissertation study makes the case that the absence of turnover, defined as length of tenure, matters for rural student achievement. Superintendents should be encouraged by the board to stay and be focused on the mission of achievement. The dissertation study also suggests a strong relationship between increased rural student achievement and internally hired superintendents. Thus, school boards should encourage the grooming of leaders from within the district and region to ensure that rural schools have a qualified pool of applicants from which to hire.

**Researchers.** The Council of School Superintendents conducts a tri-annual State of the Superintendency across New York State. As they survey superintendents about tenure, job satisfaction, and other indicators, they should also request school type. The current state wide study of the superintendency leaves the data broad and general across the state and does little to capture the differences superintendents face based on locale.

### **Limitations and Implications for Future Study**

A limitation of this study is the over simplification of the way *motives* were measured. The contention that internal versus external replacement of a superintendent accounts for the difference in motives (Carlson, 1961). appears to be an overstatement. Once the percent change from pre-succession to post-succession events are averaged, internal replacement superintendents are shown to have a greater impact on rural student achievement than external replacement superintendents. However, when the range of superintendent impact on rural student achievement is examined, regardless of origin, superintendents can have a negative or positive impact on student achievement. Thus,

the origin of the superintendent does not account for enough of the variance in the data. One way to address this limitation is through the application of Boyne and Dahya's (2002) theory on executive succession which breaks motives into the three categories of altruist, pragmatist, and egoist to better capture the managerial styles of each leader. Future research should examine the motives of the executive using Boyne and Dahya's (2002) approach.

A second limitation involves the small sample size of the dissertation study and limited measurement of achievement. Examining the effect of superintendent turnover on 21 rural schools does not provide a large enough *N* to generalize the data across rural districts. The study is also limited in that it examines organizational performance using only the grade 8 New York state ELA assessment as a way to measure of student achievement. To add to the body of knowledge on the impact of superintendent turnover on student achievement, future research should examine all rural schools in New York State. Furthermore, including more measures from the school report card to gain a broader sense of what constitutes high performing schools would also strengthen the study. For example, adding grade 4 ELA, grade 11 ELA, grades 4 and 8 mathematics, Integrated Algebra, Regents with Advanced Designation, Graduation rate, and College and Career Readiness indicators would provide a more comprehensive definition of success.

The final limitation is that the rural region examined in this study has a ELA assessment passing average hovering around 50%, which is lower than other regions in New York State. This situation creates a regression artifact in the data meaning that low achievement scores will naturally move toward the mean over time. Thus means scores

are more likely to increase than decrease no matter the intervention, which in this study is change in superintendent. In order to address this limitation, researchers interested in furthering research on superintendent turnover in rural districts should broaden the study across locale codes.

## **Conclusion**

These final words are directed to individuals who are considering a rural superintendency position. Students in rural schools deserve leaders who are passionate about providing opportunities and a world-class education. In my experience, the rural ‘farm system’ as described by Jacobson (1988) is alive and well. However, using a rural superintendency as training ground for a future position in a larger district is an unethical way for suburban school districts to acquire experienced superintendents. Those who choose to assume the role of rural superintendent should spend a great deal of time researching the community and making certain that the rural way of life is part of their future. There are no shopping malls. The city is an hour away. The coffee shop may or may not have wifi. The school district may be the largest employer in the area, and you may be the only CEO living in the town limits. Thus, parents, teachers, and school board members will call you at home. You will be lucky to have a building principal. Additionally, you will be the public relations coordinator and maybe even the transportation director for the district. Despite these challenges, the rewards of living in a rural community are great. There will always be fish to catch, deer to hunt, and trails to journey. The landscape is breathtaking. If you can build trust, the potential to influence the system exists.

However, if you view the rural superintendency as a brief place to start your career, please pass by. Superintendents whose tenure in a rural district was less than three years made little to no impact on student achievement. Furthermore, the literature says that changing a superintendent is “a jolt to the system” (Miskel & Cosgrove, 1985, p.88), so with every change in the superintendent, the system has to start over. Student achievement drops in the first year after a succession event, especially when the superintendent is hired from the outside (Hill, 2005). Thus, a long-term commitment to the position is required if student achievement is to increase. The decision to take a rural superintendency is not about the career aspirations of a leader; it is about the academic achievement of the students served. Leaders cannot say “I do what’s best for kids” while making career decisions that negatively effect those children. Rural living is not a life style everyone can appreciate. Choose wisely.

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### Appendix

<b>Superintendent Tenure (M = 3.75 years)</b>	<b>External Succession Percentage Point Increase</b>	<b>School Size</b>	<b>Level of Aid</b>
2001-2008 (8)	4.43	large	moderate aid
2003-2012 (10)	4.90	large	moderate aid
2005-2012 (8)	9.38	large	low aid
2011-2012 (2)	10.50	large	moderate aid
2008-2010 (2)	12.60	large	high aid
2002-2006 (4)	3.00	large	low aid
2008-2010 (3)	11.00	large	low aid
2007-2011 (5)	7.00	small	high aid
2005-2007 (3)	9.17	large	high aid
2003-2011 (9)	14.89	large	low aid
2004-2005 (2)	9.17	large	moderate aid
2007-2012 (5)	13.47	large	high aid
<b>Overall Average Percentage Point Increase</b>	<b>9.13</b>		
<b>*Tenure = years in current position</b>			

<b>Superintendent Tenure (M = 3.14 years)</b>	<b>External Succession Percentage Point Decrease</b>	<b>School Size</b>	<b>Level of Aid</b>
2002-2009 (8)	-3.38	large	moderate aid
2010-2011 (2)	-7.13	large	moderate aid
2003-2007 (5)	-8.10	large	high aid
2011-2012 (2)	-14.50	large	high aid
2011 (1)	-17.00	large	high aid
2012 (1)	-8.00	large	high aid
2003-2007 (5)	-9.50	large	low aid
2011-2012 (2)	-9.00	large	low aid
2012 (1)	-1.00	small	high aid
2008-2012 (5)	-1.07	large	high aid
2010-2012 (3)	-9.42	large	moderate aid
2007-2010 (4)	-0.42	large	moderate aid
2010-2012 (3)	-10.25	large	moderate aid
2011-2012 (2)	-0.61	large	moderate aid
<b>Overall Average Percentage Point Decrease</b>	<b>-7.10</b>		
<b>*Tenure = years in current position</b>			

<b>Superintendent Tenure (M = 5.00 years)</b>	<b>Internal Succession Percentage Point Increase</b>	<b>School Size</b>	<b>Level of Aid</b>
2009-2012 (4)	5.32	large	moderate aid
2006-2010 (5)	12.40	small	moderate aid
2007-2012 (6)	18.17	large	low aid
2008-2010 (3)	16.00	large	high aid
2006-2009 (4)	1.25	large	moderate aid
2005-2012 (8)	27.88	small	low aid
<b>Overall Average Percentage Point Increase</b>	<b>13.50</b>		
<b>*Tenure = years in current position</b>			

<b>Superintendent Tenure (M = 2.80 years)</b>	<b>Internal Succession Percentage Point Decrease</b>	<b>School Size</b>	<b>Level of Aid</b>
2011-2012 (1)	-3.50	large	low aid
2010-2012 (2)	-10.50	small	moderate aid
2006-2012 (6)	-1.29	large	low aid
2011-2012 (2)	-7.82	large	high aid
2011-2012 (2)	-1.89	large	low aid
<b>Overall Average Percentage Point Decrease</b>	<b>-5.00</b>		
<b>*Tenure = years in current position</b>			