A DESCRIPTIVE ANALYSIS OF THE

PRINCIPALSHIP IN NEW JERSEY: 1996-2011

BY

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ABSTRACT OF THE DISSERTATION

A Descriptive Analysis of the Principalship in New Jersey: 1996-2011

MATTHEW GRISTINA

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Understanding how the behaviors and actions of building principals impact student achievement is a major goal of educational leadership, in which both direct and indirect factors exist. There is a wealth of research which focuses on the importance of school leadership and demonstrates that building level administrators are second only to classroom teachers in influencing student achievement (Leithwood, Luis, Anderson & Wahlstrom, 2004). Principals have many important roles to fulfill in order to establish a successful school. The significance of these roles has created an interest in the population of principals in recent years (Baker, Punswick & Belt, 2010). Despite this increased interest there has been little focus on the descriptive characteristics of the population of principals and the specific career paths of individuals in this position (Fuller, Young & Orr, 2007). Examining these characteristics and career paths may enable school and district leaders, as well as policy makers, to better understand and predict principal behavior and the needs of beginning principals. Conducting this analysis in New Jersey serves as an opportunity to closely examine the careers pathways of principals in general, and as it relates to the state sponsored induction program entitled New Jersey Leaders to Leaders (NJL2L). This study focused on providing a descriptive analysis of the principal workforce in New Jersey from 1996-2011. Principal descriptors included ethnicity/race, gender, age, salary and post-secondary educational attainment. The study also explored the career paths of New Jersey Leader to Leader Program participants and non-participants over a specific time period. Findings support the research reviewed and indicate that females and

certain minority groups are underrepresented in particular grade spans of the principalship. Additionally, certain ethnic groups have experienced growth in numbers within the position and there are salary gaps based on grade spans, gender, race and educational attainment. Cohort tracking revealed that the majority of principals retain the same job code after one year of service, the majority of principals experience a job code change after 4-5 years of service and the most common examples of a job code changes typically involve an increase in salary. When comparing the career paths of NJL2L principals to nonparticipants the data do not result in less frequent job code changes for beginning principals. Recommendations include examination of NJL2L program activities, further examination of the principal population according to these descriptors, including an analysis by county and district codes, and tracking cohorts, taking into consideration the descriptors explored, in order to identify additional trends and best predict the behaviors of New Jersey school principals.

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Understanding how the behaviors and actions of building principals impact student achievement is a major goal of educational leadership, in which both direct and indirect factors exist. There is a wealth of research which focuses on the importance of school leadership and demonstrates that building level administrators are second only to classroom teachers in influencing student achievement (Leithwood, Luis, Anderson & Wahlstrom, 2004). While earlier studies established the connection between educational leadership and student achievement, more recent work has helped to identify examples of how principals specifically influence teachers' actions and student achievement. Examining and analyzing these specifics regarding the principalship will continue to build a more in-depth understanding of how school leadership affects educational outcomes.

Principals have many important roles to fulfill in order to establish a successful school. They lead and develop the culture of a school, appoint faculty members, and set expectations for the quality of the learning environment. The significance of these roles has created an interest in the principalship in recent years (Baker, Punswick & Belt, 2010). While the position of school principal demands high quality individuals to move schools forward, the applicant pool for the position are dwindling among all school levels and settings. Studies have indicated that the stress created by increased demands and accountability measures within the position contribute to the decline in desirable and willing candidates. Other aspects of the job that contribute to a small candidate pool include lack of parental support, negativity of the media towards public schooling, inadequate salaries and time constraints (Whitaker, 2001).

Despite the concerns of increased demands, a shortage of qualified candidates and the need for principal support, there has been little focus on the descriptive characteristics of the

population of principals and the specific career paths of individuals in this position (Fuller, Young & Orr, 2007). Examining these characteristics and career paths may enable school and district leaders, as well as policy makers, to better understand and predict principal behavior and the needs of beginning principals. This knowledge would then be applied to better inform preparation programs and induction and mentoring programs for school leaders, resulting in more stable school leadership and better prepared school leaders.

As the state of New Jersey is no exception to the concerns raised over the position of school principal, it seems appropriate to perform a descriptive analysis of the principalship in this state in order to help inform local districts and the State Department of Education. Conducting this analysis in New Jersey also serves as an opportunity to closely examine the career pathways of principals in general and as they relate to the state sponsored induction program called New Jersey Leaders to Leaders (NJL2L). This program is a two year residency program designed to offer induction and mentoring opportunities to newly hired principals, and other individuals utilizing the Principal license, in an effort to reduce administrative turnover and better prepare individuals for the principalship. All new principals since July 2005 have completed this program.

A review of the literature revealed that there is a need to examine the principalship in New Jersey through an overall descriptive analysis and an examination of career pathways in order to better inform the existing induction program and suggest areas of focus for the program to concentrate on.

Research Questions:

This study focused on providing a descriptive analysis of the principal workforce in New Jersey from 1996-2011. Principal descriptors included ethnicity/race, gender, age, salary and

post-secondary degree attainment. The study also explored the career paths of principals and, in particular, described the career paths of New Jersey Leader to Leader Program participants and non-participants over a specific time period. The specific research questions for this study are indicated below.

1. How do the demographic characteristics of New Jersey school principals change from 1996-2011?

2. How can the career paths of new principals be described in New Jersey from 2003-2008?

3. Do the career paths of New Jersey Leaders to Leaders participants differ from the career paths of non-participants in the time frame 2003-2008?

Significance

This study may assist school and district leaders, along with policy makers, in the development of effective hiring practices of school principals. By developing a deeper understanding of the overall population of principals in New Jersey, district leaders will be better prepared to hire and retain effective building leaders. School district leaders have suggested that the role of the principal be reexamined in order to reduce the demands of the position. They have also called for the provision of ongoing support and mentoring of new and current principals. In order to increase the candidate pool school districts must develop teachers and assistant principals into capable leaders and must work closely with local universities and colleges to make sure there are qualified candidates for the position (Whitaker, 2001). The evidence examined in the review of the literature demonstrated the importance of school leadership in educational reform and student achievement, and suggested that it is important to invest in the

recruitment, development and evaluation of school leaders as a cost effective approach to successful schooling (Leithwood, Luis, Anderson & Wahlstrom, 2004). Examining cohorts of principals to identify differences in career paths may also help in the development of induction and mentoring activities for principals in the state of New Jersey. This may lead to revisions within the New Jersey Leaders to Leaders Program that will enhance the program experience and help develop and retain effective leaders.

State level data can certainly be used to analyze career paths but it does not provide the information needed to help address the intimate questions regarding the principalship today (RAND, 2004). As states, including New Jersey, begin to focus on analyzing the performance of principals as it relates to student achievement, the analysis of state level data will become increasingly important. This study will demonstrate the value of data which is collected on school leaders. It may also introduce the benefits of examining and tracking principal descriptors and career paths in relation to principal evaluation, which is now being linked to student achievement and teacher performance through the New Jersey Department of Education's AchieveNJ reform agenda.

Limitations of the study

The findings of this study are limited by the quality of data. The data used from the New Jersey Department of Education Fall Reports included staff information, but did not include any unique identifiers for these staff members. In addition, participation in the NJL2L program was assumed based on the job codes provided in the fall report data for each year examined. Although the researcher reviewed and corrected the data sets, the final data used may not include

all valid individuals who belong to each cohort. The study is also limited because it only examines a limited number of years. Any conclusions are solely based on data from the time period of the cohorts examined. In addition, other cohorts of principals that were not examined may exhibit different patterns of employment history. The researcher made no effort to examine why particular members of a cohort decided to stay or leave a position. The study is limited by this factor, as moves within the data set may or may not be a result of induction activities. Also, coding during the cohort tracking did not address individuals who may have experienced multiple job code changes over the time period examined. While tracking principals as compared to their original cohort year, individuals were coded for their first change in job code. Any additional codes for those individuals were not addressed. Conversely, while conducting the cohort tracking as compared to the previous year multiple changes in job code were included in the coding. Lastly, this study is limited to the particular induction program examined within New Jersey. The results of this study may not extend beyond New Jersey.

CHAPTER II

REVIEW OF THE LITERATURE

Literature Review Process

The review of the literature focused on the main areas of research which relate to the goals of the study. The importance of principal leadership was investigated in order to frame the direction of the research questions. Research surrounding the principal descriptors utilized in this study was also examined, along with principal career paths and factors affecting principal turnover. Lastly, the general components of principal induction and mentoring were examined. Various sources were reviewed in order demonstrate the relationship between effective principal induction and reduced turnover in leadership, and to specifically describe the New Jersey Leaders to Leaders Program. A multi-step approach was utilized to conduct the literature review. Major databases such as ERIC and ProQuest were searched for relevant sources. Sources were read, summarized and coded by topic, type of research and application to this study.

Importance of Principal Leadership

There is an increasing recognition among researchers in the field of educational administration that the school principal is the key person in improving the quality of schooling (Kitavi & Westhuizen, 1996). The body of research focusing on the significance of the principalship, as related to effective schooling, has grown over the years. Additionally, improvements in research methodology have resulted in increased evidence indicating that principals impact student learning and achievement (Fuller, Young & Orr, 2007). Evidence regarding how leadership influences student learning suggests that school leadership is second

only to classroom instruction in increasing student achievement (Leithwood, Luis, Anderson & Wahlstrom, 2004). Although the research strongly supports the role of a building leader, the degree to which leadership can positively impact student achievement is usually largest when and where it is needed most, as there are very few instances of struggling schools being significantly improved without direction from an influential leader. In addition, this impact on student learning may be direct at times, but is most notable through a leader's indirect influence on other people in the educational organization (Leithwood, Luis, Anderson & Wahlstrom, 2004).

Principal behaviors, characteristics, and other variables related to their role, such as selection of teachers, efficiently operating a building, controlling the curriculum and academic program of study and setting academic school goals, have been demonstrated to influence student achievement (Brewer, 1993). For example, Clotfelter (2006) found that a principal's leadership rating, as determined through a teacher workplace conditions survey, has a positive effect on student proficiency levels in elementary and high school, with students earning five percentage points higher in schools run by principals with a high leadership rating. In addition to a leadership rating, which may account for certain principal behaviors, a principal's attendance at a competitive institution seems to be moderately related to increased student performance at the middle and high school levels (Clotfelter, 2006). Principals who exhibit high leadership ratings were also found to be better able to reduce teacher turnover by approximately 2.6% and were better equipped at attracting stronger teachers, as demonstrated in their test scores and teacher practice (Clotfelter, 2006). In addition to these areas of focus, there exists other, more complex, areas of principal leadership, such as the mentoring of students and teachers and serving as a role model within the school, that remain unexamined as factors influencing student achievement

(Brewer, 1993). Hallinger and Heck (1998) concluded that principals have a measurable effect on school effectiveness through student achievement and further explained that principals accomplish this by influencing several key areas of the organization, including people, purposes, goals, structure of social networks and culture. These key areas help to identify behaviors and actions related to efficient leadership and fall under the two essential objectives of leadership which are, helping an organization set a direction and influencing members of the organization to move in that direction (Leithwood, Luis, Anderson & Wahlstrom, 2004).

Teacher Selection and Development

An example of a function that is more directly related to student achievement is the principal's selection of teachers and teacher development and motivation. Effective principals are more successful in recruiting, developing and retaining high quality teachers (Clotfelter, 2006). The ability of a principal to hire and work towards retaining highly effective teachers is one of the most influential responsibilities of administering an effective school (Papa, Lankford & Wyckoff, 2002). In this role specific principal characteristics can affect school culture and the overall effectiveness of the teaching staff. Brewer (1993) determined that higher student outcomes stemmed from schools in which the teaching staff was comprised largely of staff members appointed by principals with high standards. Baker and Cooper (2005) explored principals' undergraduate educational background in relation to the teachers they hired and found that principals who graduated from more selective colleges were more likely to hire teachers with a similar educational background. These studies indicate that the attributes of a particular school leader are reflective of the team of teachers within a school.

Although tenure, seniority rules, and the presence of local politics sometimes place limitations on the hiring power of a school leader, principals are often able to strongly influence, or directly select, teachers that they wish to work with. Strong relationships are created with teachers that principals hire directly and, in addition, relationships with existing staff members strengthen over time allowing the principal to increase the overall quality of the staff (Brewer, 1993). The development of staff members is as important as the selection of individuals to work in the organization. Motivation to work hard within the organization is often influenced by direct exposure to people in leadership roles. Leaders help develop individuals by offering intellectual stimulation, providing individualized support and supplying models of best practice that are aligned to the overall mission of the organization (Leithwood, Luis, Anderson & Wahlstrom, 2004).

The principal is also responsible for influencing teacher development through the process of making decisions around the topic of teaching assignment and experience within a mentoring or induction program. The building level administrator typically chooses a mentor for a teacher and assigns them to a grade level and team in which they feel they will experience success. Providing a structure for new teachers to meet with their mentor and attend grade level meetings is also driven by building leadership (Youngs, 2007). These are strong examples of how a principal's actions may influence new teachers and it is noted in the research that principals draw from their professional background, leadership beliefs and theories regarding induction and teacher evaluation while assisting these new teachers in these areas (Youngs, 2007).

Vision and Goal Setting

A second direct function of the principalship that positively impacts student achievement exists in the role of setting building level goals to help motivate teachers. Being able to transmit a vision to staff and parents that includes clear academically oriented goals influences student achievement (Brewer, 1993). Evidence suggests that setting a direction for an organization accounts for the largest proportion of a leader's impact on the organization (Leithwood, Luis, Anderson & Wahlstrom, 2004). Developing a vision creates a sense of purpose within the organization and helps members make sense of their work. In addition to articulating a vision, leadership practices in this area may include fostering group goals, setting high expectations, monitoring performance and promoting effective communication (Leithwood, Luis, Anderson & Wahlstrom, 2004). Goal setting also is related to the important role of teacher selection previously discussed, as establishing academic goals within the full faculty can take place through the hiring process or by facilitating consultation sessions. Principals who are able to hire teachers will naturally gravitate towards individuals who share their goals and vision. Principals who are limited in their hiring power may choose to establish a vision by facilitating goal setting sessions with existing staff in order to create a coherent school mission (Brewer, 1993).

Conveying a school's purpose, building consensus and developing the substance of the school's mission are important activities that influence school outcomes (Hallinger & Heck, 1998). These activities are also noted to be stronger predictors of school outcomes than managerial activities like time management (Hallinger & Heck, 1998). Setting goals around topics rather than more general themes, such as increased student achievement, was found to be a strong predictor of school outcomes. Examples of these more specific topics include emphasis on

citizenship, personal growth, study skills, and building staff consensus regarding educational

goals (Hallinger & Heck, 1998).

Hallinger and Heck (1998) also note that goal setting exists in two realms for principals.

Goal setting in the instructional leadership model is used to provide a focus to staff members and

students by narrowing activities in order to best increase student achievement. Within this realm

principals may choose to provide explicit goals to a staff in a controlling fashion, or they may

choose to establish goals in a general format by asking teachers to call upon their experience

within the classroom in order to meet an established expectation. This difference in approach

seems to be based upon school characteristics such as the socioeconomic status of the students.

The second realm in which goal setting becomes an important vehicle for principals is within the

transformational leadership model. This model stresses the importance of setting goals for

personal and professional growth rather than specific goals tied to student outcomes. Principals

who are able to stimulate teachers and work towards having a group of teachers commit to a

common cause excel in this area and can increase the overall capacity of a faculty (Hallinger &

Heck, 1998). This transformational leadership model extends from goal setting to the area of

enhancing social structures within a school. Higher producing schools have been found to

involve a variety of stakeholders, including parents, in the decision making process. Principals

who employ the transformational leadership model efficiently are able to promote participation

in decision making (Hallinger & Heck, 1998).

The implementation of the transformational leadership model also lends itself to the idea

of strengthening school and district culture as a way to positively impact student achievement.

Organizational conditions can distract teachers from their goals and erode the intrinsic

commitment teachers have to their students (Leithwood, Luis, Anderson & Wahlstrom, 2004).

Effective leaders can impact the culture within a building to best support and sustain the performance of teachers and students. Effective school leaders are able to change organizational structures and build collaborative procedures that match the ever-changing school improvement agenda and facilitate the work of the organization (Leithwood, Luis, Anderson & Wahlstrom, 2004). The ability of a principal to understand what motivates people is heavily relied on while developing group goals and school level goals. Social interactions within the school community are crucial to successful leadership. Principals must be able to model behavior, provide motivation and individualized support, and provide recognition in order for leadership to influence teacher perception of progress and increase student outcomes (Hallinger & Heck, 1998). These social interactions also speak to the development of a school climate, which may encompass consistent beliefs and values within a school and, in turn, may impact the instructional program, policy and student or staff related outcomes (Hallinger & Heck, 1998).

Curriculum, Instruction and Learning

As the instructional leader within the school the principal is responsible for the direct monitoring of instruction and serves as the primary source of assistance to the teaching staff (Angelle, 2006). In addition, principals have an indirect impact on student learning through policy setting activities and by engaging teachers in the understanding of such policies, but they are also able to more effectively impact areas such as curriculum and instruction by emphasizing what they feel is important to teacher practice (Printy, 2008). For example, a principal that stresses the use of data to inform instruction during grade level meetings can influence teacher practice around this topic and establish collaborative practices (Printy, 2008). In addition to prioritizing and speaking about certain instructional concepts, principals also have the ability to closely observe and manage what occurs in the classroom.

The concept of the principal as an instructional leader is linked to student achievement through the idea of the principal supervising teacher instruction and directly controlling curriculum (Brewer, 1993). School leaders also engage themselves in the area of curriculum and instruction by focusing teachers, creating an environment conducive to instruction and by scaffolding teachers' learning in a community setting (Printy, 2008). Although the role of instructional leader is often in conflict with the building based duties of the principalship, it is clear that developing academic programs, evaluating teachers and influencing graduation requirements are powerful ways to control what goes on in the classroom.

The importance of principal leadership is well established in the literature and covers many facets of the principal's job description. Goal setting, staffing, and instructional decision making are all roles of the principal that impact student achievement. With the foundation of the importance of school leaders developed, one must look towards principal descriptors and career choices in order to better understand the dynamics of the position, and school organizations, as they relate to student achievement.

Principal Descriptors

There are a wide variety of descriptors to consider when analyzing the principal population. Examples include age, ethnicity/race, education level, gender, salary, years of experience, and previous positions held. Very few studies exist that closely examine the position of principal in a detailed manner. One such study examined the principal workforce in Wisconsin and not only provided a descriptive analysis of the population, but also described the career pathways of principals over a period of time (Clifford, Condon, Greenberg, & others, 2012). Findings from this study indicate that there is little fluctuation in principal age over the time

period examined, minority and female principals are underrepresented within the principalship, there is a narrowing of the gender and minority gaps over the time period examined, most new principals were teachers right before becoming principals and did not serve as an assistant principal, principals serving in high poverty areas have a higher than average turnover rate and fifty percent of principals remained in the principalship over the ten year time span examined (Clifford, Condon, Greenberg, & others, 2012).

Another study analyzed secondary principals within the Unites States in order to describe the population using descriptors such as ethnicity/race, educational degree, salary, and hours worked per week (Battle & Gruber, 2009). Findings from this study indicate that the majority of principals were white, approximately eight percent of principals held a doctoral degree, principals in secondary positions earn more than principals in elementary positions, and on average, principals work 58.4 hours per week (Battle &Gruber, 2009). These studies highlight some of the more common descriptors used in principal workforce studies and the researcher chose to utilize a number of them while conducting this study in order to present findings that align to current research involving principal populations.

Gender based inequities have been examined in several studies and have highlighted differences in salary and access to secondary principal positions. Zheng and Carpenter-Hubin (1999) concluded that females made significant gains in accessing school administrator positions between the years of 1984-1994, however it is noted that these gains are not enough to offset the gap between grade span distributions, particularly at the secondary level. This study also indicated that female principals are less likely to be paid as much as their male counterparts. Kaparou and Bush's (2007) study of female secondary principals in Greece confirmed these findings and concluded that women are underrepresented in the secondary principalship. The

mains reasons cited for these disadvantages are covert discrimination, stereotypical behaviors and personal and social constraints within defined roles.

Eckman (2004) concluded that the lack of female representation within the population of high school principals can be explained in several ways. The existence of the "good old boys" club was one potential barrier to entry into this position. The high school principalship, as well as the superintendency, tends to be male dominated and the male to male connective network often identifies potential candidates for vacant positions through this established network. At home responsibilities were also identified as a barrier to the high school principalship. The balance of work and home responsibilities becomes more difficult in the high school principalship and the principalship in general. In addition, the lack of female mentors was identified as a potential obstacle to females trying to enter the principal population. Mentors may play a role in the identification of potential candidates and without equitable female representation the "good old boy" network can potentially push more male candidates forward than female. This rationale may also be applied to the interview process. Administrators selecting candidates and interview teams must have equitable female representation (Eckman, 2004).

This male dominated network of existing principals may further contribute to a gender gap within the position through the process of tapping. Myung, Loeb and Horng (2011) refer to tapping as an informal recruitment process in which existing administrators encourage teaching staff members to pursue administrative careers. The study concluded that teaching staff members are more likely to pursue an administrative career when they are tapped by a superior. The study also found that principals are more likely to tap males and individuals who share their ethnicity.

Lee, Smith and Cioci (1993) also recognize the gender gap within the principalship. Their study indicates that ninety percent of secondary principals in the 19080's were male, while approximately half of the teachers are female. The authors argue that this is a statistic that must be addressed. Men assess women as competent leaders when they gain experience working with women. In order for men to have a greater exposure to women in the principal role there needs to be a greater number of women in school leadership positions (Lee, Smith & Cioci, 1993).

Salary is another descriptor that can be examined through the lens of gender, as well as through ethnicity/race and grade span. An investigation of principal salaries in 2008-2009 confirmed that high school principals are consistently paid higher than their counterparts at other grade spans (Cooke & Licciardi, 2009). Additionally, male principals are typically paid more than female principals, although the salary differential tends to be rather small (Pounder, 1988). These differentials have decreased over time and educational reform agendas have provided females and minorities more access to academic training and the principalship (Oberman, 1996). This access is important to examine as studies such as Tresslar's (2010) work on principal ethnicity and student achievement indicated that descriptors such as ethnicity of the principal are related to the percent of students receiving free or reduced lunch. Principal ethnicity was also found to be related to type of community, accountability rating, and years of teacher experience (Tresslar, 2010).

Post-secondary education, particularly attainment of a doctoral degree, is another example of a indicator used to describe the principalship. The doctoral degree in education has evolved to include options of Ed.D and Ph.D. programs in selected institutions. Guthrie (2009) submits that the job of the school principal demands that graduate schools offer an Ed.D. as a practitioner's degree because a single doctoral track issuing a Ph.D. is no longer appropriate.

Administrators are now required to have a specific and complicated skill set in order to be effective practitioners and the research skills emphasized in a traditional Ph.D. program do not translate to the demands of the job (Guthrie, 2009). Zirkel's (2012) article on doctoral programs in educational leadership echoes this perspective and speaks to the duality of the Ph.D. and Ed.D. programs within the field. The concern regarding the skill set needed for the principalship and the completion of a doctoral degree as an indicator of preparedness helps identify this as an another attractive component of a descriptive study.

Principal Career Paths

In exploring the research that exists on principal career paths and factors contributing to principal turnover it is apparent that most of the current research is qualitative in nature. There are few quantitative studies, and most do not utilize large scale data sets. Topics that have been examined include pathways to the principalship, principal characteristics, and factors associated with leaving teaching to pursue administration (Baker, Punswick & Belt, 2010). Today most administrators ascend to their positions through the teaching ranks (RAND, 2004), and a teacher's decision to leave the classroom and pursue a career in educational administration typically occurs within the first five to seven years of their teaching experience (Fuller, Young & Orr, 2007). Other individuals have the opportunity to serve as a teacher on special assignment and are exposed to the duties of a school administrator in order to help identify whether or not they are interested in an administrative position. This approach not only provides a breeding ground for districts to identify future leaders, but also helps to build a culture of shared leadership within a school building (Hix, Wall & Frieler, 2003).

Fuller, Young and Orr's (2007) study of principals in Texas provided several conclusions regarding individuals who pursue the principalship and the career paths of individuals that enter the position. The study noted that approximately six percent of teachers obtain principal certification within ten years of employment as a teacher. Almost ten percent of males obtain the certification and numbers indicate that minorities are well represented within this group (Fuller, Yong & Orr, 2007). The data also indicate that teachers decide whether or not they will pursue administration within their first five to seven years of teaching. The researchers note that this information is important for administrators looking to identify potential leadership candidates. The study also indicated that middle and high school teachers are more likely to pursue the principalship, and within these ranks physical education teachers were 50% more likely to pursue administration than other teachers (Fuller, Young & Orr, 2007).

The Texas study also examined populations of individuals who were granted employment as principals. Results indicate that males were more likely to be hired for the position and in particular, Hispanic males were more likely to be hired than their white or African American counterparts. The authors explain that this may be a result of the growing Hispanic population in the state of Texas. The authors also found that individuals scoring in the top 10% on the state certification exam are more likely to become principals. In addition to being granted employment, the Texas study examined the continued employment and career paths of individuals in the position. Nearly 50% of the principals left the position within the first five years of employment. An analysis of career paths indicates that most attrition represents individuals leaving the Texas public school system and only a small percentage of individuals experiencing a change in position, within the Texas system, over a ten year period (Fuller, Young & Orr, 2007). Lastly, the Texas study examined the three year retention rate of new

principals. The retention rate at the same school was extremely low with about 50% of principals at the same school after three years. This number decreases as the economically disadvantaged population increases. The retention rate also decreases at the high school level. Although females were more likely to leave the principalship overall, they were found to have a greater three year retention rate at the same school (Fuller, Young & Orr, 2007).

Similar findings are outlined in Baker, Punswick and Belt's (2010) study of principal moves and departures in Missouri. Conclusions from this study indicate that over an eight year period elementary school principals spend about 65% of their time in a single school, with high school principals averaging slightly more and middle school principals slightly less. Within a given population of starting principals, approximately half of them are no longer principals after about five years. In addition nearly 75% of these principals made at least one move to another Missouri school. The authors also conclude that the principals in the Missouri study appear comparable in stability to the Texas principals in the Fuller, Young and Orr study (2007). This study also identified student populations with instable leadership and linked relative salary to principal retention indicating that principals with higher salaries appear to stay longer in a particular school (Baker, Punswick & Belt, 2010).

Additional conclusions regarding the career paths of principals are explored in Papa, Lankford and Wyckoff's (2002) study of New York State principals. In this study cohorts of new principals were tracked in the years 1990, 1991 and 1992. The cohorts were followed for six consecutive years. Only 34% percent of these principals were in the same school that they started in six years later. About 16% of these individuals transfer to positions in other school districts. In addition, New York City principals are 60% more likely to leave the New York public school system within six years of becoming a principal than principals outside the city

district. This large discrepancy may be explained by age, as beginning city principals are significantly older than suburban principals in New York. The data also indicate that principals that transfer out of the city move towards schools with higher test scores, less students receiving free or reduced lunch, and teachers with better qualifications (Papa, Lankford & Wyckoff, 2002).

Another significant finding of this New York State study regarding principal career paths includes the recognition of a large pool of young individuals who are certified to respond to the increased demand for new principals due to retirements. Although the number of qualified individuals exceeds the need, there is a sense that there is shortage of qualified candidates. The authors contribute this idea of a shortage to the lack of qualified individuals who move towards becoming a principal due to the increased demands of the job compared to the salary for most beginning principals (Papa, Lankford & Wyckoff, 2002). Additionally, Papa, Lankford and Wyckoff (2002) noted that when comparing urban and non-urban school leaders, urban principals were more likely to follow a non-traditional career path to administration and come from lower ranked institutions.

The impact of educational institutions attended extends further as there is a large difference in the career path of principals grouped by the ranking of their bachelor degree institution. This difference in career path is also represented in the urbanacity of particular regions. These factors contribute to the overall principal turnover problem involving approximately two thirds of new principals leaving their school within the first six years of the assignment. This positional turnover makes it increasingly difficult to make cultural changes at the school level that will have a positive impact on student achievement (Papa, Lankford & Wyckoff, 2002).

Recent research has also provided information regarding the turnover of principals. A RAND study (2004) indicated that the turnover rate for school leaders was 14%-18% in Illinois and North Carolina. Fuller, Young and Orr (2007) presented information indicating that 50% of principals left the building level position within five years. Fuller, Young and Orr (2007) and Clotfelter, Ladd, Vigdor and Wheeler (2006) also found that schools with higher levels of poverty experience increased turnover within the principalship and have the least experienced principals. These indicators demonstrate the need to further examine the factors that may contribute to principal turnover within a school.

<div align="center">**Factors Affecting Principal Turnover**</div>

Principal turnover has long been linked to problems with student achievement at the school level. A study conducted by Griffith (1999) provides a relationship between school configuration and change in principal. This study concluded that schools that experienced a principal change had more students which were new to the district or school, more economically disadvantaged students, and slightly lower test scores. Students and parents also perceived these schools as being less orderly and less disciplined. Parents also reported lower levels of participation in the schools which experienced a principal change. All of these results contributed to the conclusion that schools that experience a principal change had a somewhat predictable school configuration associated with poor student achievement (Griffith, 1999).

In addition to a predictable school configuration, there exists other factors that may contribute to the turnover of a principal within a school. An Illinois study conducted by DeAngelis and White (2011) involved tracking principals over the course of a seven year period, 2001-2008, in order to determine individual moves and examine principal turnover. The study

identified principals in five categories; stayed in same school as principal, moved to another school in the same district, moved to another school out of district, moved to a non-principal position within the district, or left the district completely. Some of the general conclusions of the study point to the fact that principal turnover is increasing and principals generally move in an effort to lead a higher achieving school. In regards to factors contributing to principal turnover, the study concluded that accountability pressures have a negative impact on principal stability, citing AYP status being related to principal turnover. Schools that made AYP had significantly lower odds of losing their principal. In addition, schools with higher percentages of non-highly qualified teachers had a significant greater chance of experiencing a principal move. This demonstrates that student achievement and teacher qualifications contribute to principal turnover (DeAngelis & White, 2011).

The increased principal turnover rate in Illinois has created a dependence upon younger principals who enter the position. Results of the study indicate that as many as three out of ten principals leave the position for a non-administrative position, which may indicate that they feel unprepared for the role of the principalship. This suggests a need to better understand the preparation and selection process of principals and also examine the induction process of these new principals (DeAngelis & White, 2011).

The mobility of elementary leaders is examined in Akiba and Reichardt's (2004) study based in Colorado. This study concluded that female and minority groups generally had higher attrition rates than male and non-minority groups. The study also found that school size and salary were associated with the attrition of both male and female leaders. Large schools had higher rates of attrition and leaders who expected relatively higher salary increases by transferring were more likely to leave their schools. In females, lower school achievement

impacted attrition as well (Akiba & Reichardt, 2004). This link to student achievement is also explored in a study by Beteille, Kalogrides and Loeb, (2011) in which principal career paths are compared to school outcomes. Findings indicate that principals tend to prefer working in schools with higher achieving students and higher socioeconomic backgrounds. The study also concludes that principals tend to use schools with low achieving students as a stepping stone to more desirable assignments. The study explains that district leadership can often increase principal turnover in an attempt to address low achievement. An example of this would be rotating principals to different schools. Lastly, findings indicated that principal turnover was detrimental to school performance and results in lower teacher retention and lower student gains (Beteille, Kalogrides & Loeb, 2011).

A study based on turnover rates of principals within the Chicago school system builds on these findings and identifies the bureaucracy of central office as a contributing factor to the frustrations of the job and turnover rates (Oberman, 1996). Principals who were interviewed for this study labeled central office as the greatest obstacle to school reform and identified other central office functions such as budget cuts and teacher transfers as contributing factors to their decision to leave the position. In addition, principals pointed to school reform as forcing them to become involved in the politics surrounding education. Based on the interviews, this political role was not interesting to the principals, and they felt unprepared to deal with that particular aspect of the job. Lastly, the principals who were interviewed pointed to the inability of the local leadership councils to agree and move in one direction. Being pulled in different directions was detrimental to the school and to the individual principals (Oberman, 1996). In this particular study the most overwhelming sources contributing to principal turnover were identified as the

overall burden of the job and the retirement package that was being offered by the Chicago

School District at the time the study was conducted (Oberman, 1996).

Role of Induction Programs

In order to meet the challenges of a modern day school administrator, effective leaders

need continued support and guidance to develop the skills necessary to be a success within the

field (Ehrich, Hansford & Tennet, 2003). Effective building principals are expected to manage

the building, be instructional leaders, and establish a positive school culture (Fullan, 1999).

Research indicates that most "rookie" principals could benefit from participating in a well-

structured and properly implemented induction program, especially if the program varies

according to district size and resources available (Andrews, 1989). Unfortunately, most new

school principals are hired into a sink or swim environment in which they are expected to

perform the duties of an experienced principal with little or no guidance or induction to the job

(Anderson, 1991).

Although there is, traditionally, a lack of formal support for newly hired principals,

research does suggest areas in which a school district can focus in order to build and develop a

comprehensive administrative induction program. Some of these areas include orienting

principals to the district and school, assigning a mentor to newly hired principals, monitoring the

workload of new administrators, providing frequent and meaningful feedback to new principals,

planning for professional growth, and focusing on peer problem solving. If central office

representatives within a district, including the superintendent, are able to focus on these areas

while developing induction activities for newly hired principals, their chance for success is greatly increased (Anderson, 1991).

Although induction and mentoring programs are common for teachers they are not as common for administrators, and in the absence of these programs it becomes increasingly important for teachers to explore a leadership role before committing to a graduate program or a formal administrative position. Schools and principals that provide this type of informal training produce a mechanism to develop and identify in-house leadership candidates, and also successfully create a culture of shared responsibility and leadership within a school building. (Hix, Wall & Frieler, 2003). This form of mentoring is also a crucial component to formal induction programs designed for newly hired school administrators. Within these induction programs, mentoring is beginning to become one of the major components of an effective program (Daresh 1987). Daresh (1986) described mentoring programs as helpful in developing new insight into the profession and found it reduced isolation within the position and helped build a collegial network for new administrators.

Isolation is one a several problem areas for new principals. The sink or swim environment that many new principals experience is just the opposite of the collaborative environment that most principals tend to come from in education. Technical problems such as learning specific procedures and protocols and learning various technical programs are also a key area of concern for new principals. Lastly, new principals experience a need to properly socialize into their new environment and a need for feedback over the course of their first year as principal. These areas, and others, demonstrate the need for induction programs for new principals (Anderson, 1989). In addition to supporting the implementation of induction programs to assist in these areas, research suggests that the school district also has a distinct role in the

induction of new principals. Orienting new principals, instituting a buddy system, structuring the beginner's workload, providing feedback, developing professional growth plans and facilitating reflective activities are all identified as activities that a school district can implement in order to ease the transition to the principalship (Anderson, 1989).

The Needs of New Principals

The needs of new principals are unique and induction programs must be developed in a well-informed manner in order to meet the distinct needs of these individuals. Daresh (1987) suggests that the needs and concerns of beginning principals may be found in three areas, problems with role clarification, limitations on technical expertise and difficulties with socialization to the profession and individual school system. Daresh suggests engrossing graduate students in activities that better mimic the life of a principal in order to replicate the role of an instructional school leader. Issues in the area of technical expertise should be handled with focused and targeted training for new administrators. This type of training may be provided directly by the school district or by a third party (Daresh, 1987). Trainings covering these areas have certainly grown to become important components of most induction programs. Daresh also concludes that socialization issues must be addressed through the use of a buddy system or in-house mentor. This mentor would help explain procedures and organizational rules that arise while on the job but may not be found in policy (Daresh, 1987).

Erlandson (1994) posits that there are distinct and necessary skills that every new principal needs. New principals must be able to master interpersonal skills in order to best lead a human organization. Conflict resolution, the ability to effectively communicate and delegation are examples of interpersonal skills that are identified as important to new principals. Erlandson

also explains that news principals must have a working knowledge of curriculum and instruction and must be able to offer alternatives to curriculum and learning theories in order to best manage a building. The other areas of need that Erlandson (1994) identifies cover the analysis of student and school data and measurements of achievement, efficient operation of a school building, coordination of resources and time, and a comprehensive understanding of school law relating to personnel (Erlandson, 1994). With these needs in mind Erlandson recommends several ways to best support new principals. Pre-service preparation is noted as an area of concentration to include such topics as curriculum and instruction, data analysis, evaluation of personnel and legal matters. A focus on the development of interpersonal skills is also stressed. Lastly Erlandson suggests that a mentoring system be in place for new principals in order to support ongoing growth throughout the beginning stages of the principalship (Erlandson, 1994).

It should be noted that there exists a discrepancy regarding the perceived needs of new principals from an aspiring and practicing administrator's viewpoint. Daresh and Playko (1992) were able to identify these differences by asking aspiring and practicing administrators to complete a questionnaire in which they identified aspects of the principalship as important or unimportant. While practicing administrators believed important interpersonal and socialization skills were most important, the aspiring administrators believed managerial and technical duties were most important to the role (Daresh & Playko, 1992). This discrepancy suggests a need for change at the pre-service, induction and ongoing in-service levels of the profession. It also suggests that we should continue to monitor the duties of the principalship in an effort to ensure university based preparation programs are continually serving the needs of aspiring administrators.

There are numerous activities which would constitute an effective induction and mentoring program for principals. Elsberry and Bishop (1993) identified thirteen induction practices considered by first year principals in Alabama, Mississippi, and South Carolina to be the most effective for success in their role. Some of these practices included summer conference events, mentoring by a veteran, orientation by outgoing principal, collegial observations and feedback, and a collegial support group. This need for induction programs and mentoring activities is a consistent finding in studies regarding the needs of new principals, and these findings extend across the globe. In a study focused on the problems that new principals face in Kenya, Kitavi and Westhuizen (1996) concluded that principals need intense pre-service training focused on technical support and guidance in the area of socialization. Induction programs for first year principals should include workshops, seminars, conferences, feedback and evaluation. Mentoring is also identified as an important, and cost effective, piece of a comprehensive induction program for new principals in Kenya. Other suggested components of induction programs included the provision of manuals to help learn policy and regulation, interviews with the outgoing principal, school visitations, networking and shadowing other successful principals (Kitavi & Westhuizen, 1996).

Areas of Focus for Induction Programs

There is a wealth of research that helps to identify areas of focus for induction programs for new principals. Elsberry and Bishop (1993) conducted a study involving the perceptions of first year principals in three southeastern states regarding induction programs and were able to identify topics that were ranked as important for inclusion in induction programs. These topics included goal setting and planning, organizing routines, instruction and curriculum, and school finance and business management. The study also pointed out that these are areas that are not

typically assigned to vice principals or assistant principals, which also contributes to the lack of experience new principals have in these areas (Elsberry & Bishop, 1993).

This study also identified practices within induction programs that new administrators felt would be most effective in meeting their needs. Mentoring and learning the informal ropes through a veteran were both identified as useful activities. Attendance at a summer conference was also identified as a worthwhile activity for new principals to engage in. Lastly, the study indicated a contradiction in what new principals found to be valuable activities within the induction program and what activities were actually being implemented. In-service workshops seemed to be the most common activities and were viewed as the least valuable by new principals. In addition, engaging in social experiences with other new principals was a common activity and was ranked 15 out of 18 in terms of effectiveness by the new principals (Elsberry & Bishop, 1993).

In addition to the areas of focus previously discussed, there is research that indicates that principal preparation programs should focus on better preparing principals to be able to identify, recruit, select and retain qualified staff. The results of a study by Fuller, Young and Baker (2011) suggest that teacher qualifications are significantly associated with gains in student achievement and offer that this association may suggest a more direct way for principal preparation programs to increase student achievement. Preparing principals to recruit, hire and retain well qualified staff is an important component of principal preparation and induction (Fuller, Young & Baker, 2011).

Ricciardi and Petrosko's (2000) study of Kentucky's Principal Intern Program (KPIP) focused on the perceptions of first year administrators and their professional growth needs as it

relates to their responsibilities and preparation. Results of this study revealed that new administrators spend very little time working on curricular and instructional issues and more time dealing with discipline and other non-instructional tasks (Ricciardi & Petrosko, 2000). Assistant and vice principals in particular have very little exposure to instructional and curriculum related tasks. The study also noted that vice and assistant principals had a difficult time fulfilling the internship requirements in the areas of instruction and curriculum and explained that vice and assistant principals need to be assigned more responsibility in these areas if the positions are to serve as a training ground for the principalship (Ricciardi & Petrosko, 2000).

Internship participants also reported that they feel most prepared to deal with student discipline and least prepared to handle school finance. The study explained that the need for exposure and experience in the area of school finance should be addressed during the vice principalship in addition to the principalship. Vice principals are routinely unexposed to school finance during the KPIP program and this hinders these individuals as they become principals and are not required to complete KPIP activities in their new position as principal (Ricciardi & Petrosko, 2000). Findings of the Ricciardi and Petrosko study (2000) also indicate that the KPIP program should be extended to two years instead of one. This supports the need for induction programs to extend past the first year of employment within a position in order to provide continued opportunity for professional growth.

A separate study of the Kentucky Principal Intern Program was conducted by Ricciardi in 2000 and focused on exploring job assistance offered in the first year of employment. The findings echoed that of the study previously discussed, noting that the KPIP program was extremely helpful to new elementary principals who had no experience other than teaching.

There is also a concern over teachers moving into the ranks of administration with as few as six year of teaching. The study suggests that this population of principals be tracked carefully in order determine if the lack of prior work experience hinders their performance as new administrators (Ricciardi, 2000). This study also supports the claim that new administrators spend very little of their day on curriculum and instruction related issues. Of particular concern is the amount of time assistant principals spend on student discipline. If the assistant principalship is to be a training ground for principals the position must include duties and opportunities for growth in the areas of leadership, vision building, and instruction. Without the inclusion of these areas principals will continue to be ill-equipped as they ascend from the ranks of the assistant principalship (Ricciardi, 2000).

Although the KPIP program fails to provide sufficient opportunity to expose novice administrators to the areas of curriculum, instruction, assessment and leadership, it does provide ample opportunity for new principals to become socialized in their role as school administrators. Participants report the relationships fostered through the program by central office are invaluable. This suggests the importance of mentoring in a well-developed induction program. The mentoring component of KPIP is viewed as successful and valuable to participants and mentors within the program, and although mentoring is identified as a complex process with various obstacles, it is an important part of the induction process for novice administrators (Ricciardi, 2000).

Mentoring

Mentoring of new principals is generally accepted as an important aspect of transitioning to the principalship (Coleman, 1996). A majority of states in America currently have laws which

require mentoring to be part of the induction process for beginning principals. These mentoring programs typically go beyond university and college-based preparation and also assist in the socialization of new principals to the field of administration (Daresh, 2004). Individuals who complete a mentorship program as a new administrator report that they have more confidence regarding their professional responsibilities and are better able to transition from educational theory into educational practice (Daresh, 2004). Increased communication skills have also been attributed to the completion of a mentoring program, as interactions with experienced principals and administrators fosters a sharing of opinions and avoids isolationism. Protégés have also reported that they are able to learn some of the everyday survival skills from experienced principals. These tricks of the trade can often have a large impact on the success of a new principal. New administrators also express that participating in a mentorship program creates a sense of belonging within the new organization. A mentor's supportive behavior suggests to a newcomer that he or she will be taken care of in the school or district (Daresh, 2004).

High quality mentors typically exhibit the ability to listen intently, are generally enthusiastic, have experience in the field, provide valuable feedback, are non-judgmental in the mentoring process, and excel in the area of counseling. In addition, mentoring can be an efficient way to help identify individuals to serve as appropriate role models for other administrators. Being assigned as a mentor to new administrators provides an opportunity to identify how effective a mentor is in assisting their colleagues. This assistance can then be extended beyond the scope of new employee induction. Mentoring also helps to facilitate the professional formation of administrators by offering personalized coaching and feedback through the assigned mentee (Daresh & Playko, 1993).

The benefits of mentoring also extend beyond the mentee receiving the services. Mentors have reported that serving as a mentor has provided a source of excitement to their job and has been described as a worthwhile experience. They have also associated participation in a mentoring program with an increase in job satisfaction. Mentors have indicated that they have enjoyed the recognition of being a mentor and feel they benefit from the energy and enthusiasm of the mentees. They also enjoyed the ability to take part in teaching again; as administrators often feel as though they have abandoned their passion for teaching in their transition to administration. Lastly, mentors commented that working with mentees affirmed their professional skills and exposed them to recent research through conversation with the mentees. This creates opportunities for professional growth giving the mentors the ability to capitalize on a new source of knowledge and talent (Daresh, 2004).

School districts are also in a position to benefit from the implementation of a mentoring program for new administrators. These benefits include the development of more capable staff members, creating a culture of lifelong learning, increased motivation of staff and greater overall productivity of the organization. New administrators are often hesitant to take a school in a different direction than the past principal and often the exploration of new initiatives is essential to increased student achievement. Mentor programs provide comfort to new administrators and give them the confidence to explore new paths for the school or district. In addition, lifelong learners are fostered through positive experiences with their mentors. As the new administrators become more seasoned they will volunteer to be mentors for other new staff if their experience with the program was positive. This creates a collegial environment that grows as more administrators join the organization (Daresh, 2004).

Mentoring programs are often viewed as a form of support that goes beyond what is required of an organization to offer to new employees. With this in mind, school districts may benefit by implementing this type of program, as new administrators often feel more motivated to work hard for an organization that has offered support beyond the typical level of assistance. New administrators who participate in mentoring programs also have a greater sense of accomplishment and feel more productive than their counterparts who did not complete a mentoring program (Daresh, 2004).

The combination of the benefits for the mentee, mentor and school district help to solidify the effectiveness of mentoring as a crucial component of any induction program, as it not only serves as a vehicle for induction, but also as a vehicle for in-service development for the mentors and an avenue for school or district improvement (Daresh & Playko, 1993). In order to realize these benefits school districts must be willing to work towards formalizing a mentoring program and avoiding the development of informal relationships in lieu of assigned mentors and a well-developed scope and sequence for the program (Hall, 2008). Other obstacles that may impede the development of a comprehensive mentor program include the lack of a common language defining a mentor, unclear roles and responsibilities, time constraints, mismatched mentors and mentees and unclear program goals. Mentor programs that have been able to navigate these obstacles successfully have identified a common thread regarding the programs outcomes. Successful mentor programs encourage new principals and administrators to be self-reflective at all times. This self-reflection reminds protégés to ask probing questions, analyze decisions, offer support, and foster lifelong learning while leading their particular school or district (Hall, 2008).

Principal Induction in New Jersey

New Jersey Administrative Code (N.J.A.C.) 6A:9-12.5 outlines the requirements to obtain a certificate of eligibility for the position of principal in a New Jersey public school. This section of N.J.A.C. also explains how candidates become eligible for a provisional principal certificate, as well as a standard principal certificate. In January, 2004 the New Jersey State Board of Education adopted changes to the licensing code which included new Standards for School leaders (New Jersey Leaders to Leaders Program Overview, 2011). These changes indicated that beginning on July 1, 2005 individuals who hold a certificate of eligibility for principal and are hired into a position that requires principal certification, namely the positions of principal, vice principal, assistant principal, director, and assistant director, must complete a two-year residency program approved by the state. This residency program must provide candidates with a thorough understanding of the New Jersey Core Curriculum Content Standards, the Professional Standards for Teachers and the Professional Standards for School Leaders. This thorough understanding is demonstrated through a series of activities administered by a state approved mentor as indicated in New Jersey Administrative Code 6A:9-12.5.

Prior to the adoption of this updated code an advisory committee was formed and met monthly from June 2004 through November 2004. A mission and vision were developed along with program standards, components, core principles and other supporting details (New Jersey Leaders to Leaders Program Overview, 2011). The advisory committee was comprised of superintendents, principals, experienced mentors, Department of Education professionals, and outside consultants. The standards developed by the committee are based on the ISLLC Standards for School Leaders and they are accompanied by Mentoring Program Standards also developed by the committee. The advisory committee report also outlines the details of the New

Jersey state approved mentoring and induction program entitled New Jersey Leaders to Leaders (New Jersey Leaders to Leaders Program Overview, 2011).

The New Jersey Leaders to Leaders program was developed as part of a grant entitled "The Three R's for School Leadership: Recruit, Retain and Revitalize." This grant was funded by the U.S. Department of Education – School Leadership Program, and was awarded to the Foundation for Educational Administration in partnership with New Jersey Principals and Supervisors Association and the New Jersey Department of Education in the amount of $1,897,554 in 2005. Four partner LEA's were chosen to address the needs related to expected high turnover rates of principals and assistant principals due to retirements, critical shortages and inadequate professional development. The project focused on recruitment of school leaders, induction of new school leaders and the continuing professional development of new and veteran school leaders. Part of the grant project included the implementation of the NJ EXCEL program, which was designed by the Foundation for Educational Administration and focused on the recruitment aspect of the grant. The New Jersey Leaders to Leaders program represents the projects mentoring and induction program for new school leaders and was eventually selected by the New Jersey Department of Education for delivery of the mentor training and two year mentor-directed residency program required by the State for standard principal certification (School Leadership Program, 2005).

The only noted exceptions to the required two year residency program involve individuals who hold out of state principal certification but do not hold the required master's degree. These individuals will be eligible for the New Jersey principal certification by presenting a master's degree, five years of successful full time experience as a principal or assistant principal under the out of state certificate, and an offer of employment in a position that requires

principal certification. They must then complete a six month residency under the provisional certificate, directed by an approved mentor (New Jersey Leaders to Leaders Program Overview, 2011).

The state approved mentors who administer the two year residency program are experienced principals that have completed a training program implemented by a State-approved provider. Candidates enrolled in the residency program must be formally evaluated by the mentor at least six times according to N.J.A.C. The last of the six shall serve as the final evaluation and provides a formal recommendation regarding the issuance of a standard principal certificate. Upon submission of the final report to the Department of Education the mentor shall include a certification recommendation of approved, insufficient, or disapproved. Approved candidates are recommended to receive the standard principal certificate. Candidates issued a recommendation of insufficient are allowed to continue the residency program or seek an additional residency for one additional year. Disapproved candidates are not permitted to continue the residency and are not issued a standard principal certificate as per New Jersey Administrative Code 6A:9-12.5.

Summary

Recent research indicates that the principal plays an important role in the success of a school through the hiring process, serving as an instructional leader, and by establishing school culture. It also indicates that variables such as age, gender, educational background, district poverty level, enrollment level, and salary are common descriptors used in research conducted on the principal population, and these descriptors can have an impact on the turnover rates of the principalship. In addition to these points, it is determined through the research that principal

induction and mentoring programs should be developed to include specific activities to help

reduce turnover within a school or district and to help foster more stable and effective leadership.

This study attempted to provide a descriptive analysis of the principalship from 1996-2011 and

describe career paths of principals during a timeframe within these years. It also attempted to

identify differences in career paths of principals who participated in the current New Jersey

principal induction program, New Jersey Leaders to Leaders, and those who did not.

CHAPTER III

METHODOLOGY

More than half of the states in America collect administrative data at the state level that can be used to analyze the careers of teachers and administrators. These data provide detailed information to help districts and states meet workforce goals and promote diversity and equity within an organization (RAND, 2004). Although these data do little to help identify characteristics of leaders that increase student achievement, they do improve our understanding of administrators' careers and qualities (RAND, 2004). In order to describe the changes in demographic characteristics of principals from 1996-2011 in New Jersey the researcher conducted a descriptive analysis from data which reflects the population of principals within this time frame. The researcher examined educational attainment, salary, age, gender and race/ethnicity of New Jersey principals for each year and reported changes to the characteristics examined.

The researcher used a longitudinal cohort design in order to track the career paths of principals who participated in the NJL2L program and those who did not from 2003-2008. Two principal cohorts were examined before and after the implementation of the program in order to identify trends in the career paths of these populations. The cohorts of principals before the implementation of NJL2L included the 2003-2004 and the 2004-2005 school years. These cohorts were then tracked for five years in order examine career paths for the cohort members. This served as the comparison group of non-participants. The cohorts of principals after the implementation of NJL2Lspanned the 2005-2006 and the 2006-2007 school years. This included the first and second years of implementation for the NJL2L program. These individuals were then tracked for five years in order to examine career paths for members of these cohorts. Since the NJL2L program is a two year program this method allowed for the cohort members to serve

as principals for three years after the completion of the program. The researcher used total

populations of principals for each year.

The researcher utilized fall report data from the New Jersey Department of Education in

order to identify people with a job code that corresponded to the position of principal. Results

were reported out in both narrative and figure/table formats in order to provide clear and concise

results regarding the characteristics and behaviors of principals during the analyzed time frame.

Descriptive Analysis Methods

New Jersey fall report data spanning the years 1996 through 2011 were obtained in the

form of Microsoft Access files. These files were merged together into one database with multiple

tables representing each school year in this time span. Each school year represented all

employees in school systems throughout the State for that year. This allowed the researcher to

manipulate the tables and data more easily. The query update function was utilized in order to

add a column to each table indicating the school year. The tables within this database were then

updated to eliminate fields that were identified as irrelevant to the study. Table 1 indicates the

fields, along with their meaning, used for each table. These fields are consistent throughout the

entire database.

Table 1

NJDOE Fall Report fields used

Field	Description
School Year	Current school year
County	NJDOE county code that district is located in
District	NJDOE name of school district
School	NJDOE name of school
Last Name	Employee's last name
First Name	Employee's first name
MI	Employee's middle initial
Sex	Employee's gender (1=male, 2=female)
Race	Employee's ethnic origin (1=White, 2=Black, 3=Hispanic, 4=Asian, 5=American Indian/Alaskan Native, 6=Hawaiian/Pacific Islander, 7= two or more races)
Degree	Employees educational attainment (1=no degree, 2=bachelors, 3=master, 4=doctorate, 5=other)
Exp Dist	Employee's years of experience in district
Exp NJ	Employee's years of experience in New Jersey
Exp Total	Employee's total years of experience
Salary	Employee's annual salary
YOB	Employee's year of birth
Job Code 1	Employee's primary job code
FTE 1	Employee's number of full time equivalents

For each school year the data were filtered in order to create a new database that included individuals labeled with a job code that corresponded to one of the following fourteen positions as displayed in Table 2.

Table 2

Job Code and corresponding position

Job Code	Corresponding Position
0201	High School Principal
0202	Assistant Principal High School
0211	Junior High School Principal
0212	Assistant Principal Junior High
0221	Middle School Principal
0222	Assistant Principal Middle School
0231	Elementary School Principal
0232	Assistant Principal Elementary School
0241	Vocational School Principal
0242	Assistant Principal Vocational School
0251	Principal School For the Handicapped
0252	Assistant Principal School For the Handicapped
0261	Adult High School Principal-Approved
0262	Assistant Principal Adult High School-Approved

The filtered data were then used to create a new database with one table. This table represented all of the individuals with principal job codes during the time frame of 1996-2011, organized by school year. A duplicate search was then conducted in order to identify individuals with the same last name, first name and year of birth in the same school year. Six names were identified and these records were completely eliminated from the data set. In total, twenty entries were eliminated because of duplication concerns. Pivot Charts were then created in order to demonstrate some of the demographic trends in the principal population over the time frame examined. Table 3 indicates the final figures and tables presented as results.

Table 3

Figures and tables presented as results

Title of figure or table

Gender over time – All grades
Gender over time – Elementary grades
Gender over time – High school grades
Gender over time – Junior high school grades
Gender over time – Middle school grades
Gender by doctorate degree over time
Gender by race over time – White
Gender by race over time – Black
Gender by race over time – Hispanic
Gender by race over time – Asian
Gender by race over time – American Indian/Alaskan Native
Gender by race over time – Hawaiian/Pacific Islander
Gender by race over time – Two or more races
Principals with Doctorate over time
Doctorate degree by gender over time
Doctorate degree by race over time
Race over time – All grades
Race over time – Elementary grades
Race over time – High school grades
Race over time – Junior high school grades
Race over time – Middle school grades
Race by doctorate degree over time
Race by gender over time – Male
Race by gender over time – Female
Average salary over time
Salary by degree over time
Salary by gender over time
Salary by race over time
Salary by age over time
Age over time – All grades
Age over time – Elementary grades
Age over time – High school grades
Age over time – Junior high school grades
Age over time – Middle school grades
Age by degree over time
Age by gender over time
Age by race over time

In order to best display information regarding principal age and principal salary the data provided through the fall report had to be categorized. This was necessary because of the unique nature of the "Year of birth" and "Salary" fields within the fall reports. In order to display this information the "Year of birth" data were categorized by decade and the salary data were categorized by increments of $10,000. The excel reports were then able to indicate the number of principals which belong to each category created and percentages were able to be expressed from these counts. Modified spreadsheets were saved separately as to ensure the validity of the original fall report information.

In addition to constructing pivot charts in Microsoft Access, the data were exported in Microsoft Excel format in order to reformat all of the charts and tables. While working within Excel the researcher also developed charts disaggregating the fall report data by grade span in order to describe the demographic trends in greater detail. Grade spans examined include the K-12 overall population, high school, junior high school, middle school and elementary grades. Percentages were also calculated using Excel based formulas in order to describe the data as both count and percentages. The charts and tables were formatted in order to best display information and the data were then reviewed. In addition, queries were conducted in order to display demographic information in various formats.

Cohort Tracking Methods

In order to track cohorts of principals that participated in NJL2L, as compared to cohorts that did not, the data needed to be sorted appropriately. Identifying the first class of NJL2L principals in the 2005-2006 school year involved first filtering the complete 05-06 data for principal job codes. This yielded 4053 entries and the data were placed into a new table. A query

design was then constructed that related last name, first name and year of birth between the new table and the complete 04-05 data. These related tables then yielded 3930 duplicate entries. This data represented individuals who had a principal job code in 05-06 and were also present in the 04-05 data. This list of 3930 duplicates was then filtered for non-principal job codes and this yielded 416 individuals. After also including other administrative job codes (non-principal codes) in the filter the list was reduced to 308 individuals. A new table was then created for these individuals. A duplicate search was then performed and individuals with the same last name, first name and year of birth were eliminated from the group because it would not be possible to determine job code changes for these individuals over time. The new group totaled 304 individuals.

This table was then queried alongside the full staff file from the previous year (03-04) to search for duplicates and filter out all administrative job codes. The result yielded 295 individuals. A table was created for this list and the elimination of duplicate names reduced the table to 289 individuals. This table, which represented individuals with a principal job code in 05-06 and no administrative job code in 04-05 and 03-04, was queried alongside the previous year's data from 02-03 and administrative job codes were filtered out. A table was created for the 281 individuals listed and a search eliminating duplicates yielded 277 individuals.

A duplicate search was then performed with the 277 individuals and the 05-06 listing with only principal job codes in order to list the 277 NJL2L participants with their principal job code from 05-06. A table was created for this group and duplicate search was performed which yielded no results. This group represented individuals who had a principal job code in 05-06 but did not have a principal job code in 04-05, 03-04 and 02-03. This represented a cohort of

individuals that presumably became principals in 2005 and had been assigned non-principal job codes in the three years prior to 05-06.

Duplicate searches were then performed using each of the next five years of data in order to track these 277 individuals. As names and year of birth duplications were identified they were eliminated from the table of the original 277 individuals as job code changes would not be able to be determined for these people. As the individuals were eliminated from the original 277 the duplicate queries automatically updated and provided the job codes, and other information, for these individuals in each school year examined. Cross tab queries were also conducted in order to display job codes for individuals in each school year, as well as tally the number of years each individual was present in the five year cohort examination. These sheets were used as cross reference sheets during the manual coding of the data. Cohort sheets were printed for the first school year and five years after the cohort was formed in order to track the change in job code and movement of these individuals. These steps were repeated in order to identify and track the second year NJL2L cohort and both nonparticipant cohorts.

Coding Procedures

The coding procedures for the first NJL2L class will be described in detail in order to provide background regarding how the coding process was completed. Cohort data were printed according to school year. Data columns on the printouts included School Year, County, District, School, Job Code 1, Last Name, First Name, YOB, and Salary. The first class printout was then compared to the printout of the same class in the next school year. Individuals were highlighted according to the following rules displayed in Table 4.

Table 4

Job code status and corresponding color code

Status	Color
Same Job Code	None
Different job code – same school – higher salary (SS)	Pink
Different job code – same district – higher salary (SD)	Pink
Different job code – different district – higher salary (DD)	Pink
Different job code – same school – lower salary (SS)	Yellow
Different job code – same district – lower salary (SD)	Yellow
Different job code – different district – lower salary (DD)	Yellow
Different job code – same school – same salary (SS)	Green
Different job code – same district – same salary (SD)	Green
Different job code – different district – same salary (DD)	Green
Not on report – left field, left state, retired, deceased	Blue

The original cohort sheet of the first NJL2L class for 05-06 was used to code all individuals who were not on a future report. The year in which the individual did not appear on a cohort sheet was recorded next to the Job Code column for future reference. This information was able to be verified on the cross tab report which was run in Access. In addition to highlighting the individuals as outlined above, information was recorded to indicate whether the move was in the Same School (SS), the Same Distract (SD) or a Different District (DD). This information was recorded on the cohort sheet for the year being reviewed and was listed next to the Job Code column. Marking the data in this way allowed for easy tallying later on, while constructing the summary sheets. After all highlighting and additional marking was completed the categories were tallied for count and a cohort summary sheet was completed as displayed in Figure 1 below.

Figure 1

Individual cohort summary sheet template

_____(# on previous) - _____(blue) + _____(# back) = _____ (# on sheet)

NJL2L/Nonpart _____ Class   (Year:)   in   Year:

Status	Number	Percent
Same job code		
Different job code – same school – higher salary (SS)		
Different job code – same district – higher salary (SD)		
Different job code – different district – higher salary (DD)		
Different job code – same school – lower salary (SS)		
Different job code – same district – lower salary (SD)		
Different job code – different district – lower salary (DD)		
Different job code – same school – same salary (SS)		
Different job code – same district – same salary (SD)		
Different job code – different district – same salary (DD)		
Not on report – left field, left state, retired, deceased		

The top line of the summary sheet indicates the formula used to determine the number of individuals on each cohort sheet. The (# on previous) indicates the number of individuals in the previous year for the given cohort. The NJL2L first class cohort (05-06) had 261 individuals after duplications found in future years were eliminated. This number was used in the (# on previous) box while coding the 06-07 information for the first NJL2L cohort. The (blue) box indicates the number of individuals who were coded blue and therefore eliminated from the cohort for that year. The (# back) box indicates that number of individuals who had been coded blue in a previous year, and eliminated from the cohort, and are now back in the cohort for a given year. The (# on sheet) box indicates the sum of the individuals for that given year of the cohort as per the formula outlined.

The (NJL2L/Nonpart _____ Class (Year:)) information box was completed by circling either NJL2L or Nonpart and filling in the blank with first or second class. NJL2L indicates a New Jersey Leader to Leader cohort and Nonpart indicates a nonparticipating cohort. The (Year:) box indicates the year of the cohort indicated. Table 5 indicates the cohorts, the cohort year, cohort description and the years in which they were tracked:

Table 5

Cohort Explanation Table

Cohort Name	Cohort Year	Cohort Description	Years tracked
NJL2L first class	05-06	Individuals who participated in the first year of the New Jersey Leaders to Leaders Program (NJL2L) and were assumed to be first time principals during the 05-06 school year.	06-07 07-08 08-09 09-10 10-11
NJL2L second class	06-07	Individuals who participated in the second year of the New Jersey Leaders to Leaders Program (NJL2L) and were assumed to be first time principals during the 06-07 school year.	07-08 08-09 09-10 10-11
Nonpart first class	03-04	Individuals who did not participate in the New Jersey Leaders to Leaders Program (NJL2L) and were assumed to be first time principals during the 03-04 school year.	04-05 05-06 06-07 07-08

			08-09
Nonpart second class	04-05	Individuals who did not participate in the New Jersey Leaders to Leaders Program (NJL2L) and were assumed to be first time principals during the 04-05 school year.	05-06
			06-07
			07-08
			08-09
			09-10

The number of individuals coded in each category was counted manually and entered into the cohort summary chart. The count for individuals with the same job code was calculated by subtracting the number of individuals that had been coded from the total number of individuals of the cohort in the initial year. Percentages were then calculated based on these counts. These steps were then repeated for each of the three remaining cohorts and grand summary charts were then constructed. These summary charts represent calculations based on comparison to the original cohort year, as well as calculations based on comparison to the previous year examined allowing for longitudinal analysis as well as year to year analysis.

The choice to record moves based on salary changes was decided upon after careful consideration. Although indicating a salary change in the category does not fully explain why a move may have occurred, it does provide some context as to the nature of these moves. Also, in instances in which the same job code appeared from year to year, it was not noted if there was a change in location for that individual. This information may be interesting to look at in a future study, but this study was limited to reporting a change in job code. Lateral moves are therefore not recognized.

After the construction of summary tables used in the descriptive analysis of the principal population, and the summary tables describing the career paths of NJL2L participants and non-participants, the information was reviewed in order to identify trends within the included descriptors and the time period reviewed. These trends are reported in Chapter IV and discussed in Chapter V.

CHAPTER IV

RESULTS

This study focuses on providing a descriptive analysis of the principal workforce in New Jersey from 1996-2011. Principal descriptors include ethnicity/race, gender, age, salary and post-secondary academic attainment. The study also explores the career paths of principals and, in particular, describes the career paths of New Jersey Leader to Leader Program participants and non-participants over a specific time period of 2003-2008.

Fall report data from the New Jersey Department of Education was utilized in order to review the demographic information for all principals from 1996-2011. In addition, this data was used to track the movement of new principals in the years 2003-2005 and 2005-2008 in order to review whether or not the New Jersey Leaders to Leaders program (NJL2L) had any influence on decreasing a change in job code of new principals in cohorts as compared to non-participant groups.

Research Question 1

The researcher chose to explore gender, age, ethnicity/race, salary and post-secondary attainment to offer a descriptive analysis of the principalship from 1996-2011. Job codes within fall report data were used in order to identify principals in each year. The total number of principals was recorded and percentages were calculated to further express data trends. The descriptors in the category of gender included male and female. The age category was derived from the year of birth information provided in the fall report data. The individual year of birth for each principal was transposed to a respective decade creating categories. These categories were then used to calculate an age by referencing the year in which the data were aligned to. This allowed for the data to include age groups for reporting purposes. The race descriptors included

White, Black, Hispanic, Asian, American Indian/Alaskan Native, Hawaiian/Pacific Islander and

Two or more races. Salary was handled much in the same way as age. Individual salaries were

transposed into salary ranges by increments of $10,000. These were then used to create salary

groups which allowed the researcher to report out on salary. Post-secondary academic attainment

included the descriptors of No degree, Bachelors, Masters, Doctorate and Other, but findings

were presented in reference to attainment of a doctoral degree.

Research question one indicates: How do the demographic characteristics of New Jersey

school principals change over 1996-2011? The researcher presented results for each descriptor

which was reviewed.

Gender

Gender was examined in order to display the count and percentage of female and male

principals in each year from 1996-2011. Figures 2 and 3 represent the information.

Figure 2

Gender over time – All grades - Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	64.7	63.6	62.0	60.7	59.9	58.5	57.5	56.7	55.5	55.3	54.3	53.7	53.4	53.4	53.7
Female	35.2	36.3	37.9	39.2	40.0	41.4	42.4	43.2	44.4	44.6	45.6	46.2	46.5	46.5	46.2
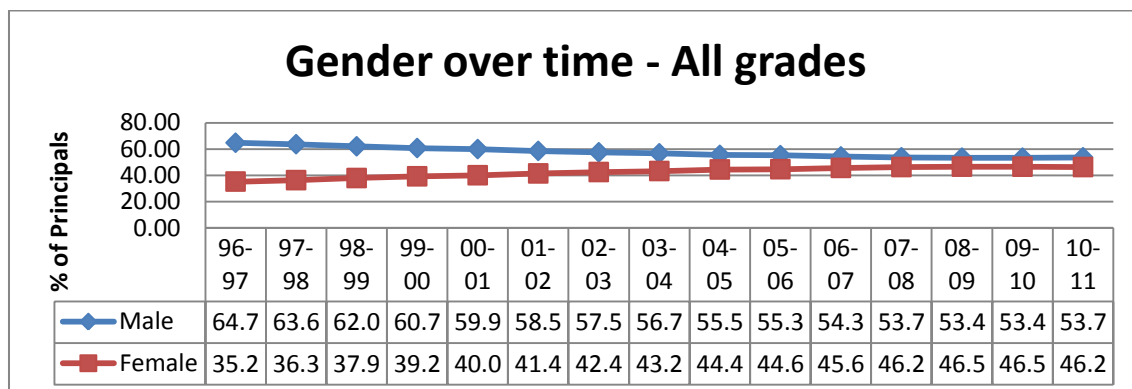
Figure 3

Gender over time – All grades - Count

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	2237	2228	2183	2201	2219	2216	2208	2198	2218	2241	2212	2213	2201	2206	2090
Female	1217	1271	1334	1422	1482	1568	1631	1675	1774	1809	1857	1906	1919	1923	1800
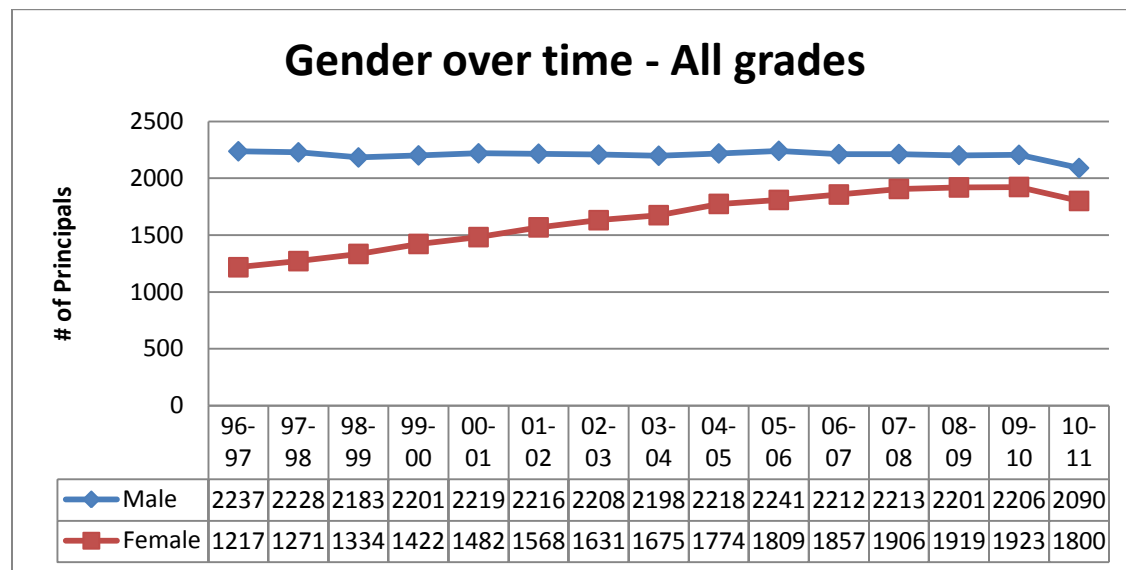
Between the years 1996 and 2011 there was always more male principals than female principals. The percentage of female principals steadily increased over time from 35% in 1996 to 46% in 2011. The number of female principals also increased from 1217 in 1996 to 1800 in 2011, while the number of male principals decreased in that time period from 2237 to 2090. In addition to examining all grades, gender was examined at several different grade spans in order to explore differences from the overall population. The charts below describe the gender breakdown for elementary grades, high school grades, junior high school grades and middle school grades.

Figure 4

Gender over time – Elementary grades - Percent

Gender over time - Elementary grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	55.7	53.9	51.5	50.8	49.7	48.1	46.8	45.0	43.8	44.1	43.0	42.2	41.4	41.2	42.3
Female	44.2	46.0	48.4	49.1	50.3	51.8	53.1	54.9	56.1	55.8	56.9	57.7	58.5	58.7	57.6
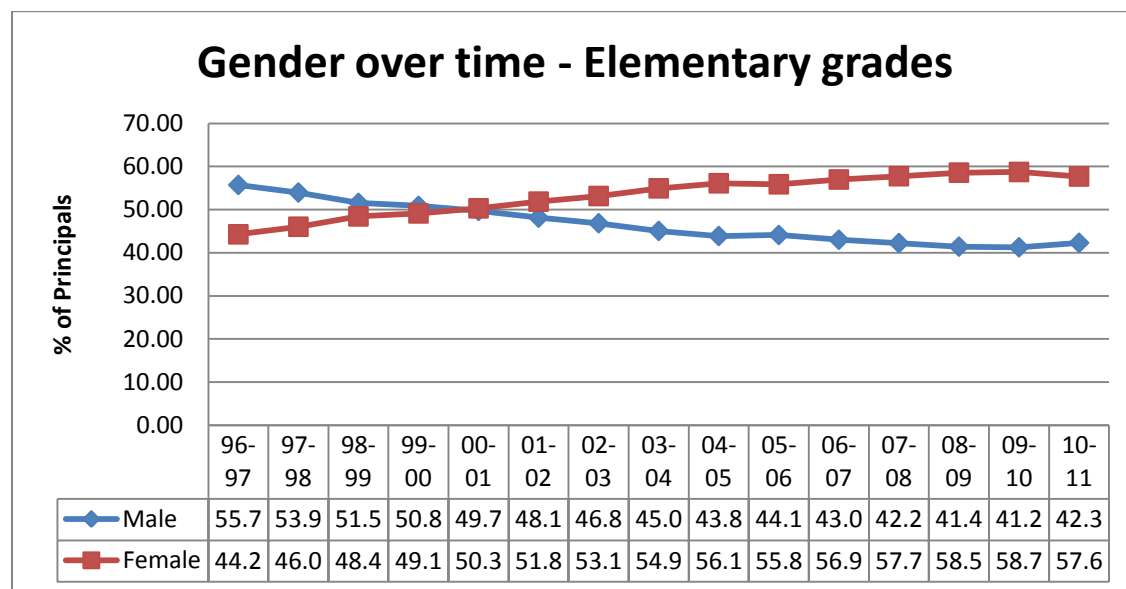
Figure 5

Gender over time – Elementary grades - Count

Gender over time - Elementary grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	954	924	885	906	900	895	883	849	854	863	828	814	804	806	779
Female	758	788	831	875	911	964	1002	1035	1092	1093	1097	1113	1137	1147	1062
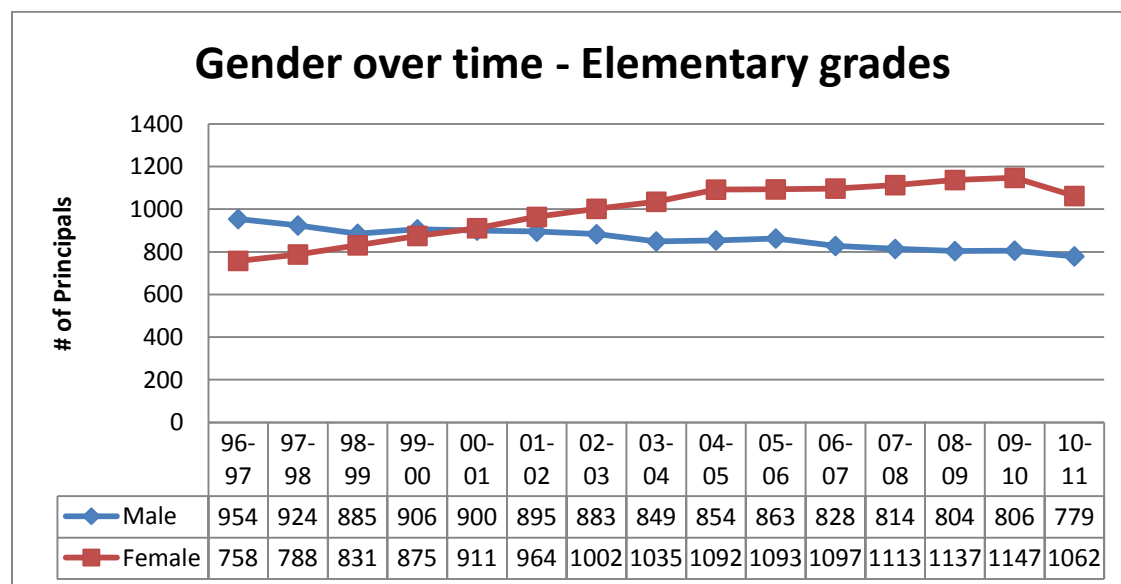
Although the percentage of male principals was always greater than the female

percentage in the overall population, when viewing the elementary grade levels the female

percentage of principals grew from 44.28% to 57.69% between the years 1996-2011. The female

percentage surpassed the male percentage in 2001, with the female percentage being greater at

this grade span through 2011.

Figure 6

Gender over time – High school grades - Percent

Gender over time - High school grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	77.2	76.3	75.3	73.8	71.9	71.3	70.6	71.1	70.6	70.4	68.6	67.6	68.7	68.3	68.5
Female	22.7	23.6	24.6	26.1	28.0	28.6	29.3	28.8	29.3	29.5	31.3	32.3	31.2	31.6	31.4
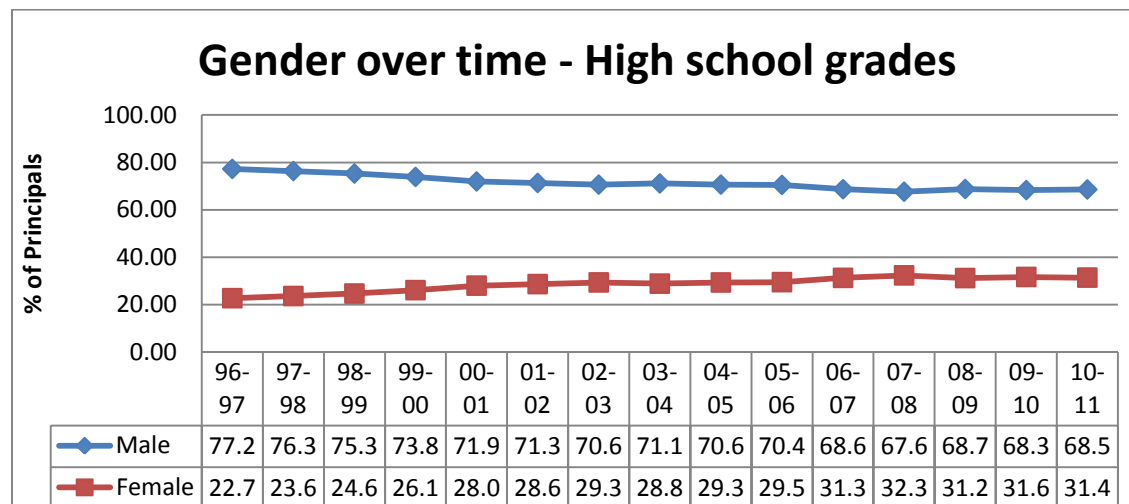
Figure 7

Gender over time – High school grades - Count

Gender over time - High school grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	744	746	738	735	724	741	745	766	794	817	803	815	826	830	777
Female	219	231	242	260	282	298	310	311	330	342	366	390	375	385	356
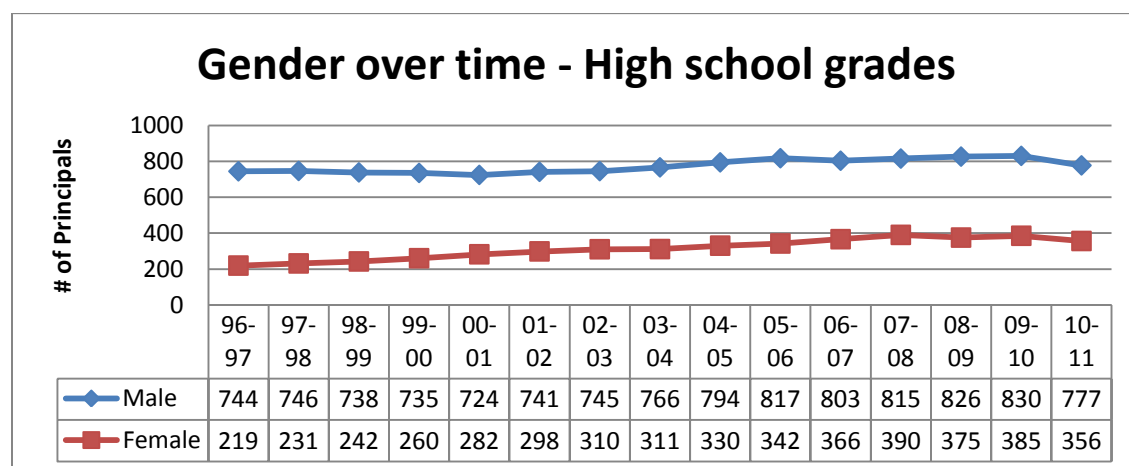
When examining the high school grade span one can observe that the female percentage of principals grew over time, but the percentage is much lower than the overall population and the elementary grade levels. Female principals represented 22.74% of all high school principals in 1996 and 31.42% of all principals in 2011.

Figure 8

Gender over time – Junior high grades - Percent
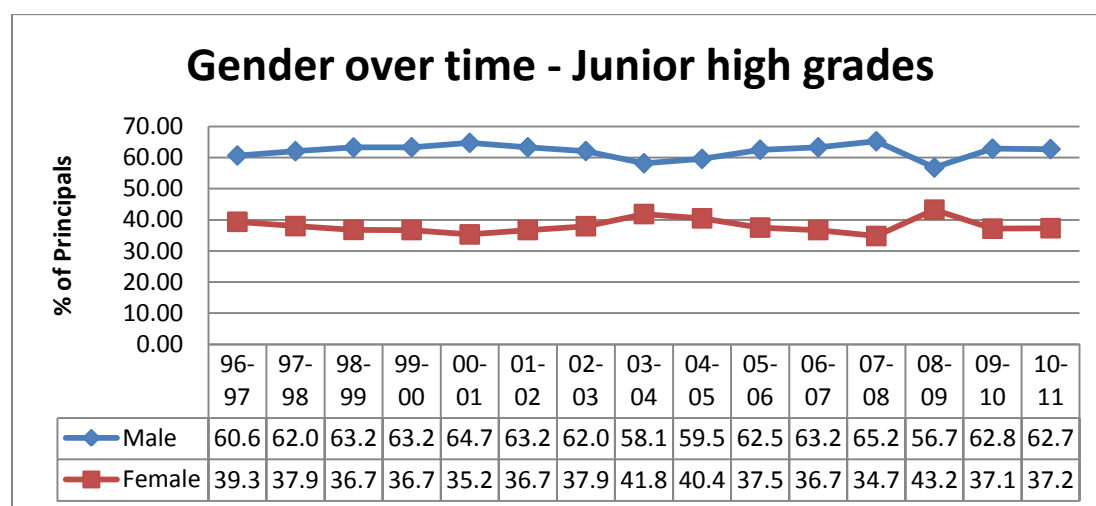
Figure 9

Gender over time – Junior high grades - Count
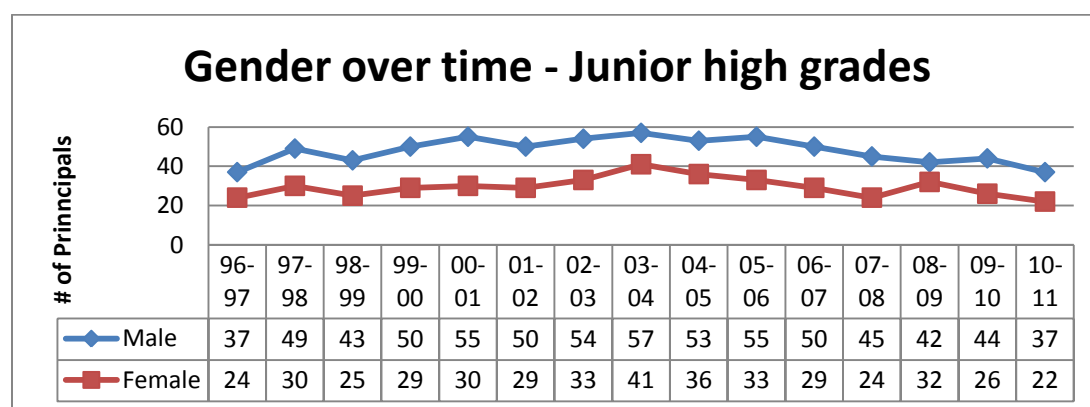
Figure 10

Gender over time – Middle school grades - Percent

Gender over time - Middle school grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	70.6	69.3	68.0	66.5	68.0	66.3	65.1	64.9	62.1	60.0	59.5	59.6	60.0	61.2	60.3
Female	29.3	30.6	31.9	33.5	31.9	33.6	34.8	35.0	37.8	39.9	40.4	40.3	39.9	38.7	39.6
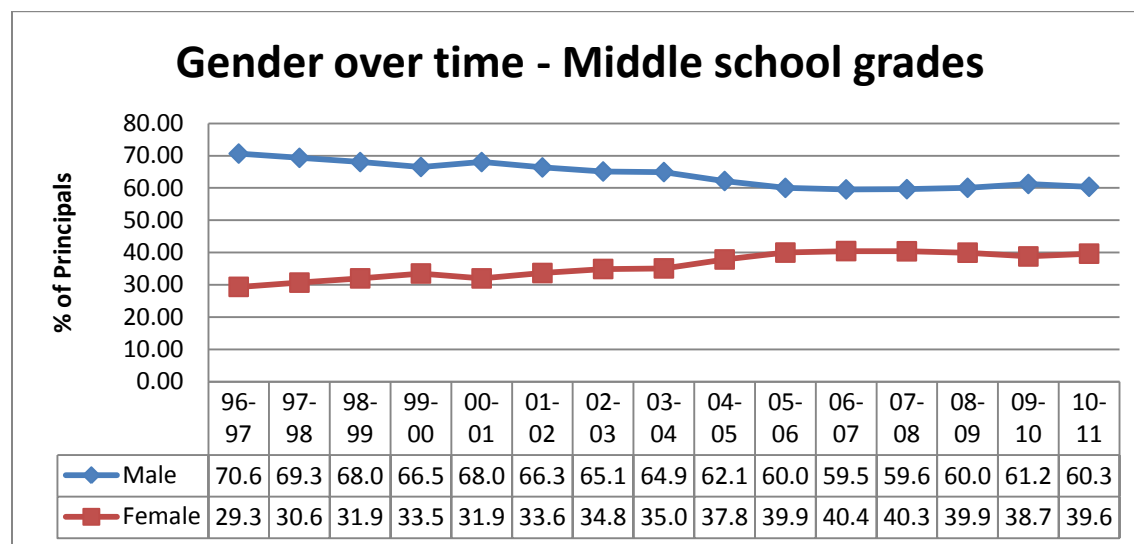
Figure 11

Gender over time – Middle school grades - Count

Gender over time - Middle school grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	390	391	402	409	434	432	431	435	432	431	458	474	469	469	443
Female	162	173	189	206	204	219	231	235	263	287	311	321	312	297	291
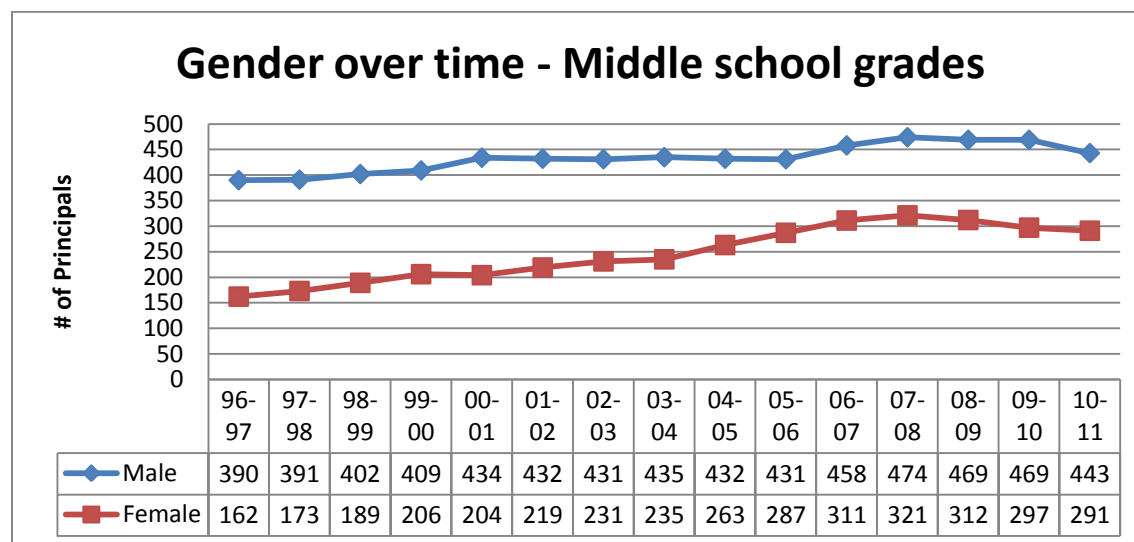
In the junior high and middle school grades the percentage of male principals was greater than the percentage of female principals from 1996-2011. The male percentage ranged from 58% to 70% between these years with no steady pattern being identified for either gender.

In addition, the descriptors of educational attainment, race, salary and age were also examined by gender in order to identify trends in the time period of 1996-2011.

Figure 12

Gender by doctorate degree over time - Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	61.7	59.2	58.4	57.0	57.9	57.9	53.8	51.2	50.1	49.0	47.5	48.9	46.7	45.4	46.8
Female	38.2	40.7	41.5	42.9	42.0	42.0	46.1	48.7	49.8	50.9	52.4	51.0	53.2	54.5	53.1
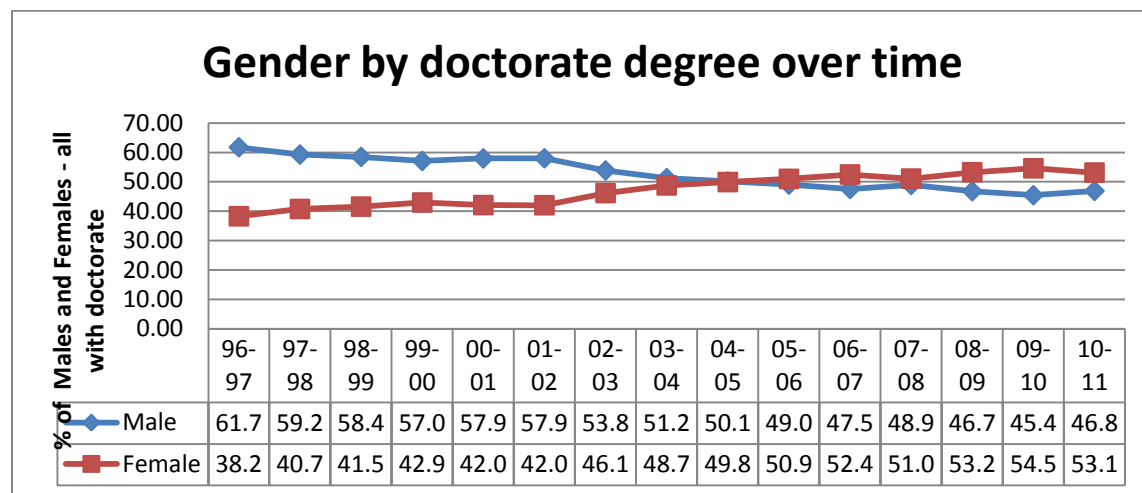
Figure 13

Gender by doctorate degree over time - Count

Gender by doctorate degree over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	213	208	197	210	208	207	196	187	222	200	192	182	174	159	158
Female	132	143	140	158	151	150	168	178	221	208	212	190	198	191	179
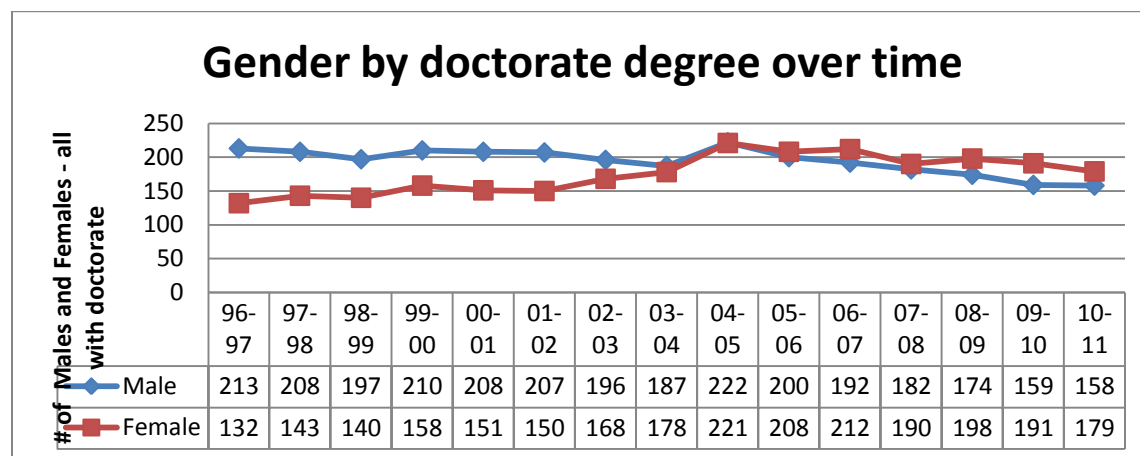
Examining gender by degree attained demonstrates that the percentage of principals with a doctorate that are female rose somewhat steadily over time from 38.26% in 1996 to 53.12% in 2011, while this percentage for males dropped from 61.7% in 1996 to 46.8% in 2011.

Figure 14

Gender by race over time – White - Percent

Gender by race over time - White

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	69.2	67.7	66.0	64.9	63.9	62.6	61.4	60.8	59.6	59.3	58.8	57.9	57.5	57.4	57.6
Female	30.7	32.2	33.9	35.0	36.0	37.3	38.5	39.1	40.3	40.6	41.1	42.0	42.4	42.5	42.3
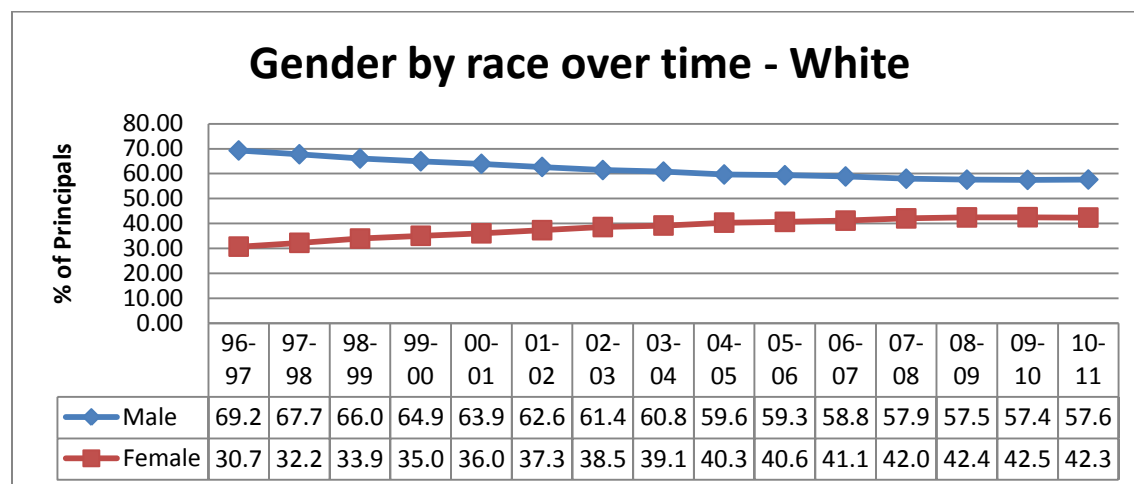
Figure 15

Gender by race over time – White - Count

Gender by race over time - White

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	1967	1958	1907	1919	1940	1925	1910	1884	1872	1881	1853	1824	1809	1805	1693
Female	872	931	980	1036	1094	1146	1199	1214	1266	1288	1295	1323	1333	1335	1245
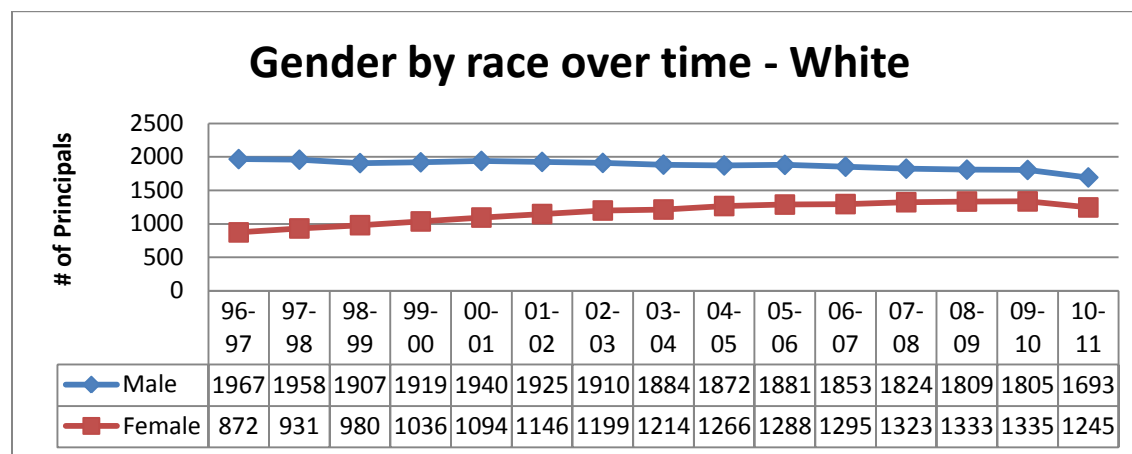
Figure 16

Gender by race over time – Black - Percent

Gender by race over time - Black

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	44.6	44.0	44.1	41.1	40.5	39.4	40.5	40.1	39.7	40.5	37.3	38.6	38.4	38.7	39.0
Female	55.3	55.9	55.8	58.8	59.4	60.5	59.4	59.8	60.2	59.4	62.6	61.4	61.5	61.3	60.9
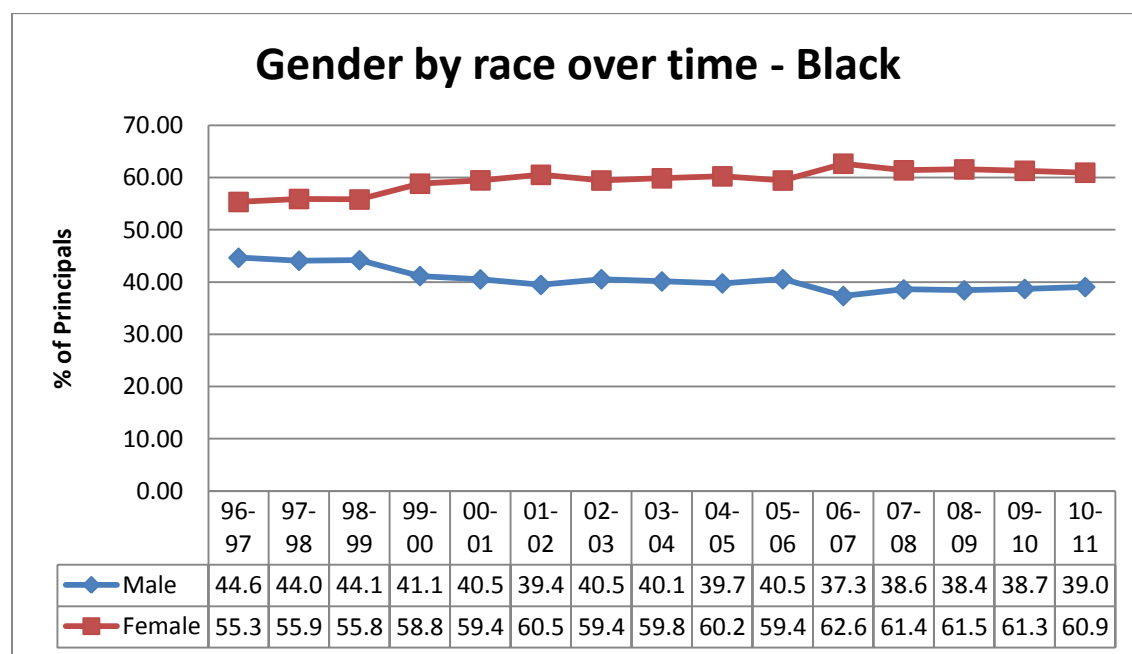
Figure 17

Gender by race over time – Black - Count

Gender by race over time - Black

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	226	220	228	219	216	223	234	248	264	277	264	281	279	279	266
Female	280	279	288	313	317	342	343	370	400	406	443	447	447	442	415
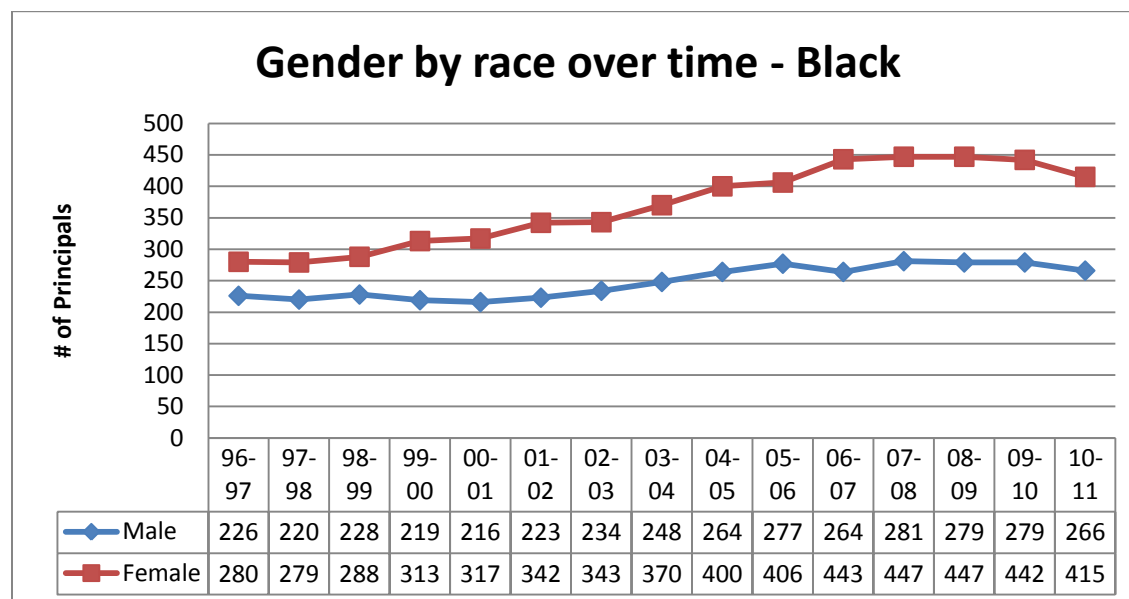
Figure 18

Gender by race over time – Hispanic – Percent

Gender by race over time - Hispanic

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	34.7	40.4	38.6	44.6	39.6	39.3	32.8	38.4	46.7	43.5	44.4	44.4	46.0	47.6	48.1
Female	65.2	59.5	61.3	55.3	60.3	60.6	67.1	61.5	53.2	56.4	55.5	55.5	53.9	52.3	51.8

Figure 19

Gender by race over time – Hispanic – Count

Gender by race over time - Hispanic

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	16	17	17	25	23	26	21	25	36	34	40	44	81	93	102
Female	30	25	27	31	35	40	43	40	41	44	50	55	95	102	110
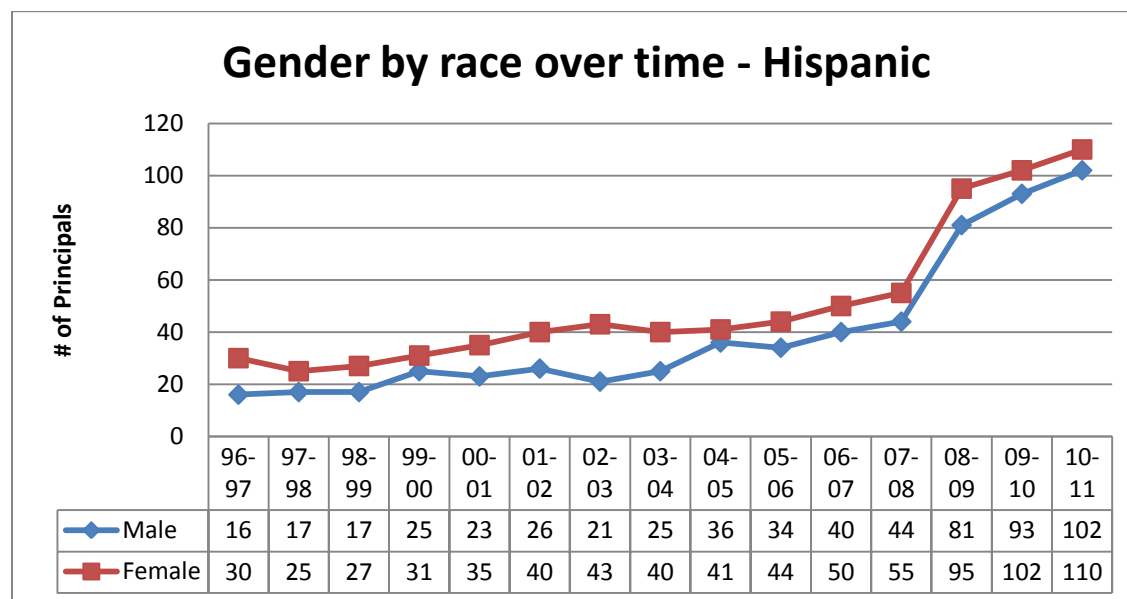
Figure 20

Gender by race over time – Asian – Percent

Gender by race over time - Asian

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	44.4	50.0	41.6	44.1	47.5	47.6	46.5	44.4	41.6	40.0	45.2	45.4	25.0	28.5	36.3
Female	55.5	50.0	58.3	55.8	52.5	52.3	53.4	55.5	58.3	60.0	54.7	54.5	75.0	71.4	63.6
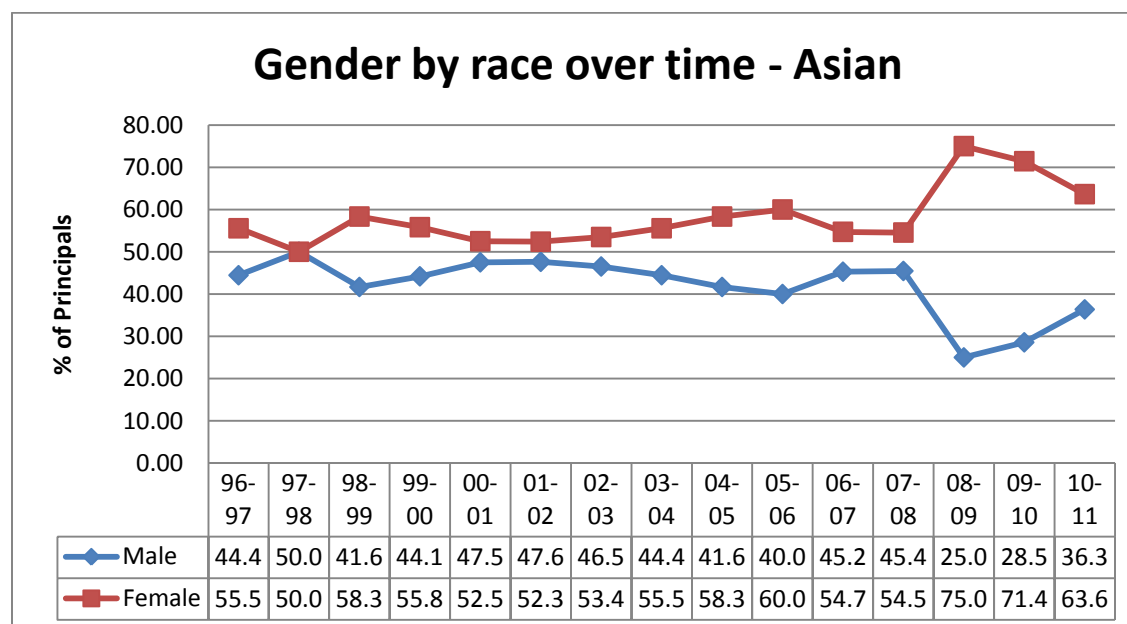
Figure 21

Gender by race over time – Asian – Count

Gender by race over time - Asian

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	12	16	15	19	19	20	20	20	20	20	24	25	5	6	4
Female	15	16	21	24	21	22	23	25	28	30	29	30	15	15	7
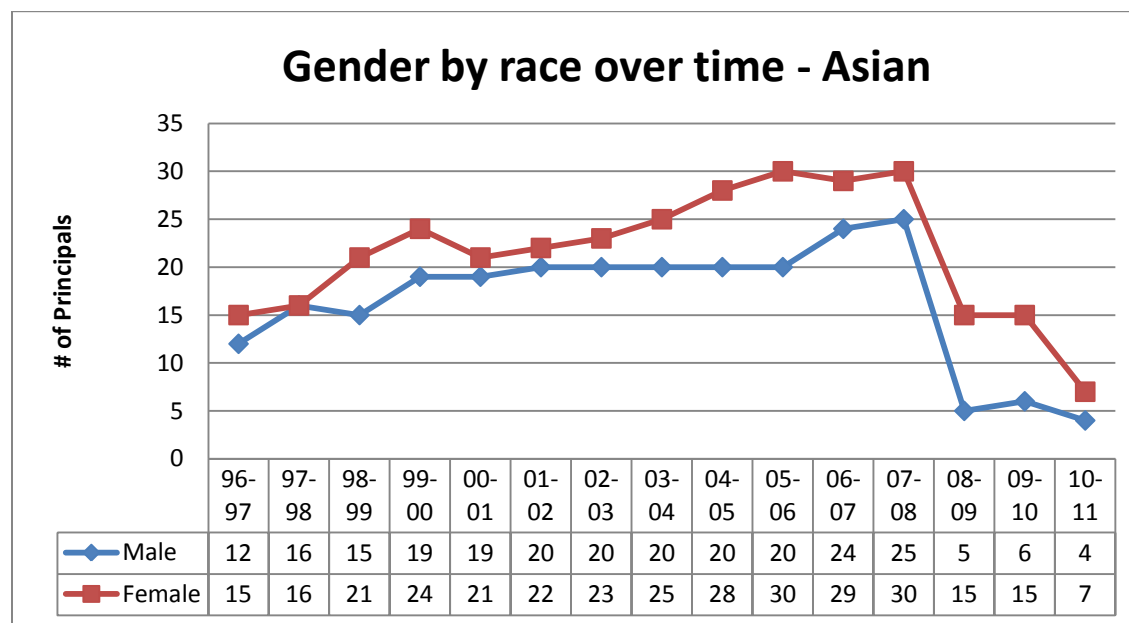
Figure 22

Gender by race over time – American Indian/Alaskan Native – Percent

Gender by race over time - Am. Ind./Alas.

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	46.4	44.8	50.0	56.6	63.3	57.1	51.2	45.0	38.8	41.0	45.7	44.7	47.8	41.8	46.8
Female	53.5	55.1	50.0	43.3	36.6	42.8	48.7	55.0	61.1	58.9	54.2	55.2	52.1	58.1	53.1
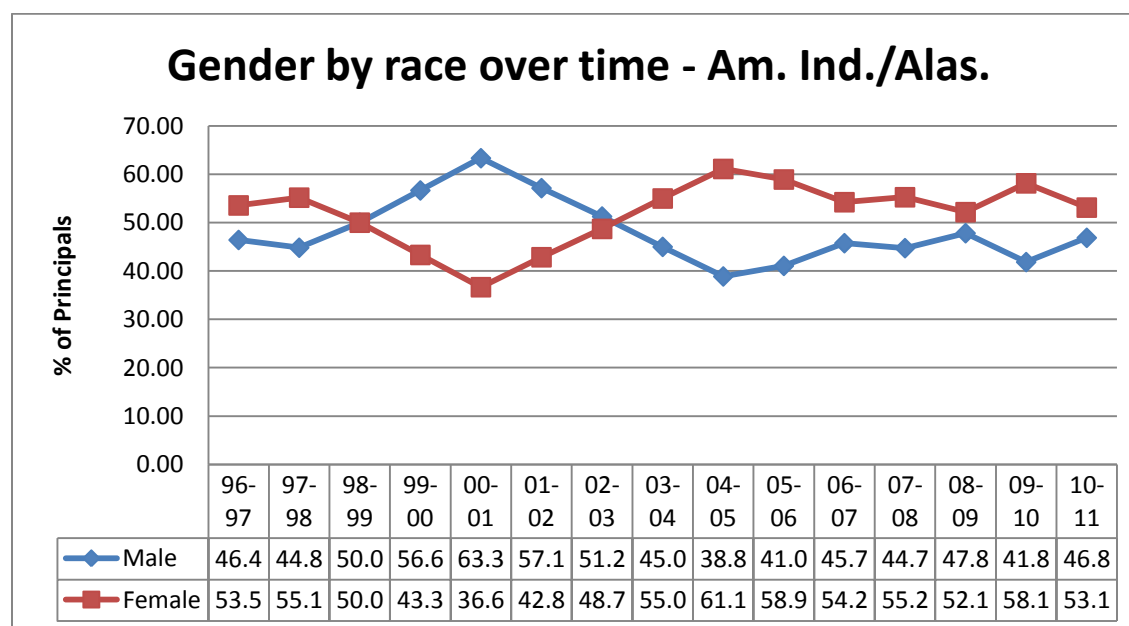
Figure 23

Gender by race over time – American Indian/Alaskan Native – Count

Gender by race over time - Am. Ind./Alas.

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	13	13	13	17	19	20	20	18	21	23	27	34	22	18	15
Female	15	16	13	13	11	15	19	22	33	33	32	42	24	25	17

Figure 24

Gender by race over time – Hawaiian/Pacific Islander – Percent

Gender by race over time - Haw./Pac. Isl.

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	50.0	66.6	50.0	100.	100.	100.	100.	100.	100.	66.6	50.0	66.6	66.6	66.6	50.0
Female	50.0	33.3	50.0	0.00	0.00	0.00	0.00	0.00	0.00	33.3	50.0	33.3	33.3	33.3	50.0

Figure 25

Gender by race over time – Hawaiian/Pacific Islander – Count

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	1	2	1	1	1	1	2	2	3	2	1	2	2	2	1
Female	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
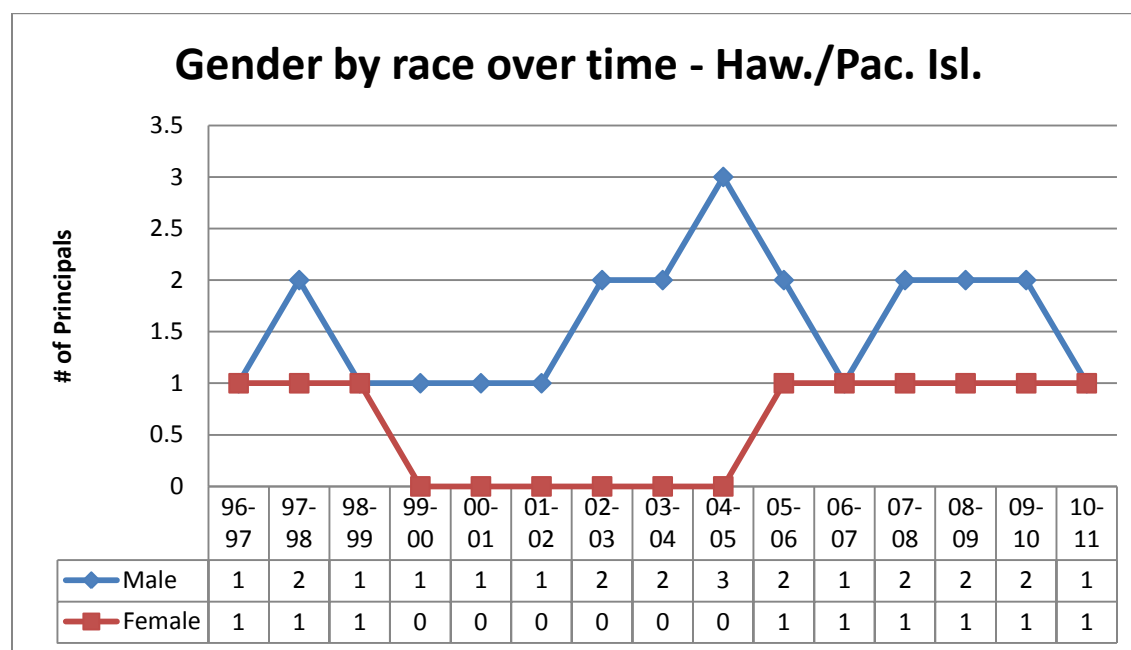
Figure 26

Gender by race over time – Two or more races – Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	33.3	40.0	33.3	16.6	20.0	25.0	20.0	20.0	25.0	36.3	30.0	27.2	42.8	50.0	64.2
Female	66.6	60.0	66.6	83.3	80.0	75.0	80.0	80.0	75.0	63.6	70.0	72.7	57.1	50.0	35.7
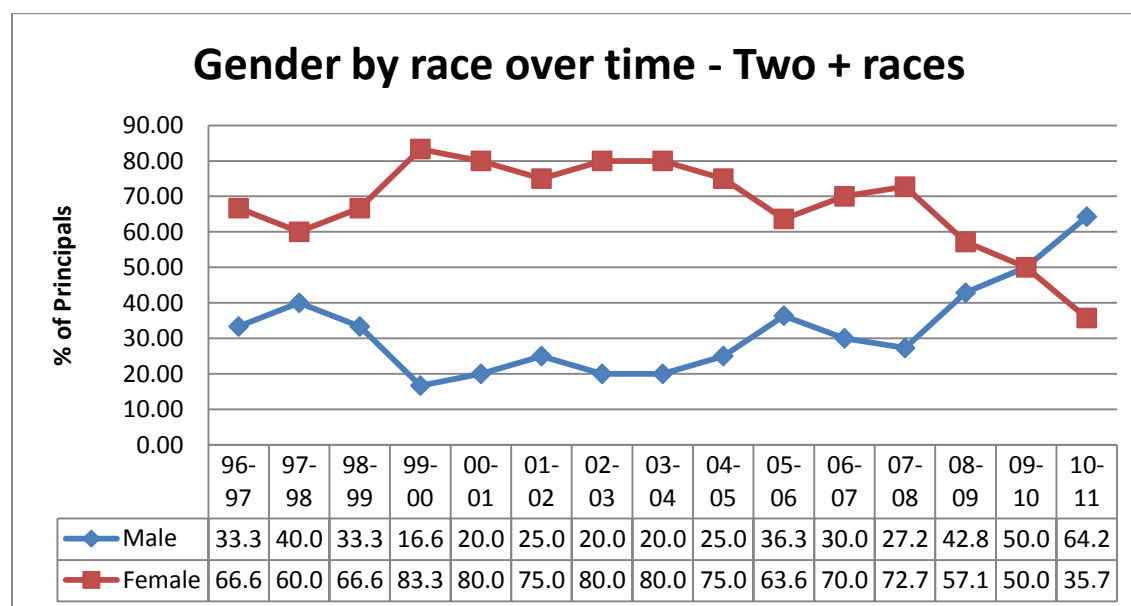
Figure 27

Gender by race over time – Two or more races – Count

Gender by race over time - Two + races

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	2	2	2	1	1	1	1	1	2	4	3	3	3	3	9
Female	4	3	4	5	4	3	4	4	6	7	7	8	4	3	5
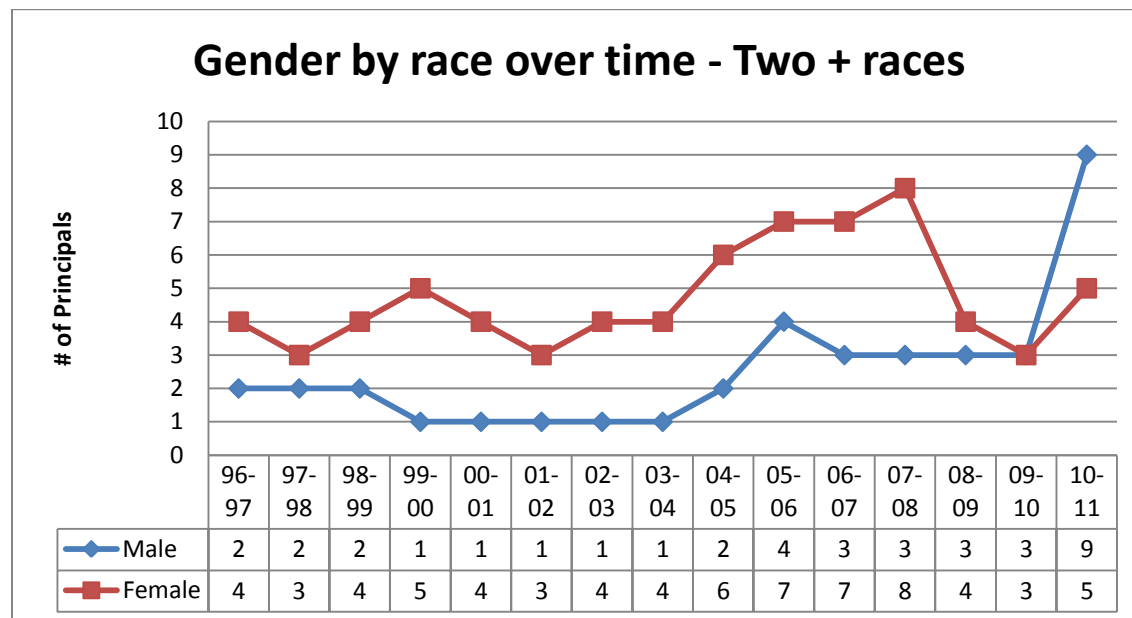
Between the years 1996-2011 among white principals the percentage of females rose from 30.72% to 42.38% indicating a large increase in female principals within the white subgroup. The percentage of female black principals rose from 55.34% to 60.94%. The percentage of male Hispanic principals rose from 34.78% to 48.11%, indicating a large increase in male principals within the Hispanic principal group. All minority sub groups had a greater percentage of female principals as compared to male principals.

Educational Attainment

Post-secondary academic training was also examined within the population of principals spanning the years 1996-2011. The following tables and figures demonstrate how doctoral degree attainment has changed over time.

Figure 28

Principals with Doctorate over time – Percent

Principals with Doctorate over time (Percent)

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
All Grades	9.99	10.0	9.58	10.1	9.70	9.43	9.48	9.42	11.1	10.0	9.93	9.03	9.03	8.48	8.66
Elementary	10.3	10.6	10.2	10.2	9.61	9.36	9.23	9.50	12.3	11.5	11.1	9.86	10.0	9.06	9.51
High School	10.5	9.62	9.18	10.3	10.0	8.85	9.29	9.01	10.1	9.32	9.75	8.55	8.16	8.07	8.47
Junior High	8.20	7.59	8.82	10.1	8.24	10.1	9.20	10.2	10.1	5.68	1.27	2.90	4.05	1.43	3.39
Middle	8.33	9.75	8.80	9.76	10.0	10.1	10.5	9.55	9.50	7.94	8.32	8.30	8.07	7.83	6.81

Figure 29

Principals with Doctorate over time – Count

Principals with Doctorate over time (Count)

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
All Grades	345	351	337	368	359	357	364	365	443	408	404	372	372	350	337
Elementary	177	182	176	183	174	174	174	179	240	226	214	190	195	177	175
High School	102	94	90	103	101	92	98	97	114	108	114	103	98	98	96
Junior High	5	6	6	8	7	8	8	10	9	5	1	2	3	1	2
Middle	46	55	52	60	64	66	70	64	66	57	64	66	63	60	50
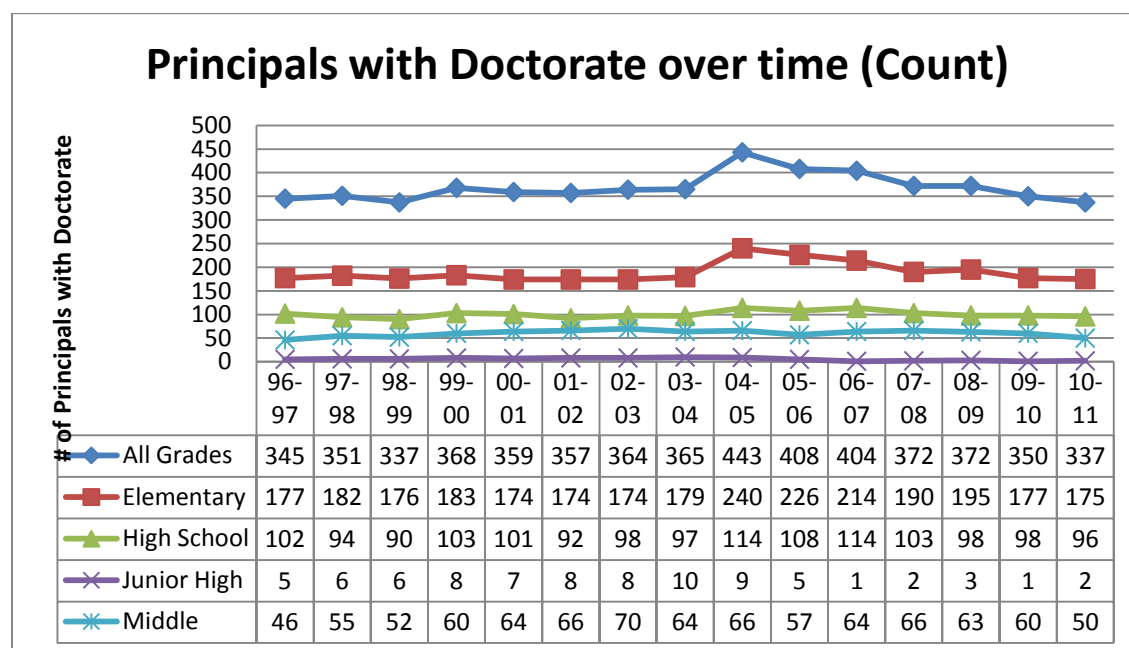
In examining doctoral degree attainment only 8%-11 % of the principal population earned a Doctorate degree with the highest percentage being 11.10% in the 2004-2005 school year. Additional, more specific, grade spans were also examined. Within different grade spans middle school and junior high school principals were least likely to have a doctorate degree. This may be attributed to the low number of principals within these grade span populations. Other grade spans mirror the overall population in attainment of a doctoral degree.

Figure 30

Doctorate degree by gender over time – Percent

Doctorate degree by gender over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	9.52	9.34	9.02	9.54	9.37	9.34	8.88	8.51	10.0	8.92	8.68	8.22	7.91	7.21	7.56
Female	10.8	11.2	10.4	11.1	10.1	9.57	10.3	10.6	12.4	11.5	11.4	9.97	10.3	9.93	9.94

Y-axis: % of Principals with Doctorate
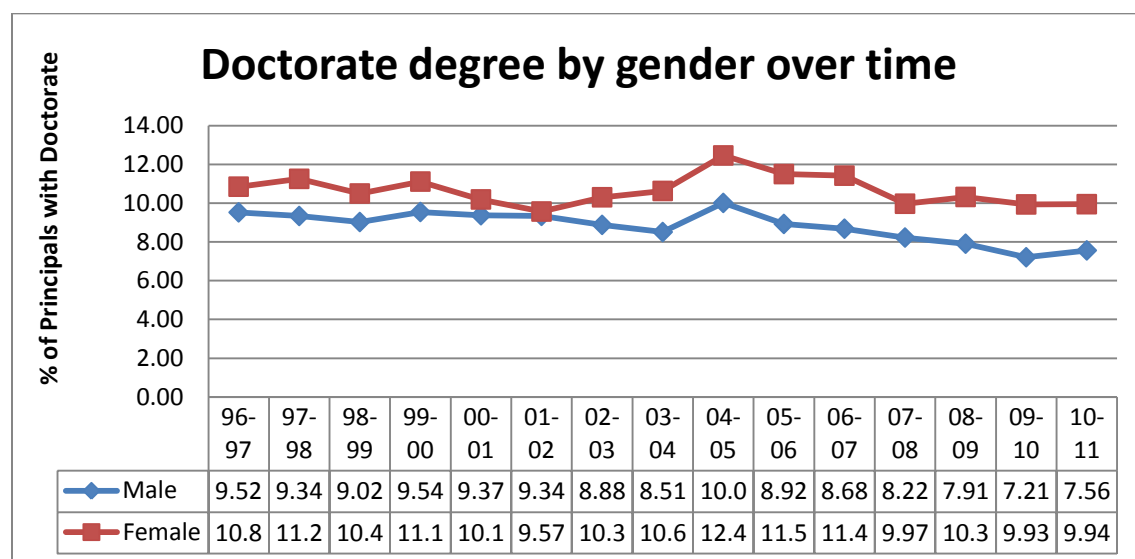
Figure 31

Doctorate degree by gender over time – Count

Doctorate degree by gender over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	213	208	197	210	208	207	196	187	222	200	192	182	174	159	158
Female	132	143	140	158	151	150	168	178	221	208	212	190	198	191	179
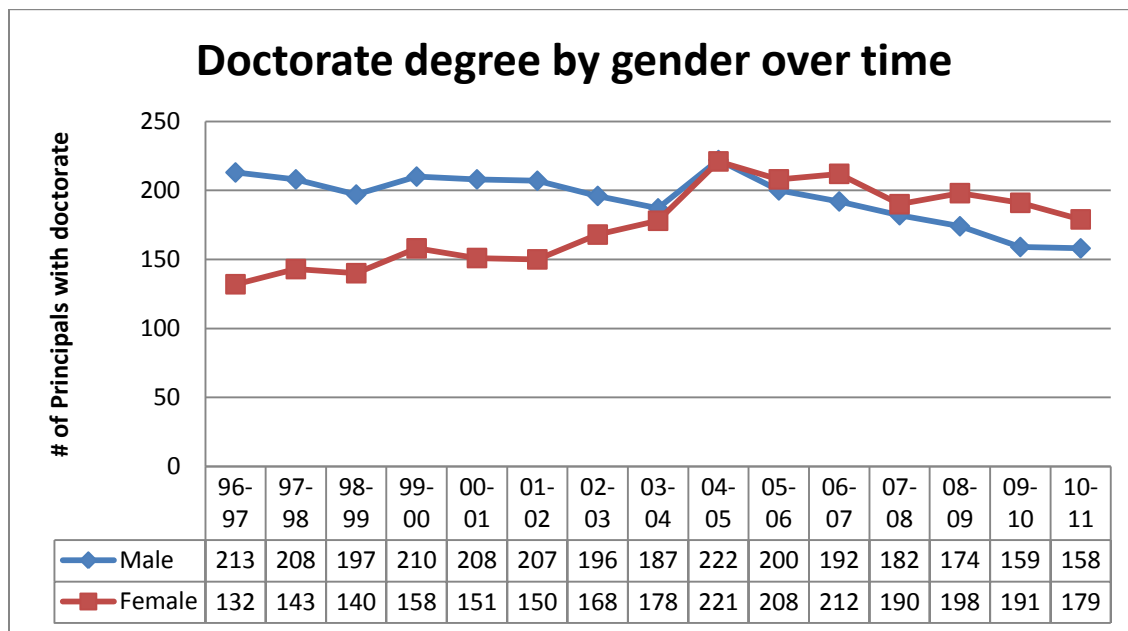
In examining degree by gender over time in each year reviewed the percentage of female principals with a doctorate degree was greater than the percentage of male principals with a doctorate degree. Additionally in 2005 and beyond the number of female principals with a doctorate surpassed the number of male principals with a doctorate degree.

Figure 32

Doctorate degree by race over time – Percent

Doctorate degree by race over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	10.3	10.3	9.70	10.3	10.0	9.70	9.91	9.52	10.2	9.44	9.34	8.45	8.43	7.74	8.20
Black	8.50	8.82	8.53	9.40	7.88	8.14	7.45	9.22	13.4	12.4	13.0	12.2	12.5	12.3	11.4
Hispanic	6.52	4.76	6.82	5.36	6.90	6.06	6.25	4.62	14.2	14.1	7.78	6.06	3.98	4.62	5.19
Asian	3.70	6.25	11.1	9.30	5.00	7.14	6.98	8.89	14.5	8.00	7.55	5.45	10.0	14.2	18.1
Amer. Ind./Alas. Nat.	10.7	10.3	15.3	13.3	13.3	11.4	10.2	7.50	16.6	10.7	6.78	6.58	8.70	9.30	12.5
Haw./Pac. Isl.	0.00	33.3	50.0	100.	100.	100.	50.0	50.0	66.6	33.3	50.0	33.3	66.6	66.6	50.0
Two or more races	33.3	20.0	16.6	16.6	20.0	25.0	20.0	40.0	25.0	18.1	20.0	18.1	14.2	66.6	0.00

Figure 33

Doctorate degree by race over time – Count

Doctorate degree by race over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	293	298	280	305	305	298	308	295	323	299	294	266	265	243	241
Black	43	44	44	50	42	46	43	57	89	85	92	89	91	89	78
Hispanic	3	2	3	3	4	4	4	3	11	11	7	6	7	9	11
Asian	1	2	4	4	2	3	3	4	7	4	4	3	2	3	2
Amer. Ind./Alas. Nat.	3	3	4	4	4	4	4	3	9	6	4	5	4	4	4
Haw./Pac. Isl.	0	1	1	1	1	1	1	1	2	1	1	1	2	2	1
Two or more races	2	1	1	1	1	1	1	2	2	2	2	2	1	0	0

Prior to the 2004-2005 school year Black and Hispanic principals had a lower percentage of individuals with a doctoral degree. In 2005 the percentage of principals with a doctoral degree rose for these sub groups and surpassed the percentage of white principals with a doctoral degree. The Black population has maintained the lead in percentage of principals with a doctoral degree since 2005, peaking in 2005 with 13.4%. The percentages of the other minority subgroup categories are skewed due to the low number of principals in these categories.

Race / Ethnicity

Race and ethnicity was also examined as a descriptor for the population of principals spanning the years 1996-2011. The following tables and figures represent the breakdown of various races over time by both percent and count.

Figure 34

Race over time – All grades – Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	82.1	82.5	82.0	81.5	81.9	81.1	80.9	79.9	78.6	78.2	77.3	76.4	76.2	76.0	75.5
Black	14.6	14.2	14.6	14.6	14.4	14.9	15.0	15.9	16.6	16.8	17.3	17.6	17.6	17.4	17.5
Hispanic	1.33	1.20	1.25	1.55	1.57	1.74	1.67	1.68	1.93	1.93	2.21	2.40	4.27	4.72	5.45
Asian	0.78	0.91	1.02	1.19	1.08	1.11	1.12	1.16	1.20	1.23	1.30	1.34	0.49	0.51	0.28
Amer. Ind./Alask.	0.81	0.83	0.74	0.83	0.81	0.92	1.02	1.03	1.35	1.38	1.45	1.85	1.12	1.04	0.82
Hawaiian/Pac.Is.	0.06	0.09	0.06	0.03	0.03	0.03	0.05	0.05	0.08	0.07	0.05	0.07	0.07	0.07	0.05
Two + Races	0.17	0.14	0.17	0.17	0.14	0.11	0.13	0.13	0.20	0.27	0.25	0.27	0.17	0.15	0.36

Figure 35

Race over time – All grades – Count

Race over time - All grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	2839	2889	2887	2955	3034	3071	3109	3098	3138	3169	3148	3147	3142	3140	2938
Black	506	499	516	532	533	565	577	618	664	683	707	728	726	721	681
Hispanic	46	42	44	56	58	66	64	65	77	78	90	99	176	195	212
Asian	27	32	36	43	40	42	43	45	48	50	53	55	20	21	11
Amer. Ind./Alask.	28	29	26	30	30	35	39	40	54	56	59	76	46	43	32
Hawaiian/Pac.Is.	2	3	2	1	1	1	2	2	3	3	2	3	3	3	2
Two + Races	6	5	6	6	5	4	5	5	8	11	10	11	7	6	14

When examining the breakdown of the principal population by race between 1996 and 2011 it is evident that the number of Black and Hispanic principals increased over this time period. The percent of black principals rose from 14.65% in 1996 to 17.51% in 2011. The percentage of Hispanic principals rose from 1.33% of the principal population in 1996 to 5.45% in 2011. The overall population remained predominantly White with 82.1% of the principals being White in 1996 and 75.5% of principals being White in 2011.

Figure 36

Race over time – Elementary grades – Percent

Race over time - Elementary grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	80.1	80.5	79.5	79.0	79.5	78.4	77.8	76.8	75.0	75.0	73.4	72.8	72.6	72.6	71.5
Black	15.4	14.8	15.5	15.5	15.3	16.0	16.6	17.5	18.4	18.5	19.6	19.1	19.1	19.0	19.4
Hispanic	2.22	2.04	2.16	2.41	2.43	2.69	2.49	2.55	2.72	2.81	2.96	3.11	5.62	5.94	7.28
Asian	1.23	1.46	1.69	1.97	1.77	1.78	1.70	1.65	1.70	1.69	1.71	1.87	0.72	0.72	0.27
Amer. Ind./Alask.	0.70	0.76	0.76	0.84	0.77	0.91	1.17	1.33	1.80	1.64	1.97	2.65	1.70	1.54	1.14
Hawaiian/Pac.Is.	0.06	0.12	0.12	0.06	0.06	0.05	0.05	0.05	0.10	0.10	0.05	0.10	0.05	0.05	0.00
Two + Races	0.23	0.18	0.17	0.17	0.11	0.05	0.11	0.05	0.15	0.26	0.21	0.26	0.15	0.15	0.33

Figure 37

Race over time – Elementary grades – Count

Race over time- Elementary grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	1372	1379	1365	1408	1441	1458	1467	1447	1461	1467	1414	1404	1410	1418	1317
Black	264	255	267	276	277	299	314	331	359	362	378	369	371	371	358
Hispanic	38	35	37	43	44	50	47	48	53	55	57	60	109	116	134
Asian	21	25	29	35	32	33	32	31	33	33	33	36	14	14	5
Amer. Ind./Alask.	12	13	13	15	14	17	22	25	35	32	38	51	33	30	21
Hawaiian/Pac.Is.	1	2	2	1	1	1	1	1	2	2	1	2	1	1	0
Two + Races	4	3	3	3	2	1	2	1	3	5	4	5	3	3	6

Figure 38

Race over time – High school grades – Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	83.2	83.7	83.4	82.7	83.3	83.1	83.7	82.7	81.8	81.4	80.5	78.9	79.2	78.3	77.9
Black	14.7	14.2	14.5	14.6	13.9	13.7	13.4	14.7	15.0	15.5	15.9	17.1	16.5	16.3	16.5
Hispanic	0.31	0.31	0.31	0.80	0.89	1.15	1.04	1.02	1.25	1.12	1.71	1.91	3.16	4.28	4.32
Asian	0.42	0.51	0.51	0.50	0.50	0.58	0.57	0.65	0.80	0.78	0.86	0.75	0.25	0.33	0.35
Amer. Ind./Alask.	1.04	1.02	1.02	1.21	1.29	1.25	1.04	0.74	0.89	0.95	0.86	1.16	0.67	0.66	0.53
Hawaiian/Pac.Is.	0.10	0.10	0.00	0.00	0.00	0.00	0.09	0.09	0.09	0.00	0.00	0.00	0.08	0.08	0.18
Two + Races	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.00	0.09	0.17	0.17	0.17	0.00	0.00	0.18

Figure 39

Race over time – High school grades – Count

Race over time - High school grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	802	818	818	823	838	864	883	891	920	944	941	951	952	952	883
Black	142	139	143	146	140	143	142	159	169	180	186	206	199	198	187
Hispanic	3	3	3	8	9	12	11	11	14	13	20	23	38	52	49
Asian	4	5	5	5	5	6	6	7	9	9	10	9	3	4	4
Amer. Ind./Alask.	10	10	10	12	13	13	11	8	10	11	10	14	8	8	6
Hawaiian/Pac.Is.	1	1	0	0	0	0	1	1	1	0	0	0	1	1	2
Two + Races	1	1	1	1	1	1	1	0	1	2	2	2	0	0	2

Figure 40

Race over time – Junior high school grades – Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	70.4	73.4	75.0	77.2	78.8	77.2	77.0	77.5	77.5	80.6	83.5	82.6	78.3	81.4	81.3
Black	26.2	25.3	25.0	21.5	18.8	20.2	19.5	17.3	17.9	15.9	15.1	17.3	21.6	18.5	13.5
Hispanic	1.64	0.00	0.00	1.27	1.18	1.27	1.15	2.04	3.37	2.27	0.00	0.00	0.00	0.00	3.39
Asian	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amer. Ind./Alask.	1.64	1.27	0.00	0.00	1.18	1.27	2.30	2.04	1.12	1.14	1.27	0.00	0.00	0.00	0.00
Two + Races	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69

Figure 41

Race over time – Junior high school grades – Count

Race over time- Junior high grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	43	58	51	61	67	61	67	76	69	71	66	57	58	57	48
Black	16	20	17	17	16	16	17	17	16	14	12	12	16	13	8
Hispanic	1	0	0	1	1	1	1	2	3	2	0	0	0	0	2
Asian	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Amer. Ind./Alask.	1	1	0	0	1	1	2	2	1	1	1	0	0	0	0
Two + Races	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Figure 42

Race over time – Middle school grades – Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	86.0	86.5	85.6	85.0	84.6	84.0	84.8	83.1	82.1	80.5	80.6	78.9	78.8	79.1	79.5
Black	12.1	11.8	12.8	13.3	13.9	14.5	13.7	15.0	15.5	15.6	15.0	16.2	16.1	16.0	15.5
Hispanic	0.72	0.53	0.68	0.65	0.63	0.46	0.76	0.60	0.72	1.11	1.56	1.89	3.33	3.26	3.41
Asian	0.36	0.35	0.34	0.49	0.47	0.31	0.15	0.30	0.43	0.70	0.91	1.01	0.38	0.39	0.27
Amer. Ind./Alask.	0.72	0.71	0.34	0.33	0.16	0.46	0.30	0.45	0.72	1.39	1.17	1.26	0.64	0.65	0.68
Hawaiian/Pac.Is.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.13	0.13	0.13	0.13	0.00
Two + Races	0.00	0.00	0.17	0.16	0.16	0.15	0.15	0.45	0.43	0.56	0.52	0.50	0.51	0.39	0.54

Figure 43

Race over time – Middle school grades – Count

Race over time - Middle school grades

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	475	488	506	523	540	547	562	557	571	578	620	628	616	606	584
Black	67	67	76	82	89	95	91	101	108	112	116	129	126	123	114
Hispanic	4	3	4	4	4	3	5	4	5	8	12	15	26	25	25
Asian	2	2	2	3	3	2	1	2	3	5	7	8	3	3	2
Amer. Ind./Alask.	4	4	2	2	1	3	2	3	5	10	9	10	5	5	5
Hawaiian/Pac.Is.	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0
Two + Races	0	0	1	1	1	1	1	3	3	4	4	4	4	3	4

The race distribution of the principal population within individual grade spans was similar to the overall race distribution within all grades, with the majority of principals being White, followed by Black and Hispanic principals representing the largest minority subgroups. There was a higher percentage of black principals within the junior high grades. The small population of principals within this grade span may skew this percentage.

Figure 44

Race by doctorate degree over time – Percent

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	84.9	84.9	83.0	82.8	84.9	83.4	84.6	80.8	72.9	73.2	72.7	71.5	71.2	69.4	71.5
Black	12.4	12.5	13.0	13.5	11.7	12.8	11.8	15.6	20.0	20.8	22.7	23.9	24.4	25.4	23.1
Hispanic	0.87	0.57	0.89	0.82	1.11	1.12	1.10	0.82	2.48	2.70	1.73	1.61	1.88	2.57	3.26
Asian	0.29	0.57	1.19	1.09	0.56	0.84	0.82	1.10	1.58	0.98	0.99	0.81	0.54	0.86	0.59
Amer. Ind./Alask.	0.87	0.85	1.19	1.09	1.11	1.12	1.10	0.82	2.03	1.47	0.99	1.34	1.08	1.14	1.19
Hawaiian/Pac.Is.	0.00	0.28	0.30	0.27	0.28	0.28	0.27	0.27	0.45	0.25	0.25	0.27	0.54	0.57	0.30
Two + Races	0.58	0.28	0.30	0.27	0.28	0.28	0.27	0.55	0.45	0.49	0.50	0.54	0.27	0.00	0.00

Figure 45

Race by doctorate degree over time – Count

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	293	298	280	305	305	298	308	295	323	299	294	266	265	243	241
Black	43	44	44	50	42	46	43	57	89	85	92	89	91	89	78
Hispanic	3	2	3	3	4	4	4	3	11	11	7	6	7	9	11
Asian	1	2	4	4	2	3	3	4	7	4	4	3	2	3	2
Amer. Ind./Alask.	3	3	4	4	4	4	4	3	9	6	4	5	4	4	4
Hawaiian/Pac.Is.		1	1	1	1	1	1	1	2	1	1	1	2	2	1
Two + Races	2	1	1	1	1	1	1	2	2	2	2	2	1		
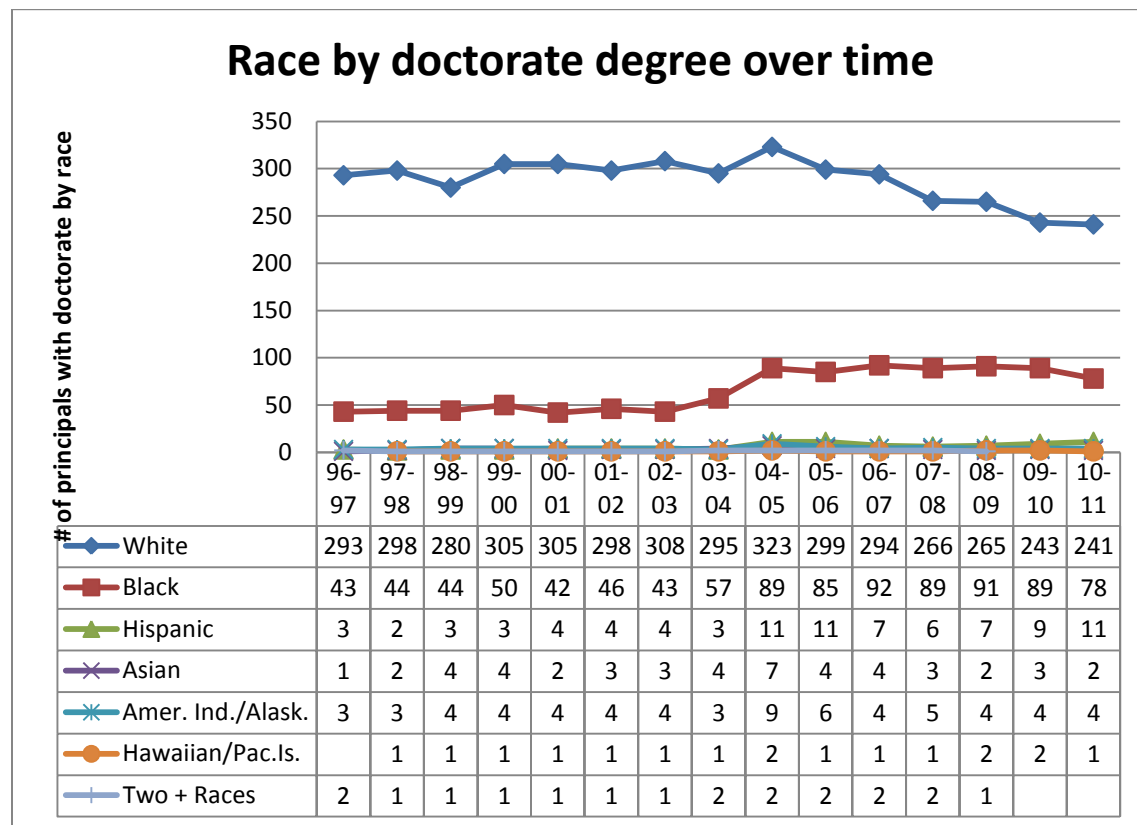
Between 1996 and 2011 the race distribution of principals with their doctorate degree changed. There was an increase in the percentage of black principals with a doctorate. In 1996 the percentage of principals with their doctorate that were black was 12.46% and in 2011 this percentage was 23.15%. Hispanic principals with a doctoral degree rose from .87% in 1996 to 3.26% in 2011. Overall, the population of principals with a doctoral degree was mostly white with a percentage of 84.9% in 1996 and 71.5% in 2011.
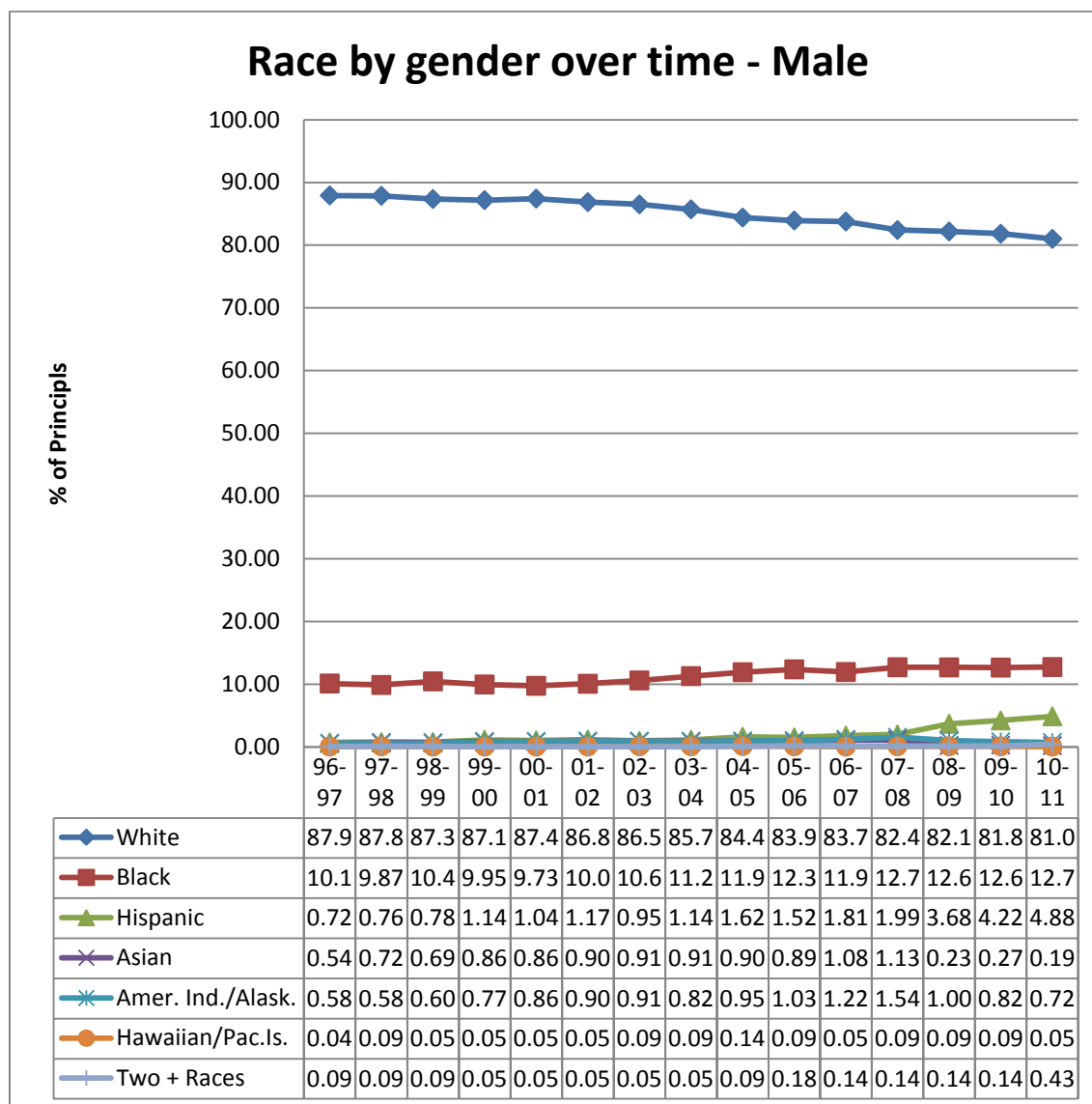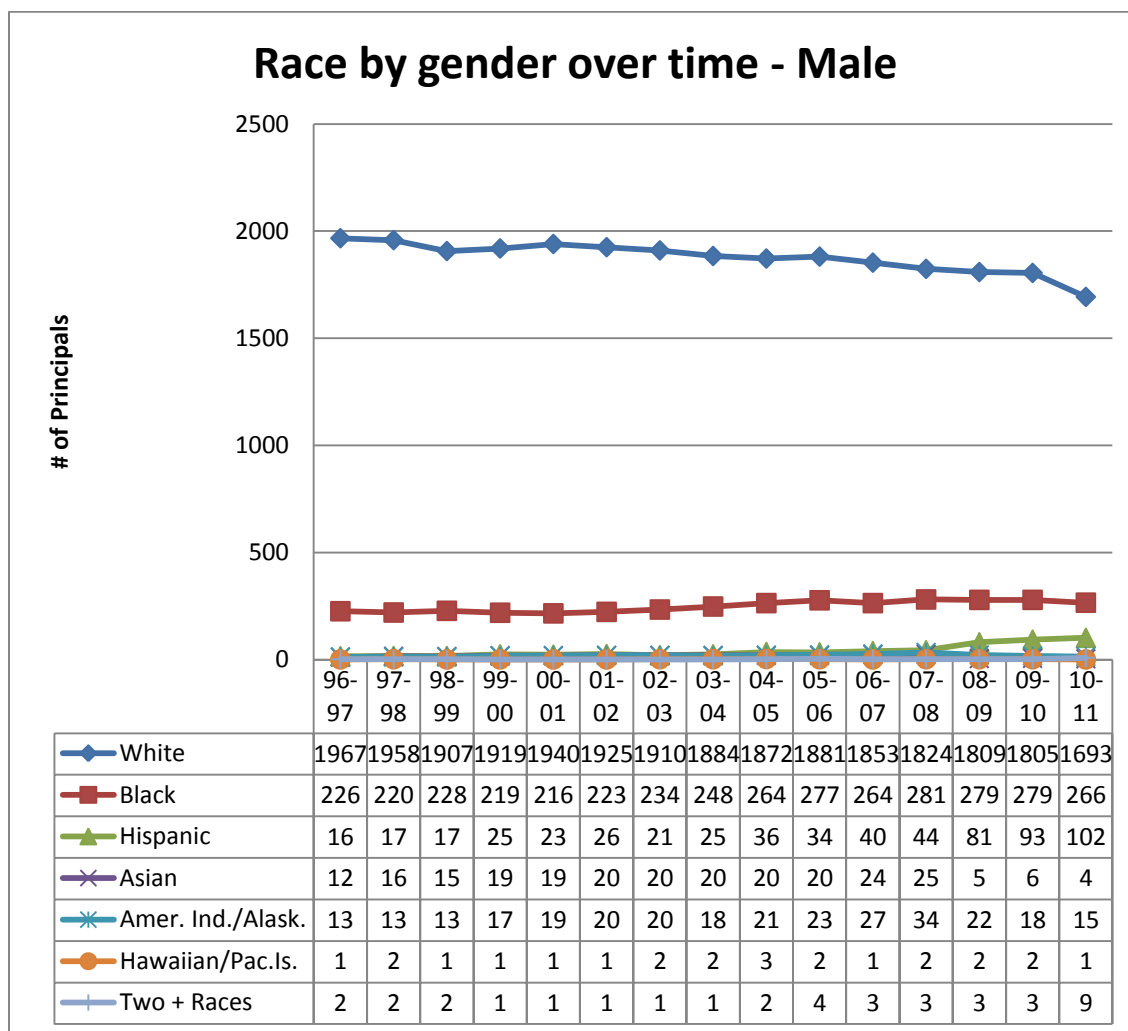
Figure 46

Race by gender over time – Male – Percent

Race by gender over time - Male

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	87.9	87.8	87.3	87.1	87.4	86.8	86.5	85.7	84.4	83.9	83.7	82.4	82.1	81.8	81.0
Black	10.1	9.87	10.4	9.95	9.73	10.0	10.6	11.2	11.9	12.3	11.9	12.7	12.6	12.6	12.7
Hispanic	0.72	0.76	0.78	1.14	1.04	1.17	0.95	1.14	1.62	1.52	1.81	1.99	3.68	4.22	4.88
Asian	0.54	0.72	0.69	0.86	0.86	0.90	0.91	0.91	0.90	0.89	1.08	1.13	0.23	0.27	0.19
Amer. Ind./Alask.	0.58	0.58	0.60	0.77	0.86	0.90	0.91	0.82	0.95	1.03	1.22	1.54	1.00	0.82	0.72
Hawaiian/Pac.Is.	0.04	0.09	0.05	0.05	0.05	0.05	0.09	0.09	0.14	0.09	0.05	0.09	0.09	0.09	0.05
Two + Races	0.09	0.09	0.09	0.05	0.05	0.05	0.05	0.05	0.09	0.18	0.14	0.14	0.14	0.14	0.43

Figure 47

Race by gender over time – Male – Count

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	1967	1958	1907	1919	1940	1925	1910	1884	1872	1881	1853	1824	1809	1805	1693
Black	226	220	228	219	216	223	234	248	264	277	264	281	279	279	266
Hispanic	16	17	17	25	23	26	21	25	36	34	40	44	81	93	102
Asian	12	16	15	19	19	20	20	20	20	20	24	25	5	6	4
Amer. Ind./Alask.	13	13	13	17	19	20	20	18	21	23	27	34	22	18	15
Hawaiian/Pac.Is.	1	2	1	1	1	1	2	2	3	2	1	2	2	2	1
Two + Races	2	2	2	1	1	1	1	1	2	4	3	3	3	3	9

Figure 48

Race by gender over time – Female – Percent

Race by gender over time - Female

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	71.6	73.2	73.4	72.8	73.8	73.0	73.5	72.4	71.3	71.2	69.7	69.4	69.4	69.4	69.1
Black	23.0	21.9	21.5	22.0	21.3	21.8	21.0	22.0	22.5	22.4	23.8	23.4	23.2	22.9	23.0
Hispanic	2.47	1.97	2.02	2.18	2.36	2.55	2.64	2.39	2.31	2.43	2.69	2.89	4.95	5.30	6.11
Asian	1.23	1.26	1.57	1.69	1.42	1.40	1.41	1.49	1.58	1.66	1.56	1.57	0.78	0.78	0.39
Amer. Ind./Alask.	1.23	1.26	0.97	0.91	0.74	0.96	1.16	1.31	1.86	1.82	1.72	2.20	1.25	1.30	0.94
Hawaiian/Pac.Is.	0.08	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.05	0.05	0.05	0.06
Two + Races	0.33	0.24	0.30	0.35	0.27	0.19	0.25	0.24	0.34	0.39	0.38	0.42	0.21	0.16	0.28

Figure 49

Race by gender over time – Female – Count

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	872	931	980	1036	1094	1146	1199	1214	1266	1288	1295	1323	1333	1335	1245
Black	280	279	288	313	317	342	343	370	400	406	443	447	447	442	415
Hispanic	30	25	27	31	35	40	43	40	41	44	50	55	95	102	110
Asian	15	16	21	24	21	22	23	25	28	30	29	30	15	15	7
Amer. Ind./Alask.	15	16	13	13	11	15	19	22	33	33	32	42	24	25	17
Hawaiian/Pac.Is.	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
Two + Races	4	3	4	5	4	3	4	4	6	7	7	8	4	3	5

In examining race by gender one can see that race distribution within the male and female population of principals did not fluctuate much between the years of 1996 and 2011. The percentage of Blacks within the male population rose by a little over 2% from 1996 to 2011 and the percentage of Hispanics within the male population rose by 4% over that time. Blacks within the male population only comprised about 10%-12% of the overall male population of principals over this time. Within the female population blacks made up about 23% of the principal population. Minorities seem to have represented a larger percentage of the female population as compared to the male population of principals.

Salary

Salary was examined for the population of principals spanning the years 1996-2011. This descriptor was reported by degree, gender, race and overall average.

Table 6

Average salary over time

Average salary over time					
School Year	**All Grades**	**Elementary**	**High School**	**Junior High**	**Middle**
96-97	$80,906	$80,451	$82,671	$80,174	$80,379
97-98	$83,093	$82,716	$84,915	$79,302	$82,475
98-99	$85,186	$84,670	$86,962	$83,504	$84,687
99-00	$87,453	$86,908	$89,537	$84,219	$86,527
00-01	$90,024	$89,754	$91,894	$87,255	$88,525
01-02	$93,216	$93,335	$94,873	$90,810	$90,980
02-03	$95,915	$95,935	$97,933	$92,630	$93,486
03-04	$99,150	$99,107	$101,411	$95,677	$96,554
04-05	$101,862	$101,881	$104,305	$98,323	$98,675
05-06	$104,662	$104,714	$107,141	$99,991	$101,785
06-07	$107,464	$107,576	$109,869	$106,321	$104,344
07-08	$110,314	$110,674	$112,251	$107,093	$107,667
08-09	$113,652	$114,228	$115,364	$109,535	$110,910
09-10	$116,273	$116,271	$118,290	$113,555	$114,343
10-11	$118,037	$117,728	$120,464	$115,576	$116,199

Across all grade levels from 1996 to 2011 the average salary of a principal has increased over time from $80,905 is 1996 to $118,037 in 2011. Over the years examined in this study the average salary of a high school principal was approximately $2,000 to $3,000 higher each year as compared to the principal salaries within other grade spans. All grade spans examined mirror the overall population in that there was a consistent rise in the average principal salary over the time period examined.

Table 7

Salary by degree over time

Salary by degree over time			
School Year	**Bachelors**	**Masters**	**Doctorate**
96-97	$64,759	$80,361	$86,945
97-98	$68,615	$82,518	$89,387
98-99	$69,924	$84,717	$91,217
99-00	$72,801	$87,084	$93,337
00-01	$76,233	$89,605	$96,976
01-02	$79,725	$92,847	$100,188
02-03	$82,369	$95,667	$103,045
03-04	$87,776	$98,752	$106,938
04-05	$91,655	$101,231	$109,325
05-06	$91,745	$104,013	$114,434
06-07	$92,469	$106,889	$118,116
07-08	$96,230	$109,735	$121,858
08-09	$99,596	$112,988	$126,049
09-10	$103,644	$115,723	$128,826
10-11	$104,576	$117,367	$131,314

The gap between the average salary earned with a master's degree and the average salary earned with a doctoral degree rose from approximately $6000 in 1996 to approximately $14000 in 2011.

Table 8

Salary by gender over time

Salary by gender over time		
School Year	**Male**	**Female**
96-97	$82,317	$78,311
97-98	$84,542	$80,554
98-99	$86,967	$82,270
99-00	$89,255	$84,665
00-01	$91,712	$87,495
01-02	$94,961	$90,750
02-03	$97,283	$94,062
03-04	$100,536	$97,331
04-05	$103,334	$100,022
05-06	$105,778	$103,281
06-07	$108,609	$106,100
07-08	$111,492	$108,947
08-09	$114,970	$112,140
09-10	$117,402	$114,978
10-11	$118,717	$117,248

Male principals consistently earned more money than female principals over the years examined, although it seems as though the salary gap was narrowed among men and women. The salary gap between male and female principals in 1996 was $4,005 and the gap in 2011 was $1,468.

Table 9

Salary by race over time

School Year	White	Black	Hispanic	Asian	Am.Ind./ Alas.	Haw./ Pac.Isl.	Two + Races
			Salary by race over time				
96-97	$81,602	$77,746	$75,993	$79,431	$77,302	$82,080	$78,358
97-98	$83,783	$79,697	$79,919	$82,810	$80,056	$74,263	$74,647
98-99	$85,811	$82,280	$81,346	$84,941	$81,895	$72,638	$82,290
99-00	$88,070	$84,384	$83,868	$90,202	$85,710	$58,345	$83,141
00-01	$90,636	$86,460	$88,291	$94,525	$88,870	$80,000	$91,336
01-02	$93,591	$90,593	$93,253	$100,643	$93,351	$88,000	$96,873
02-03	$96,305	$93,335	$95,909	$103,731	$95,017	$77,525	$98,419
03-04	$99,718	$95,634	$101,974	$106,390	$97,806	$81,798	$97,206
04-05	$102,589	$98,422	$103,598	$107,024	$96,609	$94,743	$92,820
05-06	$105,341	$101,423	$105,950	$110,356	$101,120	$85,340	$98,684
06-07	$108,401	$103,680	$105,983	$111,668	$102,767	$89,556	$102,600
07-08	$111,457	$105,880	$108,357	$118,546	$103,905	$84,294	$104,592
08-09	$114,727	$109,968	$110,722	$124,737	$106,574	$98,636	$108,077
09-10	$117,457	$112,111	$114,217	$121,091	$107,461	$106,948	$114,226
10-11	$119,200	$114,158	$115,654	$125,909	$115,189	$106,632	$100,871

Although white principals had a higher average salary than other races in the years examined, the Hispanic population and the Asian population of principals experienced increases in the average principal salary. In some years the Hispanic average salary was higher than the White average salary, and beginning in 2000 the Asian average salary was higher than the White average salary for principals. Other minority subgroups seemed to have a more volatile average salary due to the low numbers of principals in these subgroups.

Table 10

Salary by age over time

Salary by age over time								
School Year	**100's**	**90's**	**80's**	**70's**	**60's**	**50's**	**40's**	**30's**	**20's**
96-97			$80,000	$83,214	$81,117	$77,585	$70,684	$60,465	$50,000
97-98				$85,238	$83,923	$80,287	$73,165	$60,227	$62,500
98-99				$91,538	$86,335	$83,278	$75,965	$63,367	$56,667
99-00			$93,750	$89,823	$85,811	$79,398	$67,173	$63,810	
00-01			$87,500	$93,105	$89,223	$82,486	$71,253	$66,458	
01-02			$95,714	$97,375	$93,398	$87,149	$75,278	$67,714	
02-03		$100,000	$102,000	$100,000	$96,679	$90,486	$79,412	$73,114	
03-04			$102,500	$104,222	$101,166	$94,782	$83,752	$76,743	
04-05			$110,000	$105,469	$105,213	$98,561	$87,795	$80,263	
05-06			$115,000	$107,358	$109,425	$102,847	$91,502	$83,449	$90,000
06-07			$115,000	$120,541	$113,711	$106,837	$94,892	$87,586	$80,000
07-08			$125,000	$124,412	$118,156	$110,481	$99,155	$91,290	$73,750
08-09		$95,000	$125,000	$128,077	$122,025	$114,732	$104,159	$95,352	$84,000
09-10		$120,000	$134,348	$126,196	$118,364	$107,556	$98,502	$84,444	
10-11	$100,000	$120,000	$130,000	$128,596	$121,568	$110,760	$101,907	$84,694	

An examination of salary as it relates to age indicates that older principals had higher salaries up to the age bracket of 70-80 years old. Beyond this age bracket salaries dropped below the top salary brackets. Principals in their 50's, 60's and 70's have experienced greater increases in the average principal salary in the time frame of 1996-2011 as compared to principals in their 20's, 30's and 40's.

Age

Age was also included as a descriptor in examining the population of principals over the years 1996-2011. The descriptor was examined by looking at an overall average as well as by

examining age by degree, gender and race. The following tables demonstrate the variability in age over time within the principalship.

Figure 50

Age over time – All grades
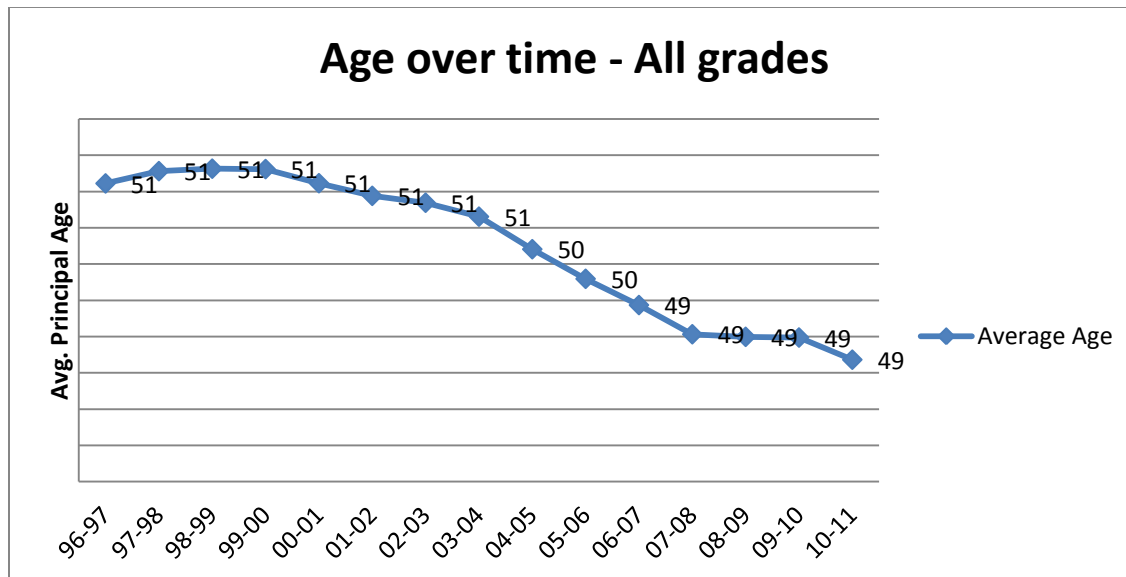
The average age of a principal in New Jersey remained somewhat constant over the time period examined. It only decreased by two years over the time period from 1996-2011.
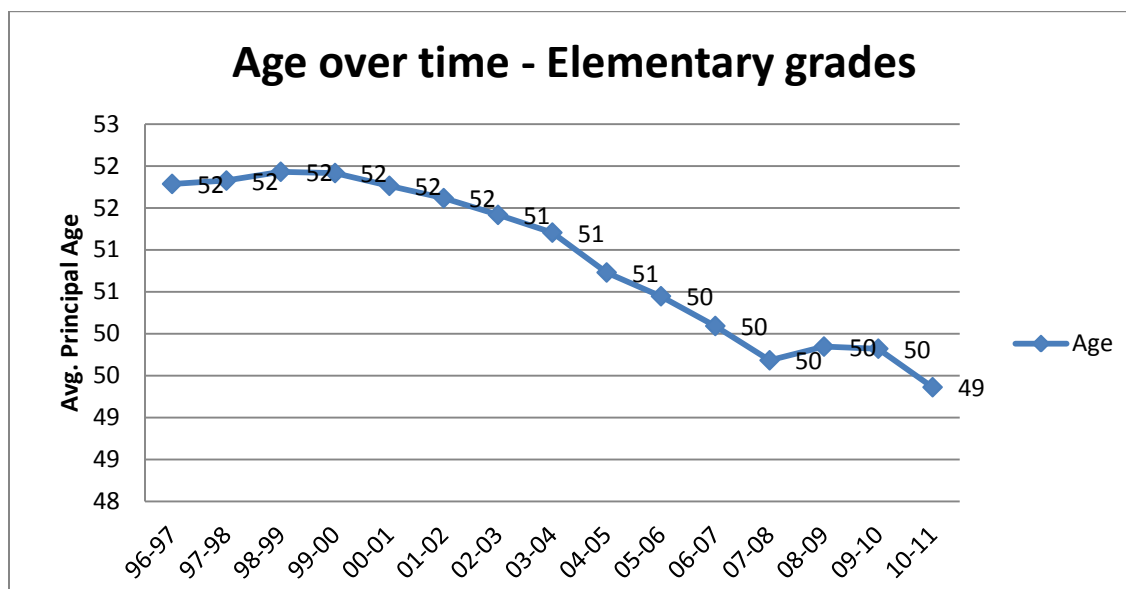
Figure 51

Age over time – Elementary grades

Figure 52

Age over time – High school grades

Figure 53

Age over time – Junior high school grades
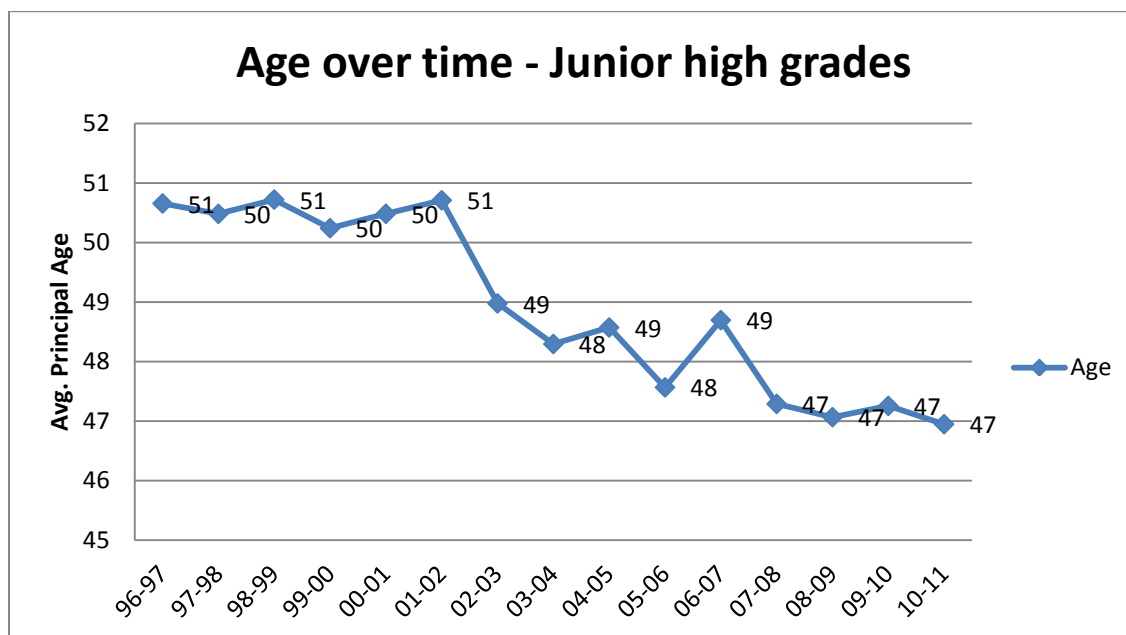
Figure 54

Age over time – Middle school grades
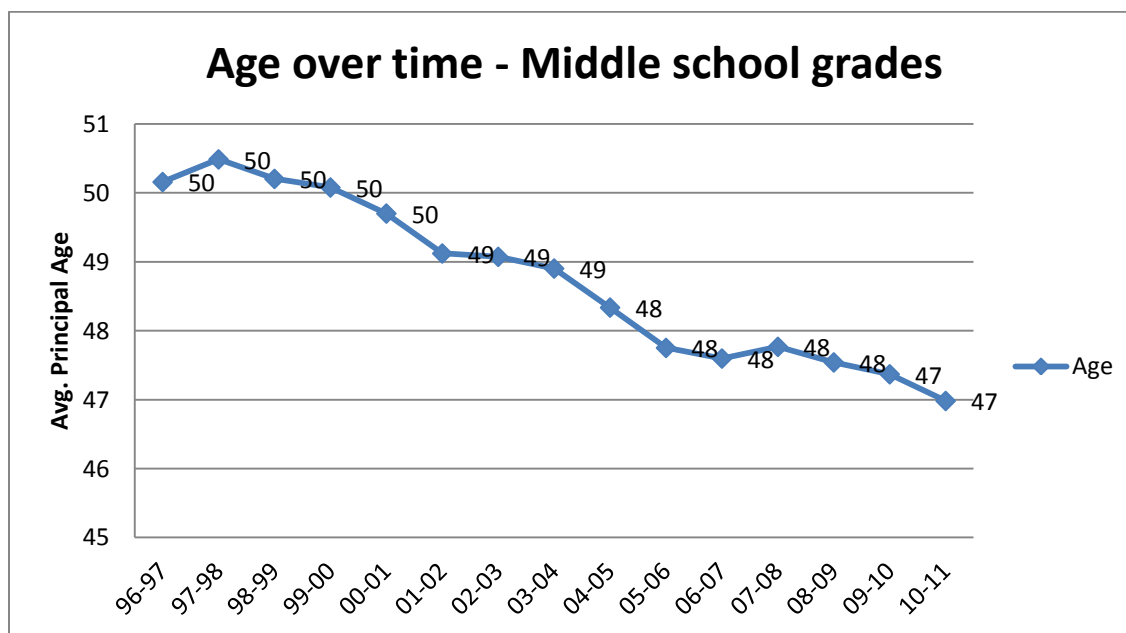
Within the different grade spans the average age of a principal mirrored that of the

overall population with very little variability in age in the time period examined.

Figure 55

Age by degree over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Bachelors	47	52	53	44	43	43	42	43	43	43	42	43	44	44	44
Masters	51	54	55	51	51	51	51	51	50	50	49	49	49	49	48
Doctorate	53	53	54	53	53	53	53	54	53	54	54	54	54	54	53
Other	52	54	55	55	55	56	54	53	52	54	55	57	54	52	53
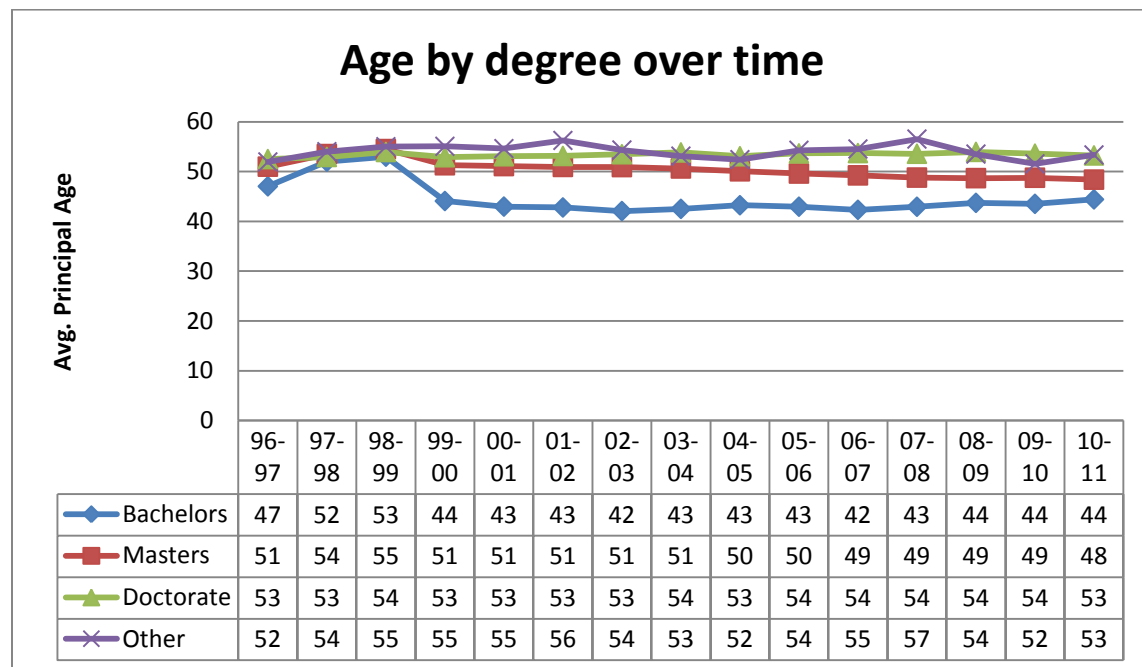
The age gap between principals with a master's degree and principals with a doctoral

degree changed slightly over time from an average age of 51 for a master degree and 53 for a

doctoral degree in 1996 to an average age of 48 for a master's degree and 53 for a doctoral

degree in 2011.

Figure 56

Age by gender over time

Age by gender over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
Male	51	51	51	52	51	51	51	50	50	49	49	48	48	48	48
Female	51	51	51	51	51	51	51	51	51	50	50	50	50	50	50
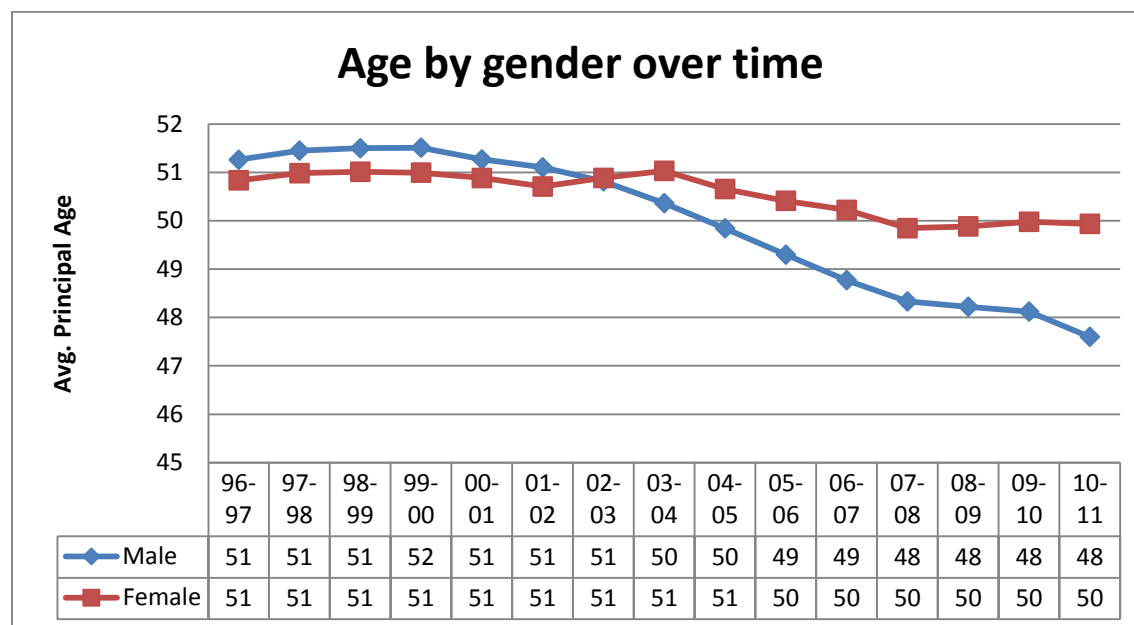
Figure 57

Age by race over time

Age by race over time

	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11
White	51	51	51	51	51	51	51	51	51	50	50	50	49	49	49
Black	53	52	52	52	51	51	51	50	50	49	48	48	48	48	48
Hispanic	49	49	49	49	49	49	50	50	48	48	48	46	46	47	47
Asian	50	51	51	51	50	51	52	49	49	50	50	51	51	49	48
Am. Ind./Alas.	49	48	49	49	49	49	48	47	45	44	44	43	43	43	44
Haw./Pac.Isl.	51	45	47	33	34	35	46	47	43	37	35	44	42	43	44
Two + Races	49	47	48	49	48	48	47	42	41	42	41	42	38	40	43

In examining both, age by gender and age by race the average age did not fluctuate more than two years within the male and female populations as well as the major racial groups of White, Black and Hispanic indicating stability within this descriptor.

Research Questions 2 and 3

Research question two indicates: How can the career paths of new principals be described in New Jersey from 2003-2008?

Research question three indicates: Do the career paths of New Jersey Leaders to Leaders participants differ from the career paths of non-participants in the time frame 2003-2008?

In addressing both of these questions the researcher examined cohorts of principals that had been identified as new principals for a particular school year and tracked their job code for several years after in order to examine changes to job code relative to school, school district and change in salary. The four cohorts of new principals examined included the school years 2003-2004, 2004-2005, 2005-2006 and 2006-2007. The New Jersey Leaders to Leaders program was implemented in 2005 and choosing these four years to examine allowed the researcher the ability to look at new principals for two years before and after the New Jersey Leaders to Leaders program was implemented. The following summary tables were produced after the coding of the cohorts was completed as outlined in the methodology section.

Table 11

NJL2L first class (original year comparison)

Status	NJL2L first class 05-06 (count=261)					NJL2L first class 05-06 (percent)				
	06-07	07-08	08-09	09-10	10-11	06-07	07-08	08-09	09-10	10-11
Same job code	219	169	124	102	48	83.91	64.75	47.51	39.08	18.39
Different job code – same school – higher salary (SS)	6	15	24	29	42	2.30	5.75	9.20	11.11	16.09
Different job code – same district – higher salary (SD)	15	31	40	46	64	5.75	11.88	15.33	17.62	24.52
Different job code – different district – higher salary (DD)	4	17	23	26	29	1.53	6.51	8.81	9.96	11.11
Different job code – same school – lower salary (SS)	2	2	4	4	7	0.77	0.77	1.53	1.53	2.68
Different job code – same district – lower salary (SD)	4	5	6	6	8	1.53	1.92	2.30	2.30	3.07
Different job code – different district – lower salary (DD)	4	6	7	8	10	1.53	2.30	2.68	3.07	3.83
Different job code – same school – same salary (SS)	0	0	0	1	3	0.00	0.00	0.00	0.38	1.15
Different job code – same district – same salary (SD)	0	1	3	5	6	0.00	0.38	1.15	1.92	2.30
Different job code – different district – same salary (DD)	0	0	1	1	1	0.00	0.00	0.38	0.38	0.38
Not on report – left field, left state, retired, deceased	7	15	29	33	43	2.68	5.75	11.11	12.64	16.48

Table 12

NJL2L second class (original year comparison)

Status	NJL2L second class 06-07 (count=258)				NJL2L second class 06-07 (percent)			
	07-08	08-09	09-10	10-11	07-08	08-09	09-10	10-11
Same job code	217	173	122	85	84.11	67.05	47.29	32.95
Different job code – same school – higher salary (SS)	8	17	23	26	3.10	6.59	8.91	10.08
Different job code – same district – higher salary (SD)	12	22	33	41	4.65	8.53	12.79	15.89
Different job code – different district – higher salary (DD)	5	17	24	27	1.94	6.59	9.30	10.47
Different job code – same school – lower salary (SS)	1	3	3	8	0.39	1.16	1.16	3.10
Different job code – same district – lower salary (SD)	1	2	5	6	0.39	0.78	1.94	2.33
Different job code – different district – lower salary (DD)	1	5	7	8	0.39	1.94	2.71	3.10
Different job code – same school – same salary (SS)	1	1	2	5	0.39	0.39	0.78	1.94
Different job code – same district – same salary (SD)	1	2	2	2	0.39	0.78	0.78	0.78
Different job code – different district – same salary (DD)	0	0	0	0	0.00	0.00	0.00	0.00
Not on report – left field, left state, retired, deceased	11	16	37	50	4.26	6.20	14.34	19.38

Table 13

Nonparticipant first class (original year comparison)

Status	Nonparticipants first class 04-05 (count=273)					Nonparticipants first class 04-05 (percent)				
	05-06	06-07	07-08	08-09	09-10	05-06	06-07	07-08	08-09	09-10
Same job code	223	171	119	80	47	81.68	62.64	43.59	29.30	17.22
Different job code – same school – higher salary (SS)	4	9	16	24	28	1.47	3.30	5.86	8.79	10.26
Different job code – same district – higher salary (SD)	15	35	55	69	78	5.49	12.82	20.15	25.27	28.57
Different job code – different district – higher salary (DD)	7	20	27	31	33	2.56	7.33	9.89	11.36	12.09
Different job code – same school – lower salary (SS)	3	6	6	7	7	1.10	2.20	2.20	2.56	2.56
Different job code – same district – lower salary (SD)	3	3	5	5	6	1.10	1.10	1.83	1.83	2.20
Different job code – different district – lower salary (DD)	4	5	6	6	6	1.47	1.83	2.20	2.20	2.20
Different job code – same school – same salary (SS)	0	1	2	2	5	0.00	0.37	0.73	0.73	1.83
Different job code – same district – same salary (SD)	1	2	3	4	6	0.37	0.73	1.10	1.47	2.20
Different job code – different district – same salary (DD)	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Not on report – left field, left state, retired, deceased	13	21	34	45	57	4.76	7.69	12.45	16.48	20.88

Table 14

Nonparticipant second class (original year comparison)

Status	Nonparticipants second class 03-04 (count=224)					Nonparticipants second class 03-04 (percent)				
	04-05	05-06	06-07	07-08	08-09	04-05	05-06	06-07	07-08	08-09
Same job code	184	145	109	77	51	82.14	64.73	48.66	34.38	22.77
Different job code – same school – higher salary (SS)	7	15	27	30	35	3.13	6.70	12.05	13.39	15.63
Different job code – same district – higher salary (SD)	9	14	22	35	39	4.02	6.25	9.82	15.63	17.41
Different job code – different district – higher salary (DD)	7	14	19	25	32	3.13	6.25	8.48	11.16	14.29
Different job code – same school – lower salary (SS)	2	2	2	2	2	0.89	0.89	0.89	0.89	0.89
Different job code – same district – lower salary (SD)	1	2	2	2	3	0.45	0.89	0.89	0.89	1.34
Different job code – different district – lower salary (DD)	3	4	5	6	6	1.34	1.79	2.23	2.68	2.68
Different job code – same school – same salary (SS)	0	0	3	4	4	0.00	0.00	1.34	1.79	1.79
Different job code – same district – same salary (SD)	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Different job code – different district – same salary (DD)	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Not on report – left field, left state, retired, deceased	11	28	35	43	52	4.91	12.50	15.63	19.20	23.21

Figure 58

Percent of principals with same initial job code

Percent of principals with same initial job code

	Year one	Year two	Year three	Year four	Year five
NJL2L first class 05-06	83.91	64.75	47.51	39.08	18.39
NJL2L second class 06-07	84.11	67.05	47.29	32.95	
Nonparticipants first class 04-05	81.68	62.64	43.59	29.3	17.22
Nonparticipants second class 03-04	82.14	64.73	48.66	34.38	22.77
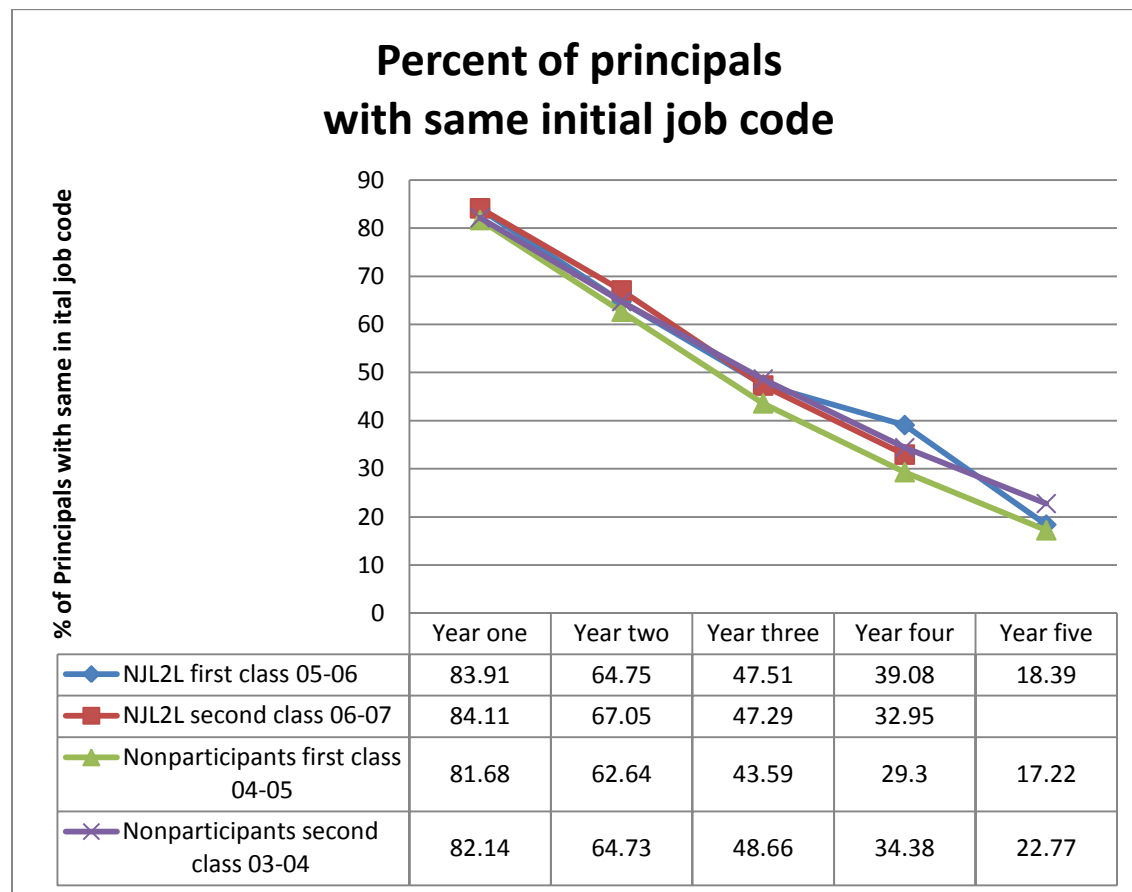
Tables 11-14 tracked principals as compared to the original cohort year and allowed for the tracking of one specific group over time. In reviewing these summary tables it should be noted that the majority of first year principals had the same job code going into their second year as a principal. Within all four cohorts examined these percentages ranged from 81.68% to 84.11%. These percentages decreased over time, ranging from 17.22% to 32.95% in the last year tracked for each cohort. One of the most prevalent conditions for a change in job code involved the individual not appearing on the report, which indicates leaving the field of education, leaving the state, retiring or dying. Percentages in this category ranged from 2.68% to 4.91% in year one and 16.48% to 23.21% in the last year tracked for each cohort. Another prevalent condition for a

change in job code involved getting a new position for a higher salary. These changes occurred within the same district, within the same school or within a different district. Percentages in these categories ranged anywhere from 1.47% to 5.75% of the population in year one and 10.08% to 28.57% in the last year tracked for each cohort. Very few job code changes were linked to moves involving a decrease in salary or a move for the same salary.

Additionally, the difference in job code changes did not vary much between NJL2L participant cohorts and Non-Participant cohorts. Non participants with the same job code after one year ranged from 81.68%-82.14%. NJL2L participants with the same job code after one year ranged from 83.91% to 84.11%. Non participants with the same job code in the last year tracked ranged from 17.22%-22.77%. NJL2L participants with the same job code in the last year tracked ranged from 18.39% to 32.95%.Within the category of "not on report" non-participants after year one ranged from 4.76% to 4.91% and participants ranged from 2.68% to 4.26% in the cohorts examined. Within the category of "not on report" non-participants in the last year tracked ranged from 20.88% to 23.21% and participants ranged from 16.48% to 19.38% in the cohorts examined. Non-participants that had a change in job code resulting in a higher salary after year one ranged from 1.47% to 5.49% and participants in the same category ranged from 1.53% to 5.75%. Non-participants that had a change in job code resulting in a higher salary in the last year tracked ranged from 10.26% to 28.57% and participants in the same category ranged from 10.08% to 24.52%. Figure 58 indicates the percent of principals with the same job code after each year and illustrates the minimal difference between the NJL2L cohorts and the nonparticipant cohorts. There was a less than 3% difference in year one, a less than 5% difference in year two, a less than 5% difference in years three and four and a less than 6% difference in year five.

Table 15

NJL2L first class (previous year comparison)

Status	NJL2L first class 05-06 (count)					NJL2L first class 05-06 (percent)				
	06-07 261	07-08 254	08-09 246	09-10 233	10-11 231	06-07 261	07-08 254	08-09 246	09-10 233	10-11 231
Same job code	219	204	201	211	176	83.91	80.31	81.71	90.56	76.19
Different job code – same school – higher salary	6	9	9	5	13	2.30	3.54	3.66	2.15	5.63
Different job code – same district – higher salary	15	16	9	6	18	5.75	6.30	3.66	2.58	7.79
Different job code – different district – higher salary	4	13	6	3	3	1.53	5.12	2.44	1.29	1.30
Different job code – same school – lower salary	2	0	2	0	3	.77	0	.81	0	1.30
Different job code – same district – lower salary	4	1	1	0	2	1.53	.39	.41	0	.87
Different job code – different district – lower salary	4	2	1	1	2	1.53	.79	.41	.43	.87
Different job code – same school – same salary (SS)	0	0	0	1	2	0	0	0	.43	.87
Different job code – same district – same salary	0	1	2	2	1	0	.39	.81	.86	.43
Different job code – different district – same salary	0	0	1	0	0	0	0	.41	0	0
Not on report – left field, left state, retired, deceased	7	8	14	4	11	2.68	3.15	5.69	1.72	4.76

Table 16

NJL2L second class (previous year comparison)

Status	NJL2L second class 06-07 (count)				NJL2L second class 06-07 (percent)			
	07-08 (258)	08-09 (247)	09-10 (245)	10-11 (226)	07-08 (258)	08-09 (247)	09-10 (245)	10-11 (226)
Same job code	217	203	194	189	84.11	82.19	79.18	83.63
Different job code – same school – higher salary	8	9	6	3	3.10	3.64	2.45	1.33
Different job code – same district – higher salary	12	10	11	8	4.65	4.05	4.49	3.54
Different job code – different district – higher salary	5	12	7	3	1.94	4.86	2.86	1.33
Different job code – same school – lower salary	1	2	0	5	.39	.81	0	2.21
Different job code – same district – lower salary	1	1	3	1	.39	.40	1.22	.44
Different job code – different district – lower salary	1	4	2	1	.39	1.62	.82	.44
Different job code – same school – same salary	1	0	1	3	.39	0	.41	1.33
Different job code – same district – same salary	1	1	0	0	.39	.40	0	0
Different job code – different district – same salary	0	0	0	0	0	0	0	0
Not on report – left field, left state, retired, deceased	11	5	21	13	4.26	2.02	8.57	5.75

Table 17

Nonparticipant first class (previous year comparison)

Status	Nonparticipants first class 04-05 (count)					Nonparticipants first class 04-05 (percent)				
	05-06 273	06-07 260	07-08 256	08-09 243	09-10 234	05-06 273	06-07 260	07-08 256	08-09 243	09-10 234
Same job code	223	208	204	204	201	81.68	80	79.69	83.95	85.90
Different job code – same school – higher salary	4	5	7	8	4	1.47	1.92	2.73	3.29	1.71
Different job code – same district – higher salary	15	20	20	14	9	5.49	7.69	7.81	5.76	3.85
Different job code – different district – higher salary	7	13	7	4	2	2.56	5	2.73	1.65	.85
Different job code – same school – lower salary	3	3	0	1	0	1.10	1.15	0	.42	0
Different job code – same district – lower salary	3	0	2	0	1	1.10	0	.78	0	.43
Different job code – different district – lower salary	4	1	1	0	0	1.47	.38	.39	0	0
Different job code – same school – same salary	0	1	1	0	3	0	.38	.39	0	1.28
Different job code – same district – same salary	1	1	1	1	2	.37	.38	.39	.42	.85
Different job code – different district – same salary	0	0	0	0	0	0	0	0	0	0
Not on report – left field, left state, retired, deceased	13	8	13	11	12	4.76	3.08	5.08	4.53	5.13

Table 18

Nonparticipant second class (previous year comparison)

Status	Nonparticipants second class 03-04 (count)					Nonparticipants second class 03-04 (percent)				
	04-05 224	05-06 213	06-07 198	07-08 193	08-09 185	04-05 224	05-06 213	06-07 198	07-08 193	08-09 185
Same job code	184	174	162	161	159	82.14	81.69	81.82	83.42	85.96
Different job code – same school – higher salary	7	8	12	3	5	3.13	3.76	6.06	1.55	2.70
Different job code – same district – higher salary	9	5	8	13	4	4.02	2.35	4.04	6.74	2.16
Different job code – different district – higher salary	7	7	5	6	7	3.13	3.29	2.53	3.11	3.78
Different job code – same school – lower salary	2	0	0	0	0	.89	0	0	0	0
Different job code – same district – lower salary	1	1	0	0	1	.45	.47	0	0	.54
Different job code – different district – lower salary	3	1	1	1	0	1.34	.47	.51	.52	0
Different job code – same school – same salary	0	0	3	1	0	0	0	1.52	.52	0
Different job code – same district – same salary	0	0	0	0	0	0	0	0	0	0
Different job code – different district – same salary	0	0	0	0	0	0	0	0	0	0
Not on report – left field, left state, retired, deceased	11	17	7	8	9	4.91	7.98	3.54	4.15	4.86

Tables 14-18 expressed job code changes based on comparisons to the previous year rather than the original cohort year. This allowed for the examination of principal groups each year and the reporting of changes year to year rather than as compared to the original year of the cohort. In reviewing these summary tables it should be noted that the majority of first year principals have the same job code for several years after their first year as a principal. Within all four cohorts examined these percentages range from 76.19% to 90.56%. One of the most prevalent conditions for a change in job code involved the individual not appearing on the report, which indicates leaving the field of education, leaving the state, retiring or dying. Percentages in this category range from 2.02% to 8.57% across all the cohorts examined. Another prevalent condition for a change in job code involved getting a new position for a higher salary. These changes occurred within the same district, within the same school or within a different district. Percentages in these categories ranged anywhere from .85% to 7.81% of the population in each cohort. Very few job code changes were linked to moves involving a decrease in salary or a move for the same salary. Percentages in these categories ranged from 0% to 1.62% of the principals in each cohort examined.

Additionally, the difference in job code changes does not vary much between NJL2L participant cohorts and Non-Participant cohorts. Non participants with the same job code in each year of a cohort ranged from 79.69%-85.96%. NJL2L participants with the same job code in each year of a cohort rage from 76.19% to 90.56%. Within the category of "not on report" non-participants ranged from 3.08% to 7.98% and participants ranged from 2.02% to 8.57% in the cohorts examined. Non-participants that had a change in job code resulting in a higher salary ranged from .85% to 7.81% and participants in the same category ranged from 1.29% to 7.79%.

Principals who experienced a change in job code for a lower salary, or for no change in salary ranged from 0% to 1.52% for non-participants and 0% to 1.53% for NJL2L participants.

The intent of this chapter was to report the findings of the study conducted utilizing clear and concise tables and figures, along with narrative based explanations. These findings will be discussed and summarized in the final chapter in order to draw conclusions regarding the descriptors and career paths examined.

CHAPTER V

SUMMARY AND DISCUSSION

Research has demonstrated the importance of school leadership and has confirmed that building principals are second only to the classroom teacher in influencing student achievement (Leithwood, Luis, Anderson & Wahlstrom, 2004). Principals develop the culture of a school, appoint faculty members, and set academic and instructional expectations for a school. The importance of these roles has created an interest in studying the principal population in recent years (Baker, Punswick & Belt, 2010). The shortage of qualified candidates and a need for experienced mentors suggests a need to focus on the descriptive characteristics of the population of principals and their career paths in order to better understand principal behavior and the needs of beginning principals (Fuller, Young & Orr, 2007). This study focused on providing a descriptive analysis of the principal workforce in New Jersey from 1996-2011. The study also compares career paths of principals that completed the New Jersey Leaders to Leaders program with those that did not from 2003-2008. Providing a deeper understanding of the overall principal population will better prepare district leaders for hiring and retaining building principals. Research also suggests that it is worthwhile to invest in the recruitment and development of school leaders (Leithwood, Luis, Anderson & Wahlstrom, 2004).

This study was conducted based on this literature and research, which demonstrates the need for a descriptive study on the principalship in New Jersey in order to learn more about this population of educators. The researcher described the changes in the demographic characteristics of principals from 1996-2011 by conducting a descriptive analysis within this time frame. Descriptors included educational attainment, salary, age, gender, and ethnicity/race. In addition,

the researcher used a longitudinal cohort design to track the career paths of principals who

participated in the New Jersey Leaders to Leaders program as compared to those who did not in

the years 2003-2008. Fall report data was used to conduct this study by referencing job codes

and location codes.

In discussing the results of the project the researcher chose to address the research

questions by discussing each variable individually. Points identified in the results section are

discussed in order to draw conclusions and make recommendations for further study.

Gender

The time frame examined indicates a steady increase in female principals and a

narrowing of the gender gap in looking at the overall population. This finding is in agreement

with the Clifford, Condon, Greenberg and other's (2012) study of Wisconsin principals which

concluded that a gender gap does exist, but has been narrowed in the time period of 1999-2009.

It is also in agreement with Zheng and Carpenter-Hubin's (1999) study which also indicates a

narrowing of the gender gap between 1984 and 1994. In viewing the data by grade span one can

see that there was a concentrated increase in females at the elementary grades and considerably

less growth in the female population of principals was seen at the high school grade span. In

addition, the count of female elementary principals was higher than male at the end of time

frame examined. This finding correlates to the finding of Kaparou and Bush (2007) in the

examination of female secondary principals in Greece. This study indicated that females are

greatly underrepresented in secondary school management positions, often due to covert

discrimination, personal factors, and gender stereotypes. The gender gap identified at the

secondary level is in agreement with Lee, Smith and Cioci's (1993) study indicating that ninety

percent of secondary principals were male in the 1980's. The study also stated that males must be exposed to women in school leadership roles in order to help close this gap and have men assess women as competent leaders.

Eckman (2004) concludes that the lack of female representation within the population of high school principals can be explained in several ways. The existence of the "good old boys" club is one potential barrier to entry into this position. The high school principalship, as well as the superintendency, tends to be male dominated and the male to male connective network often identifies potential candidates for vacant positions through this established network (Eckman, 2004).

At home responsibilities area also identified as a barrier to the high school principalship. After school activities and other significant time commitments that take a toll on females who perceive their "second shift" duties as more significant to their male counterpart. The balance of work and home responsibilities becomes more difficult in the high school principalship and the principalship in general. In addition the lack of female mentors has been identified as a potential obstacle to females trying to enter the principal population. Mentors may play a role in the identification of potential candidates and without equitable female representation the "good old boy" network can potentially push more male candidates forward than female. This rationale may also be applied to the interview process. Administrators selecting candidates and interview teams must have equitable female representation (Eckman, 2004).

In addition to examining interview protocols, Myung, Loeb and Horng (2011) call for recruitment procedures to be explored. In their study tapping teaching staff members was identified as an informal mechanism for recruitment within the principalship. The study also found that males are twice as likely to be tapped as compared to females. The gender gap

identified in this study indicates that it is worthwhile to explore whether or not tapping in New Jersey contributes to the gender gap in the principalship, particularly at the secondary level.

In light of this research and the findings of this study, the researcher suggests that the New Jersey Leaders to Leaders organization work toward examining the population of mentors and securing more female mentors if necessary. If New Jersey is going to secure more female principals at the high school level there also needs to be recognition of these instances that create an imbalance in the principal population.

In examining the breakdown of principals with a doctoral degree, the female population has increased from 38.26% in 1996 to 53.12% in 2011 indicating that females have higher percentage of principals with a doctorate than males in 2011. The researcher was unable to find research confirming this percentage breakdown and recommends that this shift be examined in order to identify possible reasons that this may have taken place. Within the white and black subgroups female principals have experienced an increase in overall percentage of the principal population. Within the Hispanic subgroup the male population has increased more than the female population. In general females make up more of the minority principal population than males. These findings align to the research of Clifford, Condon, Greenberg and others, (2010) which demonstrates an increase in female and minority principals over time. These findings also align to Oberman's (1996) study of principals in Chicago which indicated that the principalship became more accessible to females and minorities following a wave of education reform in 1989. It may be worthwhile to further examine the specific breakdown of female and male principals within the minority subgroups to work towards an explanation for the lack of male, minority principals.

Educational Attainment

As expected the majority of principals have earned a Master's degree as required for licensure for the position of principal in New Jersey. The percentage of principals earning a doctorate has ranged from 8% to 11% over the time frame examined. These percentages vary slightly from the findings of the Wisconsin study, which has a range of 4%-6% of the principal population earning a doctorate in the 1999-2009 time frame (Clifford, Condon, Greenberg & others, 2012), but are directly aligned to the findings of Battle and Gruber, (2009) who examined principals across the Unites States and concluded that approximately 8% of the population had a doctoral degree in the 2007-2008 school year. In review of the population of principals that have earned a doctorate there is typically a greater number of females than males with the degree in each year of this study. In regards to race, the percentage of white principals with a doctorate has decreased and the percentage of black principals with a doctorate has increased. The percentage of Hispanic principals with a doctorate has remained relatively steady over the time period examined. The researcher recommends analyzing these populations in order to determine if a doctoral degree has contributed to the increased access to the principalship for females and minorities.

The researcher also recommends looking at doctoral attainment beyond 2011 and the expansion of doctoral programs specifically designed for education executives in order to see if growth within the population of principals with a doctoral degree can be attributed to the development of specific degree programs. This would support Guthrie's (2009) case regarding the need for practitioner degrees within the realm of educational leadership. Other factors worth examining are the effect of the cost to earn a doctoral degree over time as compared to the percent of principals who have earned the degree, although this study suggests that cost may not

be a factor, as the percent of principals with a doctorate has not changed significantly over the time period examined. Lastly it is recommended that research be conducted in order to examine the higher percentage of women within the doctorate population.

Race / Ethnicity

Overall the race distribution of principals within New Jersey mirrored that of the principals across the country as represented in Battle and Gruber's (2009) study of principals in the 2007-2008 school year. In New Jersey, within the 1996-2011 time frame, 75%-82% of principals are White, followed by Black and Hispanic contributing to 15% to 22% of the population. In examining the Hispanic population of principals with the time frame of 1996-2011 the researcher noted an increase in the percentage of principals in this ethnic group. Although the percentage is a very small component of the overall population, its relative growth is worth examining. Although some research indicates that there is no relationship between principal ethnicity and student achievement (Tresslar, 2010), it is recommended that this growth be explored based on the location of these individuals in order to see if there are concentrated geographic areas which align to respective student populations. Oberman (1996) attributes this growth in the minority population of school leaders to education reform. It would be interesting to examine these increases with respect to New Jersey reform agendas within the 1996-2011 time frame in an attempt to extend Oberman's findings to New Jersey.

In addition, the female distribution within the principal population has a larger percentage of minorities, particularly black, than the male population does, again indicating an imbalance in female and male minority principals. Regarding principals with a doctoral degree, the population has been mostly white over the time frame examined. The white doctoral population has shrunk

from 84.9% in 1996 to 71.5% in 2011. This decrease is explained through an increase in the

black population obtaining a doctorate, which rose from 12.4% in 1996 to 23.1% in 2011. The

researcher was unable to located studies examining principals' attainment of a doctoral degree as

it relates to race/ethnicity. This may also be an area worth further investigating as it relates to

access to the principalship for minorities.

Salary

While examining the salary of the principal workforce in New Jersey from 1996-2011

there were several trends discovered that seem to align with common conclusions regarding

principal salary. In general, principal salary has risen steadily over time for the full population

and all subgroups. When examining additional grade spans high school principals tend to have

the highest salaries within the population of principals and varied job codes within this position.

This finding is in agreement with Battle and Gruber's (2009) finding which indicates a $5,000

differential between secondary and elementary principals across the nation in 2007-2008. It also

aligns to the findings of Cooke and Licciardi (2009) which indicate an even larger gap between

the salaries of principals in these respective grade spans. This study indicated that female and

minority principal salary is slightly lower than the white male principal salary over the years

examined. This finding is aligned to Zheng and Carpenter-Hubin's (1999) study which

determined a slight gap in female and male salary among public school administrators from

1984-1994. It also agrees with Pounder's (1994) study which also indicated a small differential

in female and male salary within the elementary principalship.

In addition, the gap between the salary aligned with a master's degree and the salary

aligned with a doctorate degree has increased over time. This suggests that society has placed a

higher value on the doctoral degree for the principal population. When examining other gaps in salary the researcher observed that Asian principals have successfully closed the salary gap and tend to make a higher salary than white principals. Hispanics have also successfully closed the salary gap within the principalship. It is recommended that research be conducted in order to investigate how speaking a second language influences principal salary, as this may contribute to the advancements made on the salary guide for these subgroups. Another noted trend is the race profile in the highest salary ranges for the principalship. It is noted that racial groups are well represented in all salary ranges and in general Asian principals tend to be higher paid, but white male principals are almost exclusively represented in the highest salary ranges for principals across all years examined. It may also be worthwhile to examine the location distribution of principals in order to determine if the racial distribution corresponds to the distribution of wealth within the state, as this may offer an explanation regarding the gap in salary by race.

Age

An examination of the age of the principal population in New Jersey from 1996-2011 reveals that the average age of a school principal has remained fairly static, fluctuating only by two years over this time period. This finding tends to discount research indicating that principals are aging year to year and also is in agreement with the findings outlined in Clifford, Condon, Greenberg and others (2010) study on the principal workforce in Wisconsin which also demonstrated very little fluctuation in the age of principal workforce over an examined time period. In addition to this general finding the researcher has indicated that the age of a principal earning over $100K has dropped from 60 years of age to 50 years of age in the time frame

examined. This finding is consistent with the study's finding indicating that principal salaries have consistently risen over time.

Principal Career Paths and Cohort Examination

In reviewing the change in job codes of the principal populations for the years 2003-2008 it was discovered that the majority of principals kept the same job code after the first year they served as a principal. In instances where a job code change occurred it was most often identified as a salary increase. It was also mostly identified with a departure from the fall report data indicating someone who left the state, left the field, retired, or died. These findings are in agreement with the Baker, Punswick and Belt's study investigating principal stability in Missouri (2010) which indicates that salary is a driving factor in principal job choice and is linked to a stable principal workforce. It is also concluded that there is minimal difference between NJL2L cohorts and nonparticipant cohorts regarding the percentage of principals that retain the same job code during time period examined. This may indicate that NJL2L does not have an impact on changes to principal job codes and also demonstrates that job codes are not likely to change after one year, but do tend to change for most principals within a five year period. The minimal difference in the career paths of participants and nonparticipants, as expressed through the data, also indicates that completion of the NJL2L program does not result in less frequent job code changes for beginning principals. Although less frequent job code changes is not a direct goal of the NJL2L program, a decrease in job codes changes for a school may be interpreted as increased leadership stability which relates to the NJL2L mission (New Jersey Leaders to Leaders Program Overview, 2011).

In the future it would be worthwhile to examine the mobility of principals according to the descriptors reported in this study in order to possibly identify what predicts the mobility and attrition of principals in New Jersey. This type of study was conducted by Akiba and Reichardt (2004) at the elementary level and the findings indicate that baby boomer retirement is not a major contributing factor in school leader attrition, female and minority leaders who are 35 years old and younger are more likely to leave their schools, school leaders are more likely to leave large schools than small schools, and school achievement is negatively associated with female leader movement. An additional finding of this study indicated that both female and male principals are more likely to move when there is an expected salary increase for transferring to another position (Akiba & Reichardt, 2004). This finding is in agreement with the results of this study demonstrating that salary is a potential predictor of principal mobility.

Suggestions for Further Research and Future Implications

The information presented in this study provides an introductory examination of the principalship in New Jersey in the context of other research conducted on the principal population. It may allow individuals involved with the New Jersey Leaders to Leaders program to make adjustments involving their mentoring staff and program design, particularly providing information on how to best select mentors in order to reflect the needs and demographics of the principal population. Individual districts may also find this information useful as they develop principal mentoring programs, set administrative pay scales, review principal populations and actively recruit new principal candidates. The findings and conclusions presented indicate that the population of principals in New Jersey aligns to the populations examined in other studies, with respect to the descriptors and career paths examined.

In addition to the recommendations outlined in previous sections, it is recommended that a study be conducted in order to analyze the data by county and district to see if there are geographic trends within all descriptors. For instance, exploration of age and race distribution by DFG, or other socioeconomic measure, may be interesting to review in order to identify possible concentrated areas in which the population of principals strays from the overall state population. A study conducted by Beteille, Kalogrides and Loeb (2011) indicates that principals prefer working in higher achieving schools and more advantaged socioeconomic districts. Examining this in New Jersey may lead to incentive programs to help disperse the principal population more appropriately. Clifford, Condon, Greenberg and others (2012) also conclude that poverty has an impact on principal turnover. Examining principal career paths by DFG may also help explain whether or not this is an issue in New Jersey.

It is also recommended that the study be continued in order to examine particular job codes within the principalship, as this study compiled all principal related job codes together and reported on the entire set of job codes as a unit. One may find that the descriptors for a vice principal may be very different than that of a principal. This would offer a more focused approach to using this data.

In reviewing the career paths and cohort analysis one should consider examining the job codes that remained the same from year to year. These codes were not reviewed for movement within or out of district. It may be interesting to review the movement of principals in which there is no change to job code year to year. This would help better describe the career path of a principal to include movement within the same administrative role, and may also bolster the finding indicating that principals move for higher salaries. Induction and retention programs would also best be informed by combining the information obtained in the descriptive analysis

with the information gained in the career path and cohort analysis. This would provide a richer profile of new principals in New Jersey and may help focus the programmatic aspects of the New Jersey Leaders to Leaders program. It has been found that principals often use schools with low achieving students as a stepping stone to what they view as more desirable assignments (Beteille, Kalogrides & Loeb, 2011). With this in mind, mentoring programs, like NJL2L, must be prepared to assist these schools in an effort to maintain their principal workforce, as principal turnover has also been identified as detrimental to student performance in large urban areas (Beteille, Kalogrides & Loeb, 2011).

Poorly performing schools, and schools with a concentration of poor students, typically experience higher principal turnover. These schools also have a difficult time attracting qualified principal candidates (Beteille, Kalogrides & Loeb, 2011). A future study linking principal career paths to student achievement may shed light on the movement of principals in New Jersey and help demonstrate the need to address the distribution of talent within the principal workforce. It may also prove worthwhile to further examine change in job code within the examined cohorts by the other descriptive factors outlined in this study in order to determine if they are influential in predicting principal movement. Lastly, it would be beneficial to further examine the New Jersey Leaders to Leaders participants by surveying them in order to compile some qualitative data regarding the program and the sentiments of program participants. This type of information would support the findings based on change in job code.

This study represents an initial step in examining the principal workforce in New Jersey, and has suggested that salary may play a role in principal job choice in New Jersey, as determined by the career path analysis. It has also suggested that salary gaps that exist among males and females, and within grade spans, must be addressed in order to build towards a more

stable and balanced principal workforce in New Jersey. The study has also highlighted gaps in gender and race within the principal population, indicating a need to increase access to the secondary principalship for females, and the principalship in general for minority populations. The suggestions for further investigation will help draw additional conclusions about this population.

The literature reviewed during this process indicates the importance in studying the principal population. Examining the principalship in New Jersey will become increasingly important as the candidate pool may be impacted by the mandates aligned to the AchieveNJ evaluation reform agenda. In future years it will be interesting to examine the descriptive data used in this study as organized by district performance level. This may lead to the identification of trends within the principal population that indicate the characteristics of successful principals within a certain area of the state. Continuing to track the career paths of principals, along with descriptors of the principal population will also be important as Student Growth Percentiles (SGP) begin to drive evaluations as well. This study revealed that the career paths of principals who completed the NJL2L program did not differ from principals that did. In the near future, principals may seek assignments in schools with a high SGP in order to best reflect their own evaluation. This may exacerbate the findings of Beteille, Kalogrides and Loeb (2011) and further isolate low performing schools that have a difficulty attracting and retaining quality principals. The NJL2L program should seek ways to adjust programming in order to impact career paths in order to create stable leadership for schools, as instituting SGP scores may create further instability within the principalship. Lastly, expansions of this study may provide an opportunity to track principal movement in light of these policy changes, and may provide information regarding the effectiveness of this type of evaluation within the state.

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