

**STRATEGIC CLASS ROSTER CREATION IN ELEMENTARY SCHOOLS:  
INDICATIVE OF STUDENT READING GROWTH OR A WASTE OF TIME?**

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## **ABSTRACT**

### **STRATEGIC CLASS ROSTER CREATION IN ELEMENTARY SCHOOLS: INDICATIVE OF STUDENT READING GROWTH OR A WASTE OF TIME?**

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One managerial leadership activity school leaders control and organize, either by overseeing or successfully delegating, is the creation of class rosters. The targeted purpose of this research is to determine whether a measurable value exists in spending the time and efforts to strategically “create” elementary school classes while considering key indicators that, if put into place when determining class assignments, positively benefit student reading growth for students. Certain principals explicitly consider specific key indicators, while others consider fewer. To determine whether value exists in considering key indicators when creating class rosters, for this research, each principal’s survey response was paired with their school’s 2009-2010 reading growth measure.

Potentially, these and subsequent findings may result in the development of a practice that elementary school principals could oversee or employ to improve existing methods for creating class rosters. By advancing class roster creation procedures, and understanding that key variables should or should not be considered, principals may ultimately make better leadership decisions. Better managerial decisions within schools ultimately will lead to higher student achievement, resulting in a higher quality school and most importantly, an improved education for children.

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Strategic Class Roster Creation in Elementary Schools:  
Indicative of Student Reading Growth or a Waste of Time?

## **Chapter One: Problem Background**

### **Introduction & Problem**

Hundreds of variables affect a child's learning during a school year and throughout his years as a student. Does he regularly get a good night's sleep and eat a healthy breakfast? Does he feel safe and successful in his classroom? Does he receive quality instruction that results in learning at an appropriate pace? Does he have peer role models to emulate? Although school leaders have little or no control over numerous factors that directly or indirectly affect learning and academic growth, they have the option to proactively address many key indicators that may contribute to the success of students. School leaders may utilize information and data about many of their students, their teachers, and the operational structure of their school.

Educational leaders, consultants, and various members of society constantly offer purported improvements to teaching and learning. These so-called "silver bullets" are often presented as the panaceas that will lead our schools toward higher levels of academic achievement and growth. Instead of continually modifying instructional practices with the subsequent educational flavor of the week or month, schools should make the effort to better manage the tangible resources already within their control. Leaders can proactively address a variety of variables before the school year begins to provide each child the most opportune chance of having a successful year of learning and succeeding.

One managerial leadership activity school leaders control and organize, either by overseeing or successfully delegating, is the creation of class rosters. Certain principals explicitly consider specific key indicators, while others consider fewer. For the subsequent project, the

term *class roster creation* is used to describe the process of creating homeroom lists, or rosters, for first through fifth grade teachers in elementary schools. The term *strategic class roster creation* (SCRC) is used to describe the method of creating homeroom rosters after strategically considering particular key indicators as a part of a process.

Questionnaire survey responses from 27 of 31 elementary principals from Union County Public Schools (UCPS) were utilized in this research. UCPS serves almost 40,000 students who reside in urban, suburban, and rural settings in the Central Piedmont of North Carolina. Sixty-eight percent of UCPS students are white, while 14% are Hispanic, 14% are African American, and 4% are of other ethnicities. The racial makeup of the schools participating in the survey respondents vary quite dramatically, having a range of four to 96 percent white students. Thirty-one percent of students in UCPS receive free or reduced lunch; the schools of the 27 survey respondents range from three to 95 percent free or reduced lunch ([http://www.ucps.k12.nc.us/links/about\\_menu.php](http://www.ucps.k12.nc.us/links/about_menu.php)). Excluded respondents include the author, one preschool principal who attends elementary principal meetings, and two principals who did not fully oversee the class roster creation process at their schools because they were in their first year as principal at the school.

To determine whether value exists in considering key indicators when creating class rosters, each principal's survey response was paired with his/her school's 2009-2010 reading growth measure for the purpose of statistical analysis. The questionnaire could not be taken anonymously because each principal's response and test data were paired. Therefore, the survey was collected and coded by the Director of Elementary Education for UCPS. The author does not know how each principal personally responded to the questionnaire, receiving only the coded copy of the survey results paired with each school's growth data.

The reading growth measure is taken from The North Carolina End-of-Grade Tests (EOGs), which are designed to measure student performance on the competencies specified in the goals and objectives of the North Carolina Standard Course of Study. The EOGs are the elementary school assessment component of the North Carolina ABCs (Accountability, Basics, Control) Program used to determine growth standards. The scores from the End-of-Grade Tests are used to obtain a growth indicator used for individual school, school system, and state accountability purposes. At the elementary school level, third, fourth, and fifth grade students take the EOGs. However, only fourth and fifth grade scores are used when calculating an elementary school's ABCs growth measure.

According to the North Carolina Department of Public Instruction (2010), "A school's ABCs growth status is determined by its growth calculation and its change ratio (a measure of the percent of students meeting their individual growth targets)" (p.4). The measure of 0.00 or better must be attained for a school to be considered having met "expected growth." Schools earning a change ratio of 1.5 or greater are considered "high growth" schools. A larger range of scores exists among schools when looking at the "high growth" measure versus the "expected growth" measure; therefore, the "high growth" figures are utilized for analysis.

The North Carolina End-of-Grade Tests are required by General Statute 115C.174.10 as a component of the North Carolina Annual Testing Program. As stated in the law, the purposes of North Carolina state-mandated tests are "(i) to assure that all high school graduates possess those minimum skills and that knowledge thought necessary to function as a member of society, (ii) to provide a means of identifying strengths and weaknesses in the education process in order to improve instructional delivery, and (iii) to establish additional means for making the education

system at the state, local, and school levels accountable to the public for results” (Public School Laws of North Carolina Annotated, 2009).

### **Rationale**

Based on existing research, a wide range of time and effort is spent by principals or their designees to create class rosters. At one end of the continuum are schools that employ SCRC, dedicating days or even months considering numerous key indicators to create just the right “mix” of students for each elementary school class. At the other end of the continuum are schools that consider only a few key indicators and spend much less time creating class rosters.

Elementary schools in UCPS are no exception to this continuum, utilizing time and effort to varying degrees when creating class rosters. Principals have complete autonomy since state or school district guidelines or policies do not exist to guide the process of class roster creation. Some principals take ownership in the procedures employed in their school, and are highly involved throughout the development of class rosters. Other principals delegate the responsibility and ownership of class rosters to their assistant principals, guidance counselors, teachers, or data managers. Months or minimal time and effort are devoted to the process, with some schools simply inputting student names into NC WISE, randomly letting the computer program create the class rosters just before the start of the school year. Only then, after the lists are outputted from the computer program, are a few key indicators considered as class rosters receive minor adjustments. NC WISE is the North Carolina Window on Student Education, a web-based student information management system that “integrates all aspects of public school life from the classroom to the central office” (<http://www.ncwise.org>).

The following two specific questions are addressed by this research:

1. Are there key indicators in strategic class roster creation (SCRC) in elementary schools that affect academic growth in reading?
2. If strategic class roster creation (SCRC) does affect academic growth in reading, what are the relevant key indicators?

A scarcity of empirical data exists regarding the process and procedures used in elementary schools to create class lists to benefit student reading or other academic growth. What little empirical data exists in regard to the process of elementary school class creation is inconclusive and utilizes decades-old information. Generalizable research results do not exist indicating whether spending the time and efforts to strategically “create” elementary school class rosters positively or negatively affects academic reading growth. As published by Robert Slavin (1987), and still true today, many student grouping decisions are made based on unsubstantiated opinions or assumptions.

The targeted purpose of this research is to determine whether a measurable value exists in spending the time and effort to strategically “create” elementary school classes while considering key indicators that, if put into place when determining class assignments, positively benefit student reading growth for UCPS students. Great flexibility presently exists for elementary school principals within UCPS, and subsequently, current class roster creation practices vary greatly, though UCPS elementary principals’ class creation decisions remain vulnerable to numerous limitations. Some controls principals must adhere to include national and state laws, state and local policies, and other political and legal constraints (Leiter, 1983).

Empirical findings and researcher conclusions from this project were presented to UCPS elementary school principals and executive leaders suggesting what elements to consider within established district and state parameters. More specifically, new data was shared suggesting a

positive correlation between certain key indicators of class creation and student reading growth in UCPS elementary schools, including specific findings about which variables may be most important to consider. Also presented were key indicators that had either negative or no correlation to reading growth. Also discussed was whether time spent considering a certain number of variables by school leaders and teachers preparing rosters benefits students or whether that time is needlessly wasted by teachers, principals, and others in making prescribed class lists.

In addition, an example of a replicable SCRC process was outlined, based on known practice and limited existing literature, through which class rosters can be proactively created to most benefit students and the school system. Extensive conversation was facilitated among the principals that examined several possible considerations for class creation beyond the key indicators of this study, digging deeper into the methodology of the process. Furthermore, principals' professional ideologies that support or oppose the SCRC process were explored, further contributing to reflection and professional growth among the UCPS learning community of elementary school principals. The presentation occurred on May 10, 2011 so that information learned could be applied to the creation of class lists for the 2011-12 school year if desired by principals.

The utilization of a prescribed process and empirical data regarding the strategic consideration of specific key indicators are untapped areas of study that could lead to practical and valuable contributions in the field of educational leadership. Potentially, new findings may result in the development of a practice that UCPS elementary school principals could oversee or employ to improve their existing methods when creating class rosters. By advancing class roster creation procedures, and understanding that key variables within the process of SCRC should or should not be considered, principals may ultimately make better leadership decisions. Better

managerial decisions within schools ultimately lead to higher student achievement, resulting in a higher quality school and most importantly, an improved education for children.

### **Limitations**

Several topics are beyond the scope of this research. Excluded topics include: combination or multiage/multi-grade classes, heterogeneous versus homogeneous ability grouping, single sex classes, class size, grouping of students within classrooms for instruction, mainstreaming versus separate setting for instruction of exceptional, academically/intellectually gifted, and non-English speaking students, departmentalization, tracking, team teaching, and co-teaching. Also not incorporated is consideration of parental input in the class roster creation process, as the author is assuming that parent requests for specific teachers are not granted. Whether and how to consider parent requests is a complex issue that could warrant further studies independent of other key indicators. Furthermore, the creation of kindergarten class rosters is not addressed, as analyzing beginning-of-year kindergarten assessment data, possible use of staggered entry practices, and the likelihood that new kindergarten students are being enrolled in an elementary school setting for the first time makes kindergarten class roster creation an entirely different activity than class roster creation for first through fifth grade students.

Because of the small population of principal respondents utilized in this study, the probability that rules and regulations exist for class roster creation in other school districts and states, and the demographics of UCPS, the results of this study are likely not entirely generalizable to other school districts or states. Leaders from other school districts may choose to replicate this study while working within their own specific regulations and parameters so that beneficial information may be produced to assist principals and schools in developing the most

appropriate tools for creation of class rosters for their specific student populations. Furthermore, this study could be expanded in several directions by conducting in-depth research regarding one or more of the key indicators listed on the questionnaire, delving deeper into a topic such as consideration of student race or teacher style of classroom management when creating class rosters.

The research only considers growth in reading, which utilizes standardized EOG test data for students in fourth and fifth grades. Expansion of the study could include consideration of data beyond the scope of this research, including academic growth in math and other subject areas, and consideration of reading and other growth measures that utilize non-state mandated assessments from younger students in kindergarten through second grades. Additional extensions could also contain exploration of reading and other academic growth measures of students within ethnic or socioeconomic subgroups, utilization of proficiency measures (not simply growth measures), and multi-year growth data.

### **Justification for Study**

Through completion of this capstone project, I hope to uncover information as to whether a measurable value exists in spending the time and efforts to strategically “create” elementary school class rosters while considering key indicators that, if put into place, will predict either positive or negative benefit to student reading achievement. Although my peers spend minutes, days, or weeks creating their class lists, often believing that they are proactively contributing to the success of their students, they need to be familiar with which of their specific efforts may be worthwhile and which may be in vain according to UCPS data. In other words, I hope to answer the question: Which key indicators should UCPS principals consider or not consider when creating class rosters in order to provide students the most opportunity to grow as readers?

## Chapter Two: Theoretical Framework

### Introduction

Hundreds of variables affect a child's learning during a school year and throughout his years as a student. Does he regularly get a good night's sleep and eat a healthy breakfast? Does he feel safe and successful in his classroom? Does he receive quality instruction that results in learning at an appropriate pace? Does he have peer role models to emulate? Although educators have little or no control over numerous key indicators that directly or indirectly affect learning and academic growth, school leaders should proactively address, before the beginning of the school year, as many of these key indicators as possible in hope that all students may experience success. Experienced school leaders know a great deal about many of their students, their teachers, and the operational structure of their school. It is a disservice to students for school leaders to ignore existing data and information when overseeing the creation of class rosters before each school year begins.

School leaders are charged with the responsibility of grouping students with teachers in classes where they will achieve and succeed. When each student is assigned to a class, it affects the student, his teacher, and his classmates (Monk, 1987). By addressing many of the key indicators prior to the beginning of the school year, school leaders can provide each child the most opportune chance of having a successful year of learning. Middle and high schools primarily rely upon computer programs to initiate the class roster creation process. Middle and high schools also attempt to ensure student promotion and graduation requirements are met while considering student choice. At the elementary level, the complexity of creating class rosters mandates that school leaders usually rely on more complex, less mechanical processes. Most elementary school principals manipulate class composition to some degree. The questions then

become *what* processes occur to manipulate the creation of elementary school classes, and does manipulation of class rosters based on key indicators contribute to higher levels of academic achievement?

Elementary schools in Union County Public Schools (UCPS) utilize time and effort to varying degrees when creating class rosters. The principals have autonomy in determining how this process occurs in their schools; specific state or school district guidelines or policies do not exist to guide the process of creating class rosters. Some principals take ownership in the procedures employed in their school, and are highly involved throughout the development of class rosters. Other principals entrust the responsibility and/or ownership of class rosters to subordinates. Some schools utilize a deliberate process that dedicates days or months, creating just the right “mix” of students for each first through fifth grade class. Other schools simply input student names into NC WISE; the computer programs creates class rosters and only then, after the lists are outputted, are a few key indicators considered to make minor adjustments. NC WISE is the North Carolina Window on Student Education, a web-based student information management system that “integrates all aspects of public school life from the classroom to the central office” (<http://www.ncwise.org>).

### **Purpose**

The purpose of this literature review is to synthesize the relevant research that exists related to the topic of creating elementary school class rosters. This synopsis of literature will guide a capstone project that will attempt to answer the following questions:

1. Are there key indicators in strategic class roster creation (SCRC), in elementary schools, that affect academic growth in reading?
2. If strategic class roster creation (SCRC) does affect academic growth in reading, what are the relevant key indicators?

The term *class roster creation* will be used to describe the process of creating homeroom lists, or rosters, for first through fifth grade teachers in elementary schools. Due to the potential magnitude of the resulting capstone product if a broad range of related subjects were included in this literature review, several topics are beyond the scope of this synopsis. Excluded topics include: combination or multiage/multi-grade classes, heterogeneous versus homogeneous ability grouping, single sex classes, class size, grouping of students within classrooms for instruction, mainstreaming versus separate setting for instruction of exceptional, academically/intellectually gifted, and non-English speaking students, departmentalization, tracking, team teaching, and co-teaching. Also not incorporated is discussion about parental input in the class roster creation process, as the author assumes that parent requests for specific teachers are not granted. Furthermore, the creation of kindergarten class rosters is not addressed, as analyzing beginning-of-year kindergarten assessment data, possible use of staggered entry practices, and the likelihood that new kindergarten students are being enrolled in an elementary school setting for the first time makes kindergarten class roster creation an entirely different activity than class roster creation for first through fifth grade students.

### **Review of Literature**

Professor Jeffrey Leiter (1983), in his journal article titled, "Classroom Composition and Achievement Gains," states, "the grouping of students in schools, classrooms and within classroom groups is potentially a key source of school effects" (p. 126). According to North

Carolina Public Law 115C – 288a, one of the “powers and duties” of the school principal is “to grade and classify pupils.” Therefore, ultimate responsibility for creating class rosters to maximize student achievement and success lies with the principal. School leaders must consider teacher quality and their potential success with a particular mixture of students when determining how to best utilize their staff and school resources (Monk, 1987). Burns and Mason (1998) discovered that empirical studies of class formation and outcomes in elementary schools are uncommon. Common sense indicates that students should be grouped in classes that will result in optimal academic achievement, yet very little research exists regarding methodology utilized by school administrators when creating class rosters. The limited empirical research is inconclusive and dated.

Dr. David Monk, Dean of the College of Education at Penn State University, who conducted research on assigning elementary school students to teachers, agrees with the conclusion that more research is warranted. He stated that class roster creation is “an important and largely neglected topic” and is “not aware of any related work” (personal communication, November 20, 2010). Similarly, Dr. Robert Burns, who in conjunction with DeWayne Mason published research that included the topic of class roster creation, concurs, stating that he does not “know of any research on class formation since then (when his was published) and I do keep my eye out for such things” (personal communication, October 10, 2010).

Using 1993-94 achievement data from 22 California elementary schools, Burns and Mason (2002) claim to have found evidence that class composition affected student achievement. Additionally, Burns and Mason (1998) have outlined a detailed five-step summation of the class roster creation process used across the 22 schools in their study. Class roster creation begins in the spring when teachers are asked to share their teaching assignment preferences for the

following school year. Concurrently, principals use present and projected grade level enrollments to create the probable number of classes at each level, including possible exceptional classes resulting from specialized academic programs offered at the school. Secondly, teachers are provided directions for the distribution of students, which includes heterogeneous grouping, and the pairing of students and teachers based on reasons such as having an Individualized Education Program (IEP), academic or intellectual giftedness, or limited English proficiency (LEP).

Students may also be considered for clustering with particular teachers or classmates based on: ethnicity, gender, behavior, reading and math ability, parent requests (if permitted by principal), and structure of classroom environment. The clustering of students with exceptionalities often occurs before “filling in” the rest of the class roster with non-exceptional students.

During the ensuing step in the process, teachers use student placement cards to create class rosters for the following school year. Each card includes information about student: age, ethnicity, date entered school, past teachers, retention history, exceptionality, academic performance, behavior, independence, discipline (including students to separate from), health, attendance issues, and special interests. Teachers then make draft class rosters using the cards of students that they have known for the entire school year (first grade teachers made the subsequent year’s second grade class rosters). The teachers utilize the directions previously issued by the principal; some principals choose to intentionally conceal the names of teachers for the next year’s classes to avoid having teachers favor their friends with class roster creation. By concealing the names from the teachers, the creation of class rosters to accommodate teacher strengths is also prevented (Monk, 1987).

When avoidable imbalances occur in the drafted class rosters, cards of students are traded between classes to attain more equal class rosters. This could simply result in exchanging a

female for a male student, or could involve more complex manipulation, such as re-clustering students to ensure that all classes have peer role models on their class rosters. The principal then reviews the cards for imbalances not noticed by teachers before creating more finalized class rosters. Finally, the rosters are modified through the summer as deemed necessary by the principal, including changes resulting from student transfers, which Burns and Mason (1998) identify as student “churning.” If staffing allotments change before the students return for the new school year, the principal may be required to create or dissolve a classroom, requiring substantial redistribution of students. Of course, most principals have little or no control over the number of teachers they are allotted, though in North Carolina some school districts provide principals with a variety of flexibility, as long as they consider state recommendations or local policy regarding class size when determining how many of their teachers are assigned to each grade level.

The use of this type of process in elementary schools is supported by Gary Hopkins, who conducted a survey of elementary principals inquiring about how they create class rosters. Hopkins (1999) discovered that most schools include teachers working as grade level teams to create rosters and usually include school support personnel, such as counselors and social workers, in the process. Student ability, work habits, behavior problems, leadership abilities, and other information are often compiled on cards for each student. Student information from these cards may then be entered into a database, which can be manipulated by school faculty when creating class rosters. In addition, Hopkins noted that some schools have teachers meet directly with the teachers of the subsequent grade to collaboratively compile class rosters for the next school year.

John Hattie (2002) argued that class creation based on multiage/multi-grade classes, heterogeneous versus homogeneous ability grouping, single sex classes, class size, and tracking results in minimal benefit in student learning outcomes. More powerful indicators of student learning are the level of expectations of teachers, principals, students, and parents, and the quality of instruction and the learning environments within classrooms. In other words, quality teaching trumps what advantages may result from prescribed class roster creation utilizing the above quantifiers and should therefore be the primary focus of school leaders. In support of this conclusion, Carolyn Riehl (2000) conducted a study that concluded that many school administrators do not support special student grouping plans, and that their most important contribution should be to build the confidence of teachers so that they can attain their goals for student achievement.

### **Summary**

A lack of empirical data exists about the process and procedures used in elementary schools to create class rosters to benefit student reading or other academic growth. What little data exists in regard to the process of elementary school class creation is inconclusive and utilizes dated information. Generalizable research results do not exist that validate whether spending the time and effort to strategically “create” elementary school class rosters affects academic reading growth. As published by Robert Slavin in 1987, and still true today, many student grouping decisions are made based on unsubstantiated opinions or assumptions. That being said, many school leaders consider the process of class roster creation, or determining student membership in each class, a priority that must be considered not only a few days before the start of a school year, but continually throughout the year if high expectations for student achievement are truly a school’s primary focus.

The utilization of a prescribed process and consideration of key indicators is an untapped area that could lead to practical and valuable contributions in the field of educational leadership. By advancing understanding of class roster creation procedures, school administrators may learn how to better allocate and manage their time and the time of their teachers on the non-instructional responsibility of class roster creation. Potentially, future studies may indicate whether or not dedicating substantial time and effort to strategically create class rosters is a waste of an irreplaceable resource, time. Conversely, new findings may result in a valuable, student growth-driven process that elementary school principals could employ to improve their existing methods when creating class rosters. Furthermore, the improvement in student learning could result in a higher quality school and most importantly, enhanced opportunities for children. Either result would contribute to existing knowledge in the field.

## **Chapter Three: Methodology**

### **Research Questions**

The two specific research questions addressed by this research are:

1. Are there key indicators in strategic class roster creation (SCRC) in elementary schools that affect academic growth in reading?
2. If strategic class roster creation (SCRC) does affect academic growth in reading, what are the relevant key indicators?

### **Research Design**

A quantitative non-experimental research design was utilized, exploring for correlation between two data sets. Experts suggest this nature of design when attempting to determine strength and direction of relationship (Gall, Gall, & Borg, 2003). One data set contained school reading growth measures for 27 UCPS elementary schools. The second data set contained 24 subsets of dichotomous information, one for each key indicator possibly considered by schools when creating class rosters. The purpose of conducting this study was to determine whether each pairing of a key indicator with reading growth measure results in a positive correlation, negative correlation, or absence of correlation. The consequential positive or negative correlations, or relationships between variables, may suggest or imply cause for higher reading growth, enabling the researcher to share predictions implying which key indicators should or should not be strategically considered when creating elementary school class rosters. Additional research would be required before cause could be determined.

### **Timeline**

The pilot questionnaire was distributed and collected, with feedback considered and modifications completed by December 17, 2010. The Wingate University Research Review

Board approved of the research project on January 3, 2011. The questionnaire was administered at a UCPS elementary principals meeting on January 18, 2011. The researcher received coded questionnaire responses on January 20, 2011. Reading growth scores and questionnaire responses were processed and analyzed by May 1, 2011. The findings were presented at the monthly elementary principals meeting on May 10, 2011.

### **Participants**

A convenience sample of Union County Public Schools (UCPS) elementary school principals was utilized for the study. Of the 30 elementary principals employed by the school district, data from 27 respondents were included in the study. All 27 respondents lead schools that include kindergarten through fifth grade students. Three principals' responses were excluded. One participant was in her first year as a principal. She had very little involvement in overseeing the class roster creation process for her school's 2009-2010 class lists. A second principal was moved to her school during the summer months, after most of the class roster creation process had occurred at her new school. Also, to avoid skewing data, the researcher, who is also an elementary school principal in UCPS, omitted himself from the population of respondents and did not complete the questionnaire. An additional principal completed the questionnaire. He leads a preschool rather than a K-5 school; therefore, his responses were also excluded from the data. This selection of population was feasible to the logistics of the applied context of the research.

Of the 27 questionnaire respondents, seven were male and 20 female. Ten have 2-4 years of experience as a principal, 10 have 5-9 years of experience, and seven have 10 or more years of experience. Two principals lead schools of 399 students or fewer, nine principals lead schools of 400-599 students, 12 principals work at schools with 600-799 enrollees, and four principals lead

schools of 800 or more students. Regarding free or reduced lunch, 11 principals work at schools with 0-24%, 8 principals have school populations with 25-49%, three principals lead schools with 50-74%, and five principals' schools have 75-99% free or reduced lunch.

### **Protection of Subjects**

Anonymous completion of the questionnaire was not possible because the research design entailed the pairing of principal responses and each school's test data. Therefore, the director of elementary education for UCPS collected and then coded questionnaire responses, utilizing a letter (A-Z and AA), for each set of data included in the population. He then paired each set of responses with the corresponding reading growth measure and was the only person to code and pair the data. No one else, including the researcher, knows how each principal personally responded to the questionnaire. He then copied the surveys, deleting the names on the copies that the investigator handled for data computation and analysis, and shredded the original questionnaire responses after the data had been paired. He kept a copy of the coded data in a locked cabinet at UCPS Central Services and was the only person, in addition to the researcher, with access to the coded data. The researcher received only the coded copy of the survey results paired with each school's growth data and never knew of individual principals' responses to survey questions.

### **Data Sources & Instrumentation**

Reading growth measures from the 2009-2010 school year for each UCPS elementary school were obtained. The growth statistics were taken from the North Carolina ABCs (Accountability, Basics, Control), which utilize End of Grade (EOG) Test results. As a component of the North Carolina ABC results, the growth measure is public information. According to the North Carolina Department of Public Instruction (2010, p.4), "A school's

ABCs growth status is determined by its growth calculation and its change ratio (a measure of the percent of students meeting their individual growth targets)". The measure of 0.00 or better must be attained for a school to be considered having met expected growth; schools with a change ratio of 1.5 or greater are considered high growth schools. At the elementary school level, third, fourth, and fifth grade students take the EOGs. However, only fourth and fifth grade scores are used when calculating an elementary school's growth measure; no score for establishing a baseline for a growth measure exists for third grade

(<http://www.ncpublicschools.org/docs/accountability/reporting/abc/2009-2010/abcaypreport10.pdf>).

Reading growth rather than proficiency data was intentionally selected as one of the data sets. All students and schools can demonstrate growth, improving from one year to the next. A variety of factors, such as socioeconomic status or percentage of limited English proficient students significantly impact overall proficiency measures of schools; therefore, proficiency data was not considered when comparing means.

A questionnaire to gather data was created by the researcher (see Appendix A). Before being administered to the UCPS elementary principals, to establish content validity, the questionnaire was pilot tested with four experienced and respected former UCPS elementary principals who now serve the school district in the following capacities: middle school principal, director of exceptional children's programs, director of elementary education, and director of middle school education. They agreed that the items included in the questionnaire accurately reflect the range of variables considered by UCPS elementary schools when creating class rosters. Suggestions provided to the researcher included ideas involving clarifying terminology, sentence structure, order of questions, and question-answer alignment. The survey contains a

total of 29 questions, 24 of which are dichotomous yes/no questions that investigate key indicators possibly considered when creating class rosters. In addition, one question is dichotomous regarding respondent gender, and four are multiple choice questions concerning years experience as a principal, school size, school free or reduced lunch percentage, and order of consideration of teacher and student when creating class rosters.

### **Administration of Questionnaire**

The cover letter that was attached to the questionnaire was read aloud to the respondents before completion of the questionnaire. The purpose and possible future use of the research results were explained, as were the potential benefits or risks to participants if they opted to respond, why they were chosen to be included in the population, and anonymity of participant information. An option to decline involvement in the study was provided, as was contact information for the author and university staff, including the research review board chair, in case respondents had questions. The term *class roster creation* was defined and directions for completion of the questionnaire were provided. Participants were permitted to ask clarification questions of the researcher before taking the survey. Without communicating with other respondents, participants then completed the questionnaire using a pencil or pen to answer. Because all respondents received the same directions, at the same time, and completed the questionnaire in the same setting, a high degree of fidelity of administration was accomplished.

### **Organization of Data**

The mean reading growth of schools that considered each key indicator and mean reading growth of schools that did not use each key indicator were calculated. Then the comparison of means was compared for 19 of the 24 key indicators. The comparison of means was not performed for five of the key indicators because all respondents answered the same; thus, no

control group was available. Additional information calculated was the sum total of schools, out of 27, that do or do not consider each key indicator. This information was necessary so that size of control groups for each key indicator-growth measure could be considered by the consumers of the results of this research in an accurate context, enabling them to better formulate their own conclusions.

A secondary analysis was conducted to determine whether a relationship between the total *number* of key indicators considered and reading growth may exist. Mean reading growth was calculated for all schools that consider the same number of key indicators. For example, an average growth measure was determined for all schools that consider 16 key indicators. The same calculation was made for schools who considered 17 key indicators, and so on. These means were then compared.

In order that specific demographic information about questionnaire respondents' and their schools could be provided, sum and percentage were calculated for the following: male/female respondents, years as a principal, school size, and school free or reduced lunch measure. Additionally, calculations regarding whether a school initially considers student, teacher, a combination of student and teacher, or none when creating class rosters was computed.

The study employs a comparison of means to suggest whether a relationship exists between sets of two variables, examining mean school reading growths, the dependent variables, and each of 24 key indicators, the independent variables, which may be considered by schools when creating class rosters. The reading growth measure is ex post facto, from the 2009-2010 school year. The key indicators, growth data, and the resulting disparities of means are measured quantitatively.

## Data Analysis Process

Excel, which is a commercial spreadsheet application, was utilized for the organization and compilation of most data. Calculations utilizing formulas for basic and more advanced operations were conducted. For survey questions 1-5, responses were charted separately (see Appendix B), as this information was collected primarily for the purpose of describing the population of respondents. The sum and percent of how respondents answered the one dichotomous question about participant gender and the four multiple choice questions was tabulated.

Following input of the school name (A-Z and AA) and reading growth measure into the spreadsheet, all questionnaire responses *for each of the 24 questions* relating to the key indicators were charted (see Appendix C). The sum and percent of respondents of the two populations who answered either yes or no to each question was calculated. In addition, the sum of yes or no answers *for each respondent* was calculated, and this data was then sorted based on total number of key indicators considered. Schools that consider the same number of key indicators were then clustered and the mean reading growth for these clusters of schools was calculated.

From the Excel spreadsheet containing all respondents' answers, all yes and no replies with accompanying means for questions 6-29 were carefully organized. The mean growth was then separately calculated for all respondents answering no for each question. The same mean growth calculations were performed for all respondents answering yes for each question, resulting in two average comparative growth measures for each question. The two means for each question were then compiled, and the difference of growth means for respondents answering yes or no for 19 of the key indicators was calculated. The differences in means for each key indicator were then arranged from greatest negative difference to greatest positive

difference. For survey questions regarding five of the key indicators, all participants answered yes, so no comparison of means was possible, nor were averages calculated.

For the secondary analysis, the total number of key indicators considered and reading growth were aligned. Then, the mean reading growth was determined for all schools that consider the same number of key indicators. For example, an average growth measure was determined for all schools that considered 16 key indicators. The same calculation was made for schools that considered 17 key indicators, and so on. Means were then calculated and the data was then arranged in ascending order.

In this chapter, a detailed explanation of the research design and study participants was provided. In addition, information was presented that elaborated about the sources of data, instrumentation, and data organization and analysis. In the following chapter, the resulting data will be presented in detail.

## Chapter Four: Data Analysis

### Introduction

The purpose of this chapter is to compare the average reading growth scores for UCPS elementary schools that do and do not consider certain key indicators when creating class rosters. When comparing means, schools that strategically consider specific key indicators have higher growth scores, while schools that consider other key indicators have lower growth scores. Nineteen sets of means were compared; reading averages for schools considering five particular key indicators were not calculated because all 27 survey respondents answered “yes,” eliminating the possibility of a control group. Additional data to be shared includes: the number of schools who consider or ignore each key indicator, the total number of key indicators considered by each school, and the average growth for schools who consider the same number of key indicators.

### Research Questions

The two specific questions that the study addresses are:

1. Are there key indicators in strategic class roster creation (SCRC) in elementary schools that affect academic growth in reading?
2. If strategic class roster creation (SCRC) does affect academic growth in reading, what are the relevant key indicators?

### Results

Data from 27 of 30 UCPS elementary schools were included in the study. The 2009-2010 reading growth scores for each school are public information. Reading growth measures for the UCPS elementary schools in our study varied from a 1.188 to 2.429 change ratio, creating a range of 1.241. The cumulative average reading growth measure for the 27 schools was 1.560.

Each school's reading growth measure was paired with questionnaire responses, which were coded to preserve participant anonymity. Inquiry about consideration of 24 key indicators was incorporated into the questionnaire.

Every key indicator was considered by eleven or more schools when creating class rosters, while five key indicators were considered by all 27 schools in the population. These indicators are: special placement of EC students, special placement of students with a history of retention, students who do not get along, teaching styles, and styles of classroom management. As displayed in Table 4, four indicators are deliberated upon by almost all schools, with four or fewer respondents saying that their school does not consider the indicator. These indicators are: special placement of limited English proficient students, student learning styles, students with a history of misbehavior, and characteristics of parents.

Teacher race, overall teacher years of experience, professional development history, and looping are deliberately considered by fewer than half of UCPS elementary schools as they create class rosters. At least one-third of schools ignore teacher years at their assigned grade level, special placement of speech-only students, gender of teacher, and race of students.

Table 4

*Consideration of Each Key Indicator*

<b>Survey Question Number</b>	<b>Key Indicator</b>	<b>Number of NO</b>	<b>Number of YES</b>	<b>% YES</b>
6	Equal Size	6	21	78
7	Teacher Years of Experience	15	12	44
8	Teacher Years at Grade Level	12	15	56
9	Professional Development	14	13	48
10	Teacher Evaluations	6	21	78
11	EOGs – Teacher History	7	20	74
12	LEP	4	23	85
13	EC – Speech Only	11	16	59
14	EC	0	27	100
15	AIG	7	20	74
16	Retention History	0	27	100
17	Learning Styles	3	24	89
18	Looping	14	13	48
19	Balanced Ability	7	20	74
20	Misbehavior History	2	25	93
21	Students Who Don't Get	0	27	100
22	Teacher Sex	11	16	59
23	Teacher Race	16	11	41
24	Student Race	10	17	63
25	Peer Role Models	7	20	74
26	Parent Characteristics	3	24	89
27	Teaching Styles	0	27	100
28	Neighborhood Issues	7	20	74
29	Classroom Management Style	0	27	100

*Note.* Data is taken from a population of 27 schools.

Schools that considered special placement of academically-intellectually gifted students and teacher years of experience at a grade level averaged a growth measure of almost 0.2 higher than schools not considering those indicators. Schools that considered student misbehavior history, teacher history of End of Grade Test scores, teacher performance evaluations, and race of students averaged a growth measure of 0.1 or better than schools that ignored these key indicators. Schools that considered special placement of limited English proficient students had a

growth average of 0.07 higher than their counterparts that ignored that key indicator, and schools that considered neighborhood issues had a mean change ratio of 0.04 higher than schools that did not.

As shown in Table 5, a negative correlation involving consideration of parent characteristics and growth average exists, with a change ratio of greater than -0.23. Schools that considered teacher history of professional development and student learning styles had a lower reading growth change ratio than their counterparts, with the difference of means of -0.14 or greater. Schools that considered equal class size had a lower average reading change ratio than schools that did not, with a difference of means of almost -0.05. Smaller difference of means existed for seven of the key indicators, ranging between a positive correlation of 0.02 and a negative correlation of -0.03.

Table 5

*Difference of Growth Means*

<b>Question Number</b>	<b>Key Indicator</b>	<b>NO Mean Growth</b>	<b>YES Mean Growth</b>	<b>Difference of Growth Means</b>
26	Parent Characteristics	1.771	1.534	-0.237
9	Professional Development History	1.647	1.467	-0.181
17	Learning Styles	1.692	1.544	-0.148
6	Equal Size	1.598	1.550	-0.048
18	Looping	1.572	1.548	-0.024
13	EC – Speech Only	1.574	1.551	-0.023
25	Peer Role Models	1.576	1.555	-0.021
7	Teacher Years of Experience	1.567	1.552	-0.015
22	Teacher Sex	1.567	1.555	-0.012
23	Teacher Race	1.563	1.557	-0.006
19	Balanced Ability	1.548	1.565	0.016
28	Neighborhood Issues	1.529	1.571	0.042
12	LEP	1.500	1.571	0.071
24	Student Race	1.491	1.601	0.111
10	Teacher Evaluations	1.472	1.585	0.113
11	EOGs – Teacher History	1.459	1.596	0.137
20	Misbehavior History	1.410	1.572	0.163
8	Teacher Years at Grade Level	1.454	1.646	0.192
15	AIG	1.418	1.610	0.192

*Note.* Means were not determined for the five key indicators with zero “no” answers. Each control group has at least three schools.

According to the results of the questionnaire, schools considered between 11 and 24 key indicators, as displayed in Table 6. An average of 18 key indicators was considered by UCPS elementary schools when creating class rosters.

Table 6

*Number of Key Indicators Considered*

<b>School</b>	<b>Reading Growth</b>	<b>Key Indicators Considered</b>
A	1.347	11
D	1.437	14
J	1.317	14
G	1.403	16
I	1.537	16
M	2.067	16
Q	1.268	16
R	1.271	16
W	1.500	16
K	1.472	17
S	1.953	17
F	1.969	18
L	2.138	18
N	1.490	18
T	2.429	18
AA	1.362	18
E	1.429	19
X	1.357	19
Z	1.349	19
B	1.188	20
U	1.571	20
Y	1.469	20
O	1.511	21
P	1.507	21
C	1.662	22
H	1.561	22
V	1.564	24

*Note.* The range of reading growth is 1.241.

The mean reading growth of schools that considered the same *number* of key indicators was computed; reading growth increased as the number of key indicators increased from 11 to 18, as shown in Table 7. Schools that considered 18 key indicators showed the highest reading growth; schools that considered 11 or 14 key indicators earned the lowest reading growth. This pattern of increased average reading growth when considering from 11 to 18 key indicators, and

then a lack thereof for 19 or more key indicators implies a diminishing return. Schools considering 19 key indicators averaged about the same reading growth as the schools that considered 11 or 14 key indicators.

Table 7

*Mean Growth for Each Number of Key Indicators*

<b>Number of Considered Indicators</b>	<b>Mean Reading Growth</b>
11	1.347
14	1.377
16	1.507
17	1.713
18	1.878
19	1.378
20	1.409
21	1.509
22	1.612
24	1.564

*Note.* 13 of 27 schools considered 16-18 key indicators.

**Summary of Data**

Questionnaire results about strategic consideration of key indicators when creating elementary school class rosters and reading growth measures were paired for 27 schools, creating several data sets. The number of schools that considered each of the 24 key indicators was presented, as was the difference of mean reading growth of schools that did or did not consider specific key indicators. Finally, the number of key indicators considered by each school and the mean reading growth for schools that considered an explicit number of key indicators was displayed.

## Chapter Five: Discussion

### Introduction

The purpose of this chapter is to discuss the data presented in the previous chapter that was derived from analyzing reading growth scores paired with questionnaire results from 27 UCPS elementary schools that did or did not consider certain key indicators when creating class rosters. Discussion is organized around two precepts, the number of schools that consider each key indicator and a comparison of means for each key indicator. The two specific questions that the study addresses are:

1. Are there key indicators in strategic class roster creation (SCRC) in elementary schools that affect academic growth in reading?
2. If strategic class roster creation (SCRC) does affect academic growth in reading, what are the relevant key indicators?

In addition, a secondary analysis of the total number of key indicators considered was analyzed and will also be discussed.

### Interpretation of Results

#### **Number of schools considering each key indicator.**

#### ***Key indicators considered by all or almost all schools.***

Five key indicators were considered by all schools. These include special placement of EC students, special placement of students with a history of retention, students who do not get along, styles of classroom management, and teaching styles. In addition, all but four or fewer of the schools in the study considered the following key indicators when creating class rosters: special placement of limited English proficient students, student learning styles, history of

misbehavior, and parent characteristics. As a practicing elementary school principal, the researcher was relieved that most or all 27 of his peers who completed the questionnaire oversee a class roster creation process that purposefully considers these nine key indicators.

Student learning styles and teaching styles are logically linked. Twenty-four of 27 UCPS schools consider student learning styles, and all 27 consider teaching styles. Howard Gardner's findings regarding multiple intelligences translate directly to the classroom; school leaders can facilitate the pairing of the practiced teaching styles with the successful learning styles of students. Consequently, elementary schools in UCPS, as a whole, undoubtedly make a concerted effort to align teaching styles and learning styles in our classrooms.

Thankfully, 23 of 27 schools deliberately considered special placement of students who are limited English proficient, and all 27 schools regarded special placement of EC and previously retained students when generating class rosters. These three categories of students are frequently considered at-risk; when schools consider children who statistically have a lower chance of graduating than the average student, it demonstrates that the leaders are aware of and make efforts to support the entire student population, not just the average and higher performing students. Students who have been retained are inevitably and obviously at-risk and benefit from receiving individualized consideration when being placed on class rosters. In addition, clustering students with exceptionalities enables the possibility of co-teaching or inclusion instruction, which for many students is considered their least restrictive environment. Effective pedagogy and best practice recommends students with exceptionalities learn the elementary curriculum within the regular education setting whenever feasible and productive.

Regarding classroom management, many students flourish in a more rigidly monitored classroom, while others have more success with a less structured or more relaxed learning

environment. School leaders can attempt to strategically place students in classes where they will succeed within the classroom organizational structure, whether with a teacher considered a nurturer or a strict disciplinarian. Of course, not only students with academic challenges should be considered at-risk; students with behavioral or social concerns may also be vulnerable and warrant careful placement on class lists. For example, if a student's misbehavior with a particular peer is chronic, the school should not facilitate a continuation of this history and should place the students in different homeroom classes whenever viable. Twenty-five of 27 elementary schools intentionally consider students with a history of misbehavior, while all 27 consider students who do not get along. These two key indicators are directly connected.

All but three elementary schools consider parent characteristics when creating class rosters. This question was created to be intentionally vague with the goal of providing respondents with a "catch-all" including a variety of parent actions or issues that may occur in the school setting. Parent characteristics may include style of communications, interactions with teachers, behaviors including perceived irrationality, participation in their child's education, volunteerism in the classroom, and other distinctions. Because almost all members of the population completing the questionnaire are experienced principals, the researcher concludes that most of the participants realize the importance of considering parent characteristics when creating class rosters. This understanding may have been present from each principal's first day on the job, or is now present based on a hard-learned lesson.

To pair parents and teachers who share an affinity for the same method and frequency of communications simply makes sense. A school is wise to consider parental behavior, especially when that parent may have a propensity to be confrontational instead of collaborative with a teacher. Also, parental behavior may include attempts to unfairly influence or even intimidate a

teacher; this is more common with an authoritative parent and a younger, less experienced teacher. In addition, most teachers utilize parent volunteers or “room parents,” when available and of high quality, thus benefitting their classrooms. By sharing or spreading the children of the more involved parents among the class rosters, schools can more intelligently utilize their parental resources. For all of the afore mentioned reasons, logic dictates that the smart school considers parent characteristics when forming class rosters.

***Key indicator considered by fewer than two-thirds of schools.***

At the other end of the continuum of key indicator considerations, fewer than half of the 27 schools considered teacher race, overall teacher years of experience, professional development history, and looping when producing class rosters. In addition, 10-12 schools did not deliberately consider the following key indicators: teacher years at their assigned grade level, special placement of speech-only students, gender of teacher, and race of students. In sum, 41-63% of schools considered the above-mentioned eight individual key indicators when creating class rosters at their schools.

Frequently, indicators of teacher quality include years of experience as a teacher, years spent teaching in a particular grade level, and professional development history. Though exceptions exist, educators within their first couple years of their teaching career are not typically able to perform as well as quality teachers with more years of experience. As is often commiserated within the school environment, teaching is one of the few fields where a first year employee is often expected to attain the same results as a grizzled, veteran teacher. What is vitally important regarding staff development is the degree to which teachers choose to and are able to apply what they have learned during their growth opportunities with their students. Finally, no matter how school leaders formally and informally evaluate teachers, they must take

care to not permit students to have back-to-back years with poor teachers, as a student who has a “bad” teacher for two years in a row may never recover academically.

As Monk (1987) states, “We know that it matters whom a child has for a teacher; we also know it matters whom a child has for classmates.” Children need role models to whom they can relate, who share common characteristics with them, whom they may emulate. This includes students having teachers of the same sex and race, and having high achieving peer role models who are like them in more ways than just age. This is especially true for minority students, as most schools employ proportionately fewer minorities than are represented by their student population. In addition, with a divorce rate of over 50% in the United States, many children do not have day to day adult contact with members of both sexes; schools can help to provide this interaction.

The looping of a teacher, moving them with the same cohort of students from one grade to the next, is an often underutilized practice. Looping, when accomplished with quality teachers, commonly results in higher academic performance. Many educators believe that a strong teacher can more easily learn a new grade level curriculum than the learning styles, academic levels, external challenges, and idiosyncrasies of a new set of 20 or more students. More than half of our questionnaire respondents do not consider looping as a component of their school’s class roster creation process. Two reasons account for limited consideration of looping; teacher and school leader comfort levels. Teachers generally identify themselves as a teacher of a specific grade level of students. Often, school leaders and others hear, “I’m a third grade teacher” instead of “This year, I am teaching third grade.” Teachers become attached to a grade level and believe, whether true or not, that once a grade level curriculum is experienced and learned, their job will be easier or they will become more effective as a teacher. Secondly, school leaders often settle

for very good; when a teacher does a very good job at a particular grade level, we accept this as status quo, after all, why not support job security for all! For a school leader to push teachers and schools toward being truly great frequently involves risk, and many principals or other school administrators are fearful of making this commitment.

Finally, only 59% of UCPS elementary schools intentionally considered speech only students when forming class rosters because supplemental speech services are typically provided by a speech language pathologist in a separate setting. “Pulling” these students out of their regular classroom setting is merely a scheduling issue. Clustering these students in one or a few homeroom classes is not necessarily warranted as long as the speech language pathologist and elementary teachers can effectively schedule these times so that essential core instruction in the regular classroom is not disrupted.

### **Comparison of Means of Key Indicators**

#### ***Positive correlation.***

Reading growth means were compared for schools that did or did not consider each of 24 key indicators when creating class rosters. As previously mentioned, five key indicators were considered by all schools, so no means comparison was possible. In addition, only 2-4 principals did not consider four other key indicators. While a means comparison was calculated, the small size of a control group is to be considered and will be declared within the discussion of these results. To understand the practical significance of the growth means for each key indicator, it is vital that the consumer of this research understand that the reading growth of the population of schools who participated in the study ranged from 1.188 to 2.429, creating a variance of 1.241.

Examining the largest positive correlation, schools that strategically considered teacher years of experience at a grade level and special placement of academically-intellectually gifted

students *had a mean reading growth of almost 0.2 higher* than schools that did not consider these two key indicators. Twelve schools did not consider teacher experience at a grade level, and seven did not reflect upon special placement of academically-intellectually gifted students. Though exceptions are common, teachers with more years of experience at a grade level know the designated curriculum and are able to grow past what is often “survival mode” when teaching a particular grade level of students for the first time.

In UCPS, a “pull-out” academically-intellectually gifted model is employed. Only fourth and fifth graders receive direct services. While consideration of these students may appear to be simply a scheduling issue, clustering academically-intellectually gifted students and then having them leave the homeroom class for reading and/or math instruction with another teacher results in a smaller remaining homeroom class size. With a reduced class size, the individual learning needs of the remaining students can be more effectively addressed. Because of the difference of growth means, UCPS elementary school leaders that did not consider these two key indicators should reflect upon why they did not take into account teacher years of experience at a grade level and special placement of academically-intellectually gifted students and possibly modify their class creation practice.

Schools that deliberately considered student misbehavior history, teacher history of End-of-Grade Test results, teacher evaluations, and student race *had a higher reading growth measure of more than 0.1* than schools not considering the key indicators, ranging from 0.163 to 0.111. Students with a history of misbehavior are considered more at-risk than their well-behaved peers and should merit explicit placement on class rosters. Only two schools did not consider this key indicator.

While it is only one measure of student achievement, if a teacher has demonstrated that her previous students have shown growth based on the End-of-Grade Test, school leaders obviously should consider this indicator of classroom success. Because of poor inter-rater reliability, teacher performance ratings on standardized evaluation instruments are often not accurate in measuring teacher effectiveness, especially during the first years of the implementation of the instrument. Because of the difference of growth means, certain UCPS schools may wish to explore why they are not considering student misbehavior history, teacher history of End-of-Grade Test results, teacher evaluations, and student race and possibly revise their class creation practice.

As shared by Banks (2006), when a student identifies with his or her racial group, he is likely to internalize the group's goals, interests, and aspirations. Therefore, it is important for school leaders to consider race when creating class rosters. Because minority groups are traditionally underrepresented as professional educators, with proportionally less representation than their respective student populations, considering student race when creating class rosters should be critical. To ignore race will only emphasize the dominant racial culture in any setting.

***Negative correlation.***

At the other end of the spectrum, examining the largest negative correlation, schools consciously considering parent characteristics *had a mean reading growth of 0.237 lower* than schools that did not consider this key indicator. Importantly, only three schools ignored parent characteristics when generating class rosters. Looking strictly at the comparison of means, a consumer of the data may suggest that considering parent characteristics actually hinders school reading growth.

Fourteen of 27 schools did not consider teacher history of professional development as a component of class roster creation. The data in this study support the majority of UCPS elementary principals, as their schools *had a mean reading growth score of 0.181 higher* than the 13 schools that did consider this key indicator. What is vitally important regarding professional development is not the quality of presentation or quantity of opportunities each teacher has experienced. School leaders must look beyond the surface level of professional development history, examining to what degree teachers choose and are able to apply what they have learned during their growth opportunities with their students.

Schools that considered student learning styles *had a reading growth mean 0.148 lower* than schools not considering this variable when forming class rosters. The researcher strongly believes that this resulted because only three schools did not consider this key indicator, and zero schools ignore teaching styles; these variables are unmistakably connected. While the data from this study are not indicative of the benefits of pairing learning and teaching styles, UCPS elementary schools obviously focus upon creating optimal learning style-teaching style couplings in our schools and classrooms.

***Minimal correlation.***

Schools strategically considering special placement of limited English proficient students *had a growth average of 0.071* for schools considering the key indicator, though only four schools did not consider this indicator. Though the difference of means in this study is minimal, limited English proficient students are frequently at risk. Conventional wisdom and best practice suggests that school leaders should seek to control all variables within their power, which may include consideration of placement on a class roster, when aiming to prevent at risk students from “falling through the cracks.”

Schools that considered neighborhood issues had reading growth mean of 0.042 greater than the schools not considering this variable when generating class rosters. Twenty elementary schools in UCPS made this social consideration a component of the class roster creation process. While conflict or alliances among families from the same neighborhood that prove obstructive to the school should, in theory, not carry over into the school building, this separation is usually not possible. Even in elementary schools, students or parents of students are often challenged to keep neighborhood issues disconnected from school.

Schools that did not deliberately consider creating homeroom lists of equal size have a mean reading measure of 0.048 higher than schools who do consider this key variable. While this mean difference is also small, it supports the presumption that all classes should not be equal in size. Classes at each grade level are generally kept the same size as an indicator of fairness and equity from the school's leaders toward the teachers at that grade level. Understandably only six schools considered creating classes of equal size, as several other variables, not least importantly student exceptionalities or giftedness, should play a more eminent role in the class roster creation process.

The difference of reading growth means for seven of the key indicators is very small, falling between 0.016 and -0.024. The seven variables with almost no variance are consideration of: balanced ability classrooms, teacher race, teacher sex, teacher years of experience, peer role models, special placement of speech only students, and looping. This data supports the conceptual belief that consideration of these key indicators neither helps nor hinders reading growth in UCPS elementary schools.

### **Number of Key Indicators**

Elementary schools in UCPS considered between 11 and all of the 24 key indicators included on the questionnaire. The mean reading growth was computed for all schools considering the same number of key indicators. Schools that considered 18 key indicators had the highest reading growth with a mean of 1.878. Schools that considered only 11 or 14 key indicators earned the lowest reading growth, though this total represents only three schools. An obvious pattern of increased growth is evident in the data as the means are compared for schools that considered 11, 14, 16, 17, and 18 key indicators (no schools considered 12, 13, or 15 key indicators).

Based on the data, these findings suggest that consideration of more key indicators, up to and including 18, may lead to higher reading growth. The potential benefits of addressing a certain number of key indicators must not be ignored by schools as they create class rosters. Interestingly, a property of diminishing returns is evident after the consideration of 18 key indicators. The average growth of schools considering 19 key indicators plummeted to 1.378, almost as low as schools considering only 14 key indicators (1.377).

The premise that schools that consider at least a certain number of variables when creating class rosters (18 in this study) are likely more aware of the needs of their student populations and strengths of their instructional staffs. After the mean reading growth for 19 key indicators showed a dip, average reading growth again incrementally increased, rising to 1.612 for schools considering 22 key indicators. A consumer of this data could also claim that considering more than 18 key indicators would not benefit or may even prove somewhat detrimental when engaging in the process of elementary school class roster creation.

Considering at least 16 key indicators is beneficial, as the corresponding mean for these schools (1.507) is roughly equal to the overall reading growth average of all schools in the study (1.560). After consideration of up to 18 key indicators, the data does not support considering additional key indicators, as the mean growth measures dip and then again rise, though at the end of this ascension reading means of schools that consider 21, 22, or 24 key indicators are close to meeting or exceed the overall reading growth of all schools.

### **Limitations**

Conducting research with a small population while attempting to analyze the utilization of 24 key indicators when creating elementary school class rosters presents substantial challenges. With only 27 respondents, a sizable control group of schools either considering or not considering a particular key indicators was not possible, and for several key indicators no control group exists. A convenience sample was used, which makes generalizability more difficult than when using a sample based on a random method of selection. In addition, based on the demographics of UCPS students and principals, the results of this study are likely not externally valid, or generalizable, to other school districts or states, especially since dissimilar rules and regulations likely exist for class roster creation in other school districts and states outside of North Carolina.

Several topics are beyond the scope of this research. Excluded topics include: combination or multiage/multi-grade classes, heterogeneous versus homogeneous ability grouping, single sex classes, class size, grouping of students within classrooms for instruction, mainstreaming versus separate setting for instruction of exceptional, academically/intellectually gifted, and non-English speaking students, departmentalization, tracking, team teaching, and co-teaching. Also not incorporated is consideration of parental input in the class roster creation

process, as for the sake of this study the author is assuming that parent requests for specific teachers are not granted.

The creation of kindergarten class rosters is not addressed. Analyzing beginning-of-year kindergarten assessment data, possible use of staggered entry practices, and the likelihood that new kindergarten students are being enrolled in an elementary school setting for the first time makes kindergarten class roster creation an entirely different activity than class roster creation for first through fifth grade students. The research only considered growth in reading, which utilizes standardized North Carolina end of grade test data for students in fourth and fifth grades.

Another limitation is that each building's principal was the only respondent to the questionnaire. Having only one participant per school narrowed the study, providing only one perspective about the class roster creation process from each school. Furthermore, this limits reliability of questionnaire responses. Though having the principal voice how his or her school addresses the process of class roster creation is logical, the population size could have been expanded to include other employees at each school to learn more about the perception of the process employed at each of the 27 schools.

In addition, the study only addresses the class roster creation process in elementary schools and utilizes one year of ex post facto data. Finally, the findings utilize a design based on an instrument created by the researcher. To establish content validity, the questionnaire was pilot tested with four experienced and respected former UCPS elementary principals, but it has not been validated utilizing a larger population of respondents. In addition, conclusion validity is not entirely clear, based upon the small scope of the study.

## **Suggestions for Future Research**

Establishing external validity is a matter of replication. This research is an introductory study of elementary school class roster creation, scratching the surface of what and how additional research may ultimately benefit schools. The small number of participants was selected because a goal of this study was to provide UCPS specific information about how elementary schools in this school district engage in class roster creation and hopefully build and improve from that baseline.

Replication of the research may include utilizing larger, randomly selected samples. Replication of results in a variety of settings will then move the body of knowledge toward generalizability. Leaders from other school districts may choose to replicate this study while working within their own specific school district or state regulations and parameters so that beneficial information may be produced to help principals and schools with their class roster creation for their specific student populations. Modification of this research may entail adding or removing certain key indicators from the questionnaire, as many of these variables vary greatly among school districts or states. In future study, the key indicators could be organized into constructs, such as “clustering of students with exceptionalities” or “behavior/social considerations.” In addition, if conducted in other states, a uniform growth measure would need to be determined; not all states utilize a reading quantification as a component of a standardized testing program.

Expansion of the study could also include consideration of data beyond the scope of this research, including academic growth in math and other subject areas, and utilization of reading and other growth measures that employ non-state mandated assessments from younger students in kindergarten through second grades. Additional extension could also contain exploration of

reading and other academic growth measures of students within ethnic or socioeconomic subgroups, utilization of proficiency measures (not simply growth measures), and multi-year growth data. Furthermore, future research could entail study of the class roster creation process in middle and high schools.

This research could be expanded in multiple directions by conducting in-depth research regarding one or more of the key indicators listed on the questionnaire, delving deeper into a topic such as consideration of student race or classroom management style when creating class rosters. Whether and how to consider parent requests is another complex issue that may warrant research independent of other key indicators.

The utilization of a prescribed process and empirical data regarding the consideration of key indicators is an untapped realm that could lead to practical and valuable contributions in the field of educational leadership. Potentially, new findings may result in a practice that elementary school principals could oversee or employ to improve their existing methods when creating class rosters. Future studies may indicate that dedicating substantial time and effort to strategically create class rosters is a waste of an irreplaceable resource, time. Conversely, new findings may result in a valuable, student growth-driven process that elementary school principals could employ to improve their existing methods when creating class rosters. Furthermore, students may have enhanced opportunities to learn resulting in a higher quality school and most importantly, an improved education for children. Either conclusion would contribute to existing knowledge in the field.

### **Implications for Practice**

Although the outcomes of the study provide information that may be considered helpful by UCPS school administrators and other school leaders, much more research is needed to

determine if considering certain key indicators when creating class rosters directly benefits reading growth of elementary school students. A lack of empirical data exists about the process and procedures used in elementary schools to create class rosters to benefit academic performance. What little empirical data previously existed in regard to the process of elementary school class creation is inconclusive and utilizes decades-old information. Generalizable research results does not yet exist that validates whether spending the time and efforts to strategically “create” elementary school class rosters affects reading growth. As a result of this research, a small amount of data now exists for school leaders, particularly principals in UCPS, to utilize as they oversee the class roster creation in their schools. To ignore these finding would be a disservice to students, as overseeing the process of class roster creation is one of the few variables that affect our students and staffs that we can explicitly control as school leaders.

The utilization of a prescribed process and empirical data regarding the consideration of specific key indicators are untapped areas of study that could lead to practical and valuable contributions in the field of educational leadership. Potentially, additional research may suggest the development of a practice that UCPS elementary school principals could oversee or employ to improve their existing methods when creating class rosters. By advancing class roster creation procedures, and knowing that key variables within the process of SCRC should or should not be considered, principals may ultimately make better leadership decisions. Better managerial decisions within schools should ultimately lead to higher student achievement, and eventually result in a higher quality school and most importantly, an improved education for children.

As published by Robert Slavin in 1987, and still true today, many student grouping decisions are made based on unsubstantiated opinions or assumptions. Many school leaders consider the process of class roster creation, or determining student membership in each class, a

priority that must be considered not only a few days before the start of a school year, but continually throughout the year if high expectations for student achievement are truly a school's primary focus. Based on empirical evidence, we truly do not yet know if engaging in a deliberate class roster creation process is worth the effort. In addition, arguing for the significance of consideration of one key indicator over another when creating elementary school class rosters is tempting, but with the limited amount of empirical information available on the topic, we must exercise caution. Until more data is available, we must view the class roster creation process as a dynamic interaction of key indicators to be considered within a set of structured procedures supporting the present and future success of all students.

### **Researcher Action Plan**

The research findings were presented to UCPS elementary principals and other school district executive leaders. The following information was shared:

1. Overview of study
2. Review and explanation of data
3. Interpretations and suggestions from the data
4. Logical conclusions
5. Facilitated discussion about the process of elementary school class creation including sharing specific processes utilized by individual schools in UCPS

Empirical findings and researcher conclusions from this project were presented to UCPS elementary school principals and executive leaders suggesting what elements to consider, within established district and state parameters, when creating class rosters. More specifically, new data was shared suggesting a positive correlation between certain key indicators of class creation and student reading growth in UCPS elementary schools, including specific findings about which

variables may be most important to consider. Negative or no correlation between certain key indicators of elementary school class roster creation and reading growth were also presented. Details were provided suggesting whether time spent considering a certain number of variables by school leaders and teachers preparing class rosters benefited students or whether that time was needlessly wasted by teachers, principals, and others in making prescribed class lists.

Also shared was information, based on known practice and limited existing literature, outlining how to proactively and strategically create class lists that will most benefit our students. This structure provided a skeleton that led to discussion about the process that UCPS elementary schools employ, within the parameters prescribed by our school district and North Carolina's Department of Public Instruction, when creating class rosters. Principals learned a replicable process detailing how to proactively create class lists that will benefit our students and thus our school system.

Furthermore, extensive conversation was facilitated among the principals that examined several possible considerations for class creation beyond the key indicators of this study, digging deeper into the methodology of the process. Finally, principals' professional ideologies that support or oppose the SCRC process was explored, further contributing to reflection and professional growth among the UCPS learning community of elementary school principals. The presentation occurred on May 10, 2011 so that information learned could be applied to the creation of class lists for the 2011-12 school year, if desired, by principals.

## **Summary**

With increasing budgetary challenges for schools and districts, providing a high quality education for each of our students is becoming more challenging. Hundreds of variables affect a child's learning during a school year, and throughout his years as a student. While school leaders

have little or no control over numerous factors that directly or indirectly affect learning and academic growth, they have the option to proactively address many tangible resources within their control, including key indicators that may contribute to the success of students.

One managerial leadership activity school leaders control and organize, either by overseeing or successfully delegating, is the creation of class rosters. School leaders may utilize information and data about many of their students, their teachers, and the operational structure of their school when adopting a process for class roster creation. Leaders can proactively address a variety of variables before the school year begins to provide each child the most opportune chance of having a successful year of learning and succeeding. The targeted purpose of this research is to determine whether a measurable value exists in spending the time and efforts to strategically “create” elementary school classes while considering key indicators that, if put into place when determining class assignments, positively benefit student reading growth for UCPS students. Potentially, these and subsequent findings may result in the development of a practice that UCPS elementary school principals could oversee or employ to improve existing methods for creating class rosters.

By advancing class roster creation procedures, and understanding that key variables within the process of SCRC should or should not be considered, principals may ultimately make better leadership decisions. Better managerial decisions within schools ultimately will lead to higher student achievement, resulting in a higher quality school and most importantly, an improved education for children.

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**Appendix A – Questionnaire**

January 11, 2011

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School Name

Dear UCPS Elementary Principal:

I would like to enlist your help. I am conducting research on how elementary schools create class rosters for my Doctoral Capstone Project. The purpose of the study is to learn which, if any, variables are considered by schools as class rosters are created and whether consideration of certain variables influences reading growth.

You have been chosen as a member of the sample group because of your position as principal at one of 30 UCPS elementary schools. The questionnaire should only take about 10 minutes of your time. There are no direct benefits or risks to you for your participation in this study; however, my project findings may be presented at a future elementary principals meeting.

Though this questionnaire cannot be taken anonymously because your school's EOG reading growth data will be paired with the questionnaire responses for each school, *I will never know how each school answers the questionnaire*. The Director of Elementary Education will collect and make a copy of the questionnaires. He will then pair questionnaire responses with each school's reading growth measure, deleting the school names from the results I receive. Schools will be listed A-Z (including AA and BB if more than 26 respondents participate). He will shred the original questionnaire responses and will keep only a coded set of the data, which only he will be able to access, until the end of my research.

The results of this research will be presented publicly at Wingate University. If you have questions about the research, please contact me at (704) 258-1949 or [j.m.henderson@wingate.edu](mailto:j.m.henderson@wingate.edu). You may also contact my Capstone Project Chair, Cynthia Compton at [c.compton@wingate.edu](mailto:c.compton@wingate.edu). If you have any questions regarding your rights as a research participant, please contact Wingate University's Research Review Board Chair at [d.compton@wingate.edu](mailto:d.compton@wingate.edu).

Your help with this research is strictly voluntary. If you choose not to participate simply do not complete the questionnaire. By completing the questionnaire, you confirm that you have read and understood your rights and options outlined in this letter and have had opportunity to ask questions.

*Simply write your school name on the blank at the top of this sheet. Then fill in one circle beside your chosen answer for each question. For this questionnaire, the term **class roster creation** is used to describe the process of creating homeroom lists, or rosters, for each teacher in grades 1-5. Do not consider how your school creates kindergarten rosters.*

Thank you for your time and consideration.

Sincerely,  
Mike Henderson,  
Student Researcher

1. Are you male or female?

- Male
- Female

2. Including the present school year, how many years have you been a principal?

- 1
- 2-4
- 5-9
- 10 or more

3. How many K-5 students are enrolled in your school?

- 399 or less
- 400-599
- 600-799
- 800 or more

4. What is the Free or Reduced Percentage at your school?

- 0-24%
- 25-49%
- 50-74%
- 75-99%

5. When your school creates class rosters, do you make class rosters and then assign a teacher to that list, or do you start with the teacher and then assign students to that teacher?

- Student roster created first, then teacher assigned to class list
- Teacher selected first, then students assigned to teacher
- A combination of these two methods
- None of the above

6. When your school creates class rosters, do you aim to make all of the classes at a certain grade level of equal size?

- Yes
- No

7. When your school creates class rosters, do you intentionally consider teacher total years of experience?

Yes No

8. When your school creates class rosters, do you intentionally consider teacher years of experience at his/her assigned grade level?

 Yes No

9. When your school creates class rosters, do you intentionally consider teacher history of professional development?

 Yes No

10. When your school creates class rosters, do you intentionally consider teacher performance evaluations (TPAI, NCTES)?

 Yes No

11. When your school creates class rosters, do you intentionally consider teacher history of student EOG test scores?

 Yes No

12. When your school creates class rosters, do you intentionally consider special placement of LEP students with certain teachers?

 Yes No

13. When your school creates class rosters, do you intentionally consider special placement of EC Speech-only students with certain teachers?

 Yes No

14. When your school creates class rosters, do you intentionally consider special placement of EC (exceptionalities other than speech) students with certain teachers?

 Yes No

15. When your school creates class rosters, do you intentionally consider special placement of AIG students with certain teachers?

- Yes  
 No

16. When your school creates class rosters, do you intentionally consider special placement of students with a history of retention with certain teachers?

- Yes  
 No

17. When your school creates class rosters, do you intentionally consider student learning styles?

- Yes  
 No

18. When your school creates class rosters, do you often (average once or more per year) “loop” students, keeping them with the same teacher for more than one academic year?

- Yes  
 No

19. When your school creates class rosters, do you aim to create balanced ability classrooms at every grade level?

- Yes  
 No

20. When your school creates class rosters, do you intentionally consider students with a history of misbehavior?

- Yes  
 No

21. When your school creates class rosters, do you intentionally separate students who do not get along?

- Yes  
 No

22. When your school creates class rosters, do you intentionally consider the gender of teachers?

- Yes  
 No

23. When your school creates class rosters, do you intentionally consider the race of teachers?

Yes

No

24. When your school creates class rosters, do you intentionally consider the race of students?

Yes

No

25. When your school creates class rosters, do you intentionally consider peer role models?

Yes

No

26. When your school creates class rosters, do you intentionally consider characteristics of parents?

Yes

No

27. When your school creates class rosters, do you intentionally consider teaching styles?

Yes

No

28. When your school creates class rosters, do you intentionally consider neighborhood issues between families that occur outside of school?

Yes

No

29. When your school creates class rosters, do you intentionally consider teacher style of classroom management?

Yes

No

## Appendix B – Respondent Answers: Demographic Information

Table 1

*Respondent Answers – Questions 1-5*

school	growth	Q1	Q2				Q3				Q4				Q5			
			1	two-4	five-9	10+	399 or 1	400-599	600-799	800+	0-24	25-49	50-74	75-99	stud 1st	tchr 1st	com	none
A	1.35	F			X		X					X		X				
B	1.19	F			X				X		X					X		
C	1.66	M		X					X		X					X		
D	1.44	F		X						X	X				X			
E	1.43	F			X				X		X					X		
F	1.97	M				X			X			X			X			
G	1.4	F				X		X			X					X		
H	1.56	M			X				X				X	X				
I	1.54	F		X					X				X			X		
J	1.32	F				X		X					X			X		
K	1.47	F		X					X			X				X		
L	2.14	F				X			X			X				X		
M	2.07	F				X				X	X				X			
N	1.49	F			X			X					X			X		
O	1.51	M		X						X	X					X		
P	1.51	M		X				X				X				X		
Q	1.27	F		X					X		X				X			
R	1.27	M			X		X				X					X		
S	1.95	F				X		X					X			X		
T	2.43	F			X				X			X			X			
U	1.57	F			X			X			X					X		
V	1.56	F				X		X					X			X		
W	1.5	F		X					X				X	X				
X	1.36	F		X					X			X				X		
Y	1.47	F		X				X					X		X			
Z	1.35	F			X			X				X				X		
AA	1.36	M			X					X	X					X		

**Appendix C - Respondent Answers: Key Indicators**

Table 2

*Respondent Answers – Questions 6-29*

school	growth	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23	Q 24	Q 25	Q 26	Q 27	Q 28	Q 29	
A	1.347	Y	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N	N	N	N	Y	N	Y	
B	1.188	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
C	1.662	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
D	1.437	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	Y	Y	N	N	N	N	Y	Y	N	Y	Y
E	1.429	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
F	1.969	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G	1.403	Y	N	N	N	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y
H	1.561	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
I	1.537	N	Y	Y	N	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y
J	1.317	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
K	1.472	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	N	N	Y	N	Y	Y	N	Y	N	Y	Y	Y	Y	Y
L	2.138	Y	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y
M	2.067	N	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
N	1.49	Y	N	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y
O	1.511	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
P	1.507	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q	1.268	Y	N	N	Y	Y	Y	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
R	1.271	Y	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y
S	1.953	N	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
T	2.429	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	Y
U	1.571	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y
V	1.564	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
W	1.5	Y	N	N	N	N	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y
X	1.357	Y	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Y	1.469	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y
Z	1.349	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y
AA	1.362	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y

**Time Log**

Activity	Persons Involved	Date	Hours

Pick up literature from Wingate Matthews	self	multiple	6
Correspondence with committee chair	self, Dr. Compton	multiple	35
Correspondence re: project with superintendent	self, superintendent	multiple	3
Read & Process emails from Wingate re: capstone process	self	multiple	6
correspondence with second reader	self, Dr. Stegall	multiple	6
correspondence with UCPS director of testing	self, C. White	multiple	2
correspondence with community agency rep.	self, Dr. Bulla	multiple	25
correspondence with capstone advisor	self, Dr. White	multiple	25
Discuss project with other principals	self, 2 peer principals	multiple	6
Input activity log	self	multiple	11
Discussion/correspondence with prof re: topic choice	self, Dr. Watkins		2
Discussion/correspondence with prof re: topic choice	self, Dr. Stegall		1
brainstorm possible topics	self		4
compilation of possible topics for presentation to super.	self		3
Read Research Book	self	9/22/2010	4
Informed consent training	self	9/25/2010	3
Read Research Book	self	9/26/2010	4
Research	self	9/27/2010	4
Informed consent activity	self	9/28/2010	5
Correspondence with superintendent (email/in person)	self, superintendent	9/29/2010	3
Literature Search	self	9/30/2010	4
Read collected literature for review	self	10/1/2010	3
Research	self	10/2/2010	4
Literature Search	self	10/3/2010	3
Brainstorm search terms with peers	self, 2 classmates	10/4/2010	2
Email with leading researcher on topic	self, Dr. Burns (Univ. of SF)	10/4/2010	1
Meeting with Capstone Advisor	self, Dr. White	10/5/2010	3
Construct Creation of Draft Plan	self	10/6/2010	7
Read collected literature for review	self	10/11/2010	2
Literature Search	self	10/14/2010	4
Research Questionnaire Creation	self, classmate	10/18/2010	3
Read collected literature for review	self	10/24/2010	3
Read Research Book	self	10/25/2010	4
Create questionnaire brief	self, classmate	10/26/2010	8
Seminar	self, classmates, Dr. White	10/27/2010	3
Create questionnaire presentation	self, classmate	10/28/2010	6
Read Capstone Handbook	self	10/28/2010	2
Read Research Text	self	10/29/2010	4
Collaborate with classmates	self, 2 classmates	10/30/2010	2
Literature Search	self	11/1/2010	3
Read collected literature for review	self	11/1/2010	4

Read collected literature for review	self	11/4/2010	5
Draft literature review	self	11/6/2010	9
tech consult with computer expert	self, colleague	11/7/2010	3
outline literature review	self	11/7/2010	2
Read Research Book	self	11/11/2010	4
Email with leading researcher on topic	self, Dr. Monk, PSU	11/13/2010	1
Outline Scope of Work Memo	self	11/13/2010	5
Review Wingate RRB information	self	11/15/2010	3
Continue Literature Review	self	11/15/2010	7
Search of existing dissertations	self	11/16/2010	5
Review of collected literature	self	11/16/2010	4
Meeting with committee chair	self, Dr. Compton	11/17/2010	3
Organize and synthesize notes from meeting with chair	self	11/17/2010	2
Narrow Scope of Work Memo Document	self	11/17/2010	4
Proofread SOWM and literature review	self	11/18/2010	3
Correspondence with Committee chair	self, Dr. Compton	11/18/2010	2
Review of collected literature	self	11/18/2010	4
Phone consult with research librarian, Wingate Library	self, Ms. Odom	11/18/2010	1
Amend SOWM based on feedback from committee chair	self	11/19/2010	1
Read research book	self	11/20/2010	3
Prep for meeting with committee member	self	11/21/2010	1
Meet with committee member Dr. Bulla	self, Dr. Bulla	11/22/2010	2
Organize and synthesize notes from meeting with LEA rep.	self	11/22/2010	2
Read research book	self	11/22/2010	3
search Phi Delta Kappan resources	self	11/23/2010	2
re-search existing dissertations	self	11/23/2010	3
re-search databases after librarian recommendations	self	11/24/2010	4
review potentially applicable dissertations	self	11/24/2010	3
Review of collected literature	self	11/24/2010	4
research NC ABC Growth measures	self	11/25/2010	2
consult with Testing Coordinator for UCPS	self, C. White	11/26/2010	1
work on literature review	self	11/26/2010	3
Collaborate with classmate re: progress, SOWM	self, classmate	11/27/2010	3
revise scope of work memo	self	11/27/2010	2
update literature review, including formatting	self	11/27/2010	4
tech consult with computer expert	self, colleague	11/29/2010	2
read research book	self	11/29/2010	3
draft questionnaire questions	self	11/30/2010	4
correspondence with captstone advisor re: lit review	self, Dr. White	12/1/2010	1
finalization of literature review	self	12/2/2010	5
present and receive feedback on SOWM draft from classmates	self, classmates	12/4/2010	1

brainstorm capstone process with peers	self, classmates	12/4/2010	2
review and revise drafted questionanire questions	self	12/4/2010	3
Seminar	self, classmates, Dr. White	12/4/2010	2
review and revise SOWM based on classmate feedback	self	12/4/2010	2
work on RRB application process	self	12/5/2010	3
revise scope of work memo, based on seminar	self	12/5/2010	2
research and create cover letter for questionnaire survey	self	12/5/2010	6
continue with RRB prep	self	12/5/2010	2
study of statistical analysis methods	self	12/6/2010	3
clarify SOWM	self	12/7/2010	1
prepare for meeting with capstone chair	self	12/7/2010	2
review dissertation of peer	self	12/8/2010	3
meet with community agency rep.	self, Dr Bulla	12/8/2010	1
consult with committee member, director of grad. Ed	self, Dr. Stegall, Dr. Wimberley	12/9/2010	1
continue with RRB preparation	self	12/9/2010	2
meet with committee chair	self, Dr. Compton	12/9/2010	2
tech consult with computer expert	self, colleague	12/9/2010	2
refine and format questionnaire	self	12/9/2010	3
prepare questionnaire for pilot distribution	self	12/9/2010	3
contact questionnaire "pilots", distribute, explain needs	self, 4 former elem. Principals	12/10/2010	5
continue with RRB prep	self	12/10/2010	2
review capstone handbook, SOWM	self	12/10/2010	2
discuss SOWM progress with classmate	self, classmate	12/10/2010	1
study of statistical analysis methods	self	12/11/2010	3
review dissertation examples	self	12/11/2010	4
communicate with questionnaire "pilots"	self	12/12/2010	3
collect questionnaire pilots	self	12/15/2010	4
make modifications to questionnaire based on feedback	self	12/15/2010	2
finalize appearance of questionnaire	self	12/17/2010	2
finailze RRB application and submit	self	12/17/2010	3
correspondence with RRB chair	self, RRB chair	12/20/2010	4
modifications of RRB application	self	12/22/2010	3
resubmit RRB application	self	12/23/2010	2
work on analysis of problem section	self	12/23/2010	5
collaborate with classmates re: project	self, 2 classmates	12/23/2010	3
modify and again resubmit RRB application	self	12/27/2010	1
review of capstone/dissertation components/chapters	self	12/27/2010	3
read about methods of statistical analysis	self	12/28/2010	5
create excel template for data collection/organization	self	12/28/2010	3
create and organize capstone binder	self	12/29/2010	4

read about methods of statistical analysis	self	12/29/2010	5
prepare questionnaire for administration	self	12/29/2010	2
learn about methods of correlational analyses	self	1/2/2011	4
consult with classmates	self, 2 classmates	1/2/2011	1
Prep for meeting with committee member	self	1/3/2011	2
study of Excel	self	1/4/2011	3
meeting with LEA committee member	self, Dr. Bulla	1/5/2011	1
communication with curriculum coordinator in LEA	self, curic. Coordinator	1/5/2011	1
consult with classmates	self, 2 classmates	1/8/2011	2
review of statistical analysis information	self	1/10/2011	3
study of statistical analysis methods	self	1/11/2011	2
read Schools and Data book	self	1/11/2011	3
review SOWM and capstone handbook	self	1/12/2011	3
prep for meeting with committee chair	self	1/12/2011	2
meet with 2 committee members	self, Dr. Compton, Dr. Stegall	1/13/2011	3
consult with classmate	self, classmate	1/13/2011	1
Organize and synthesize notes from meeting with chair	self	1/14/2011	3
practice administration of questionnaire	self	1/14/2011	1
study of Excel	self	1/15/2011	3
begin format of data collection spreadsheets	self	1/16/2011	3
administer questionnaire	self	1/18/2011	1
email and in person conversation about coding data	self, Dr. Bulla	1/19/2011	1
organization of data processing format in excel	self	1/19/2011	2
pick up coded data	self	1/20/2011	1
capstone seminar	cohort members, Dr. White	1/20/2011	3
consult with classmates	self, classmates	1/20/2011	3
organization/processing of seminar information	self	1/21/2011	2
check questionnaires for completeness	self	1/23/2011	1
input data on spreadsheets	self	1/23/2011	3
input data on spreadsheets	self	1/24/2011	4
data calculation	self	1/25/2011	4
data calculation	self	1/26/2011	3
organize constructs	self	1/27/2011	2
data organization & simple formula use	self	1/28/2011	6
reorganize capstone binder	self	1/29/2011	3
consult with classmates	self, classmates	1/29/2011	1
align data/questions/constructs	self	1/31/2011	2
read re: research and analysis	self	2/1/2011	3
add to capstone outline	self	2/1/2011	3
prepare for meeting with capstone chair & advisor	self	2/2/2011	2
meeting with capstone chair and advisor	self, Dr. Compton, Dr. White	2/3/2011	2

add to capstone outline	self	2/4/2011	1
organize and synthesize notes from meeting with chair & advisor	self	2/4/2011	2
data calculation	self	2/4/2011	3
data calculation	self	2/5/2011	1
data calculation	self	2/7/2011	2
outline chapter 1	self	2/10/2011	3
work on chapter 1	self	2/11/2011	5
read re: research and analysis	self	2/13/2011	3
work on chapter 1	self	2/15/2011	2
outline chapter 3	self	2/16/2011	2
work on chapter 3	self	2/17/2011	4
work on chapter 3	self	2/18/2011	4
modify chapter 1	self	2/20/2011	3
take info from class and add to ch. 1 & ch. 3	self	2/21/2011	2
proofread and prepare for submission chapter 1	self	2/22/2011	2
modify chapter 3	self	2/24/2011	2
read re: research and analysis	self	2/26/2011	3
meet with peer to review chapter 1	self, classmate	3/1/2011	3
chapter 1 modification based on peer feedback	self	3/1/2011	2
format chapter 1	self	3/2/2011	2
format chapter 3	self	3/2/2011	2
consult with classmates	self, classmates	3/4/2011	2
modify literature review into ch. 2	self	3/5/2011	2
proofread and amend chapter 1	self	3/9/2011	2
compile and send ch. 1 to committee members	self	3/14/2011	1
work on statistical analysis procedures	self	3/17/2011	5
proofread and modify chapter 3	self	3/18/2011	4
fix and submit chapter 1 based on peer feedback	self, classmate	3/19/2011	1
meet with capstone committee chair	self, Dr. Compton	3/23/2011	2
organize and synthesize notes from meeting with chair	self	3/23/2011	1
read re: research and analysis	self	3/24/2011	2
modify chapters 1 & 3 based on meeting feedback	self	3/24/2011	3
pull appendices pages from data workbook to ch. 3 and format	self	3/25/2011	2
proofread and amend chapter 3	self	3/25/2011	2
draft chapter 4	self	3/26/2011	9
refine tables for chapter 3	self	3/29/2011	2
import draft charts for chapter 4, interpret data and write	self	3/29/2011	4
finalize appearance of chapter 3	self	3/30/2011	2
proof chapter 4	self	3/31/2011	1
modify & check terminology ch. 4	self	4/1/2011	2
learn APA re: embedded tables	self	4/1/2011	2

read re: research and analysis	self	4/2/2011	3
consult with classmates	self, classmates	4/6/2011	2
read re: research and analysis	self	4/7/2011	4
create tables for chapter 4	self	4/8/2011	3
fix errors in chapter 4	self	4/10/2011	2
capstone seminar	cohort members, Dr. White	4/11/2011	3
revise chapter 3 based on feedback from Dr. White	self	4/11/2011	3
Meet with committee member Dr. Bulla	self, Dr. Bulla	4/12/2011	1
Compile chapters 1-4 onto one document	self	4/14/2011	5
reorganize chapter 1 based on captstone advisor feedback	self	4/15/2011	2
discuss and consult with classmate re: ch. 3-5	self, classmaate	4/16/2011	2
fix and submit chapter 3 based on peer feedback	self	4/17/2011	3
draft chapter 5	self	4/19/2011	12
modify chapter 5	self	4/20/2011	5
review APA re: correctly writing numbers	self	4/21/2011	1
review APA re: citing and reference of web resources	self	4/21/2011	1
review APA re: use of italics & quotatoins	self	4/21/2011	1
review APA re: use of numbered and bulleted lists within text	self	4/21/2011	1
proofread chapter 5	self	4/22/2011	2
backup and organize completed documents & files	self	4/22/2011	2
discuss and consult with classmates	self, classmaate	4/22/2011	3
format reference page	self	4/23/2011	2
create title page	self	4/33/2011	1
make suggested APA changes (from chair)	self	4/25/2011	1
compile chapter 5 into master document	self	4/26/2011	2
work on headings and other APA issues	self	4/27/2011	3
modify and APA tables and appendices	self	4/27/2011	3
modify chapter 5	self	4/28/2011	4
re-organize capstone binder	self	5/1/2011	1
modify chapters 1-5 based on feedback from chair	self	5/2/2011	5
begin table of contents	self	5/3/2011	1
outline presentation for elementary principals	self	5/3/2011	2
fix "tense" issues in chapter 5	self	5/3/2011	1
create presentation/PP for elementary princpals	self	5/4/2011	7
create/prepare etc. handouts for presentation	self	5/5/2011	2
modify PP based on peer feedback	self	5/5/2011	2
practice and tweak presentation, add/delete info	self	5/6/2011	2
practice presentation, change few slides	self	5/9/2011	2
present project to UCPS elementary princpals	self, other elem. Principals	5/10/2011	2
add to capstone presentation-specific info	self, other elem. Principals	5/11/2011	2
modify project based on proofreading feedback	self, other elem. Principals	5/12/2011	3

modify format based on feedback	self	5/15/2011	2
amend chapter 5	self	5/16/2011	3
amend cover sheet and table of contents	self	5/16/2011	2
work on formatting	self	5/16/2011	2
make changes after intense proofing	self	5/19/2011	3
capstone seminar	self	5/23/2011	3
organize and process notes from seminar	self	5/24/2011	1
prepare for capstone defense	self	5/24/2011	4
prepare for capstone defense	self	5/30/2011	2
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