Evaluating the Influence of Response to Intervention (Levels 2-3) with Racially, Culturally, Ethnically, Linguistically Diverse (RCELD) Students

Reina Martinez
Seton Hall University

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Evaluating the Influence of Response to Intervention (Levels 2-3) with RACIALLY, CULTURALLY, ETHNICALLY, LINGUISTICALLY DIVERSE (RCELD) Students

A dissertation submitted

by

Reina Martinez

to

Seton Hall University

in partial fulfillment of
the requirement for the
degree of

DOCTOR OF EDUCATION
in
EDUCATIONAL ADMINISTRATION

This dissertation has been accepted by the faculty of

Seton Hall University

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APPROVAL FOR SUCCESSFUL DEFENSE

Doctoral Candidate, Reina Martinez, has successfully defended and made the required modifications to the text of the doctoral dissertation for the Ed.D. during this Spring Semester 2011.

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ABSTRACT

The purpose for this study was to determine the influence on achievement and classification rate into special education of racially, culturally, ethnically, linguistically diverse students following the use of a district-designed response to intervention (RtI) structure by examining local processes that may contribute to student achievement and classification rate into special education settings. Response to intervention (RtI) is a structure created as a function of academic intervention to address students who are experiencing academic or behavioral difficulties.

Achievement was measured by the scores attained by the students in grades 5-9 referred to IST on the New York State English Language Arts and New York State Math Assessments and the rate of classification into special education.

This study was designed as a cross-sectional, descriptive, non-experimental design (Type 2, Table 3) (Johnson, 2001). To explore the null hypothesis, separate Repeated Measures of Analysis of Covariance (ANCOVA) were performed for the NYS ELA and NYS Math Assessments, examining two points in time, the 2008-2009 and 2009-2010 school years. Quantitative data were collected from the district data repository system and the New York State District Report Card Website.

The qualitative data were collected from voluntary district personnel through open-ended interviews. The interviewees' responses were recorded and transcribed, then analyzed using the Analysis of Competing Hypothesis (ACH) software. Results indicated that referral to an Instructional Support Team (IST) did not have influence on the achievement of the students referred. Regarding the classification rate of students...
into special education, results indicated that although the number of students classified into special education has been declining in the district, the number of minority students classified during the 2009-2010 school years was disproportionate when compared to the number of non-minority students referred to the committee on special education (CSE).

The results of the qualitative data indicated that the teachers interviewed were not familiar with the RtI process and the administrators were not using the RtI process consistently to address student academic and/or behavioral difficulties.

The influence of RtI was not significant. This can be attributed to the limitation of four schools in one district, the diversity of the students, and the inconsistency in implementation of procedures and processes of RtI.
ACKNOWLEDGMENTS

I am deeply grateful and appreciative to the following people and thank them sincerely for all they have done.

Thank you to my advisor and mentor, Dr. Barbara Strobert, for your unconditional support and encouragement and relentless determination to see me through this process, and to Dr. Achilles, for your love of research, your advocacy for those who are disenfranchised and marginalized in our schools, your commitment to me and encouraging me to complete my study. I am grateful to Mrs. L. Weinbrook for all of her help and support.

Thank you with my most heartfelt gratitude, Dr. Debra Thomas, for encouraging me to begin this process and for being there for me with support and encouragement every step of the way.

Thank you, Dr. Milagros Torres. Your encouragement and continuous support have given me the inner strength to work on a day-to-day basis, and thank you, Dr. Bernadette Casey. You have inspired, supported, and given of yourself at all times to help me in every way.

Thank you to my Superintendent(s) for consenting to and trusting me to conduct this study, and to the following:

- District administrators and colleagues who provided me with the resources needed to conduct my study.
• My district friends, colleagues, and Seton Hall Cohort members, whose words of support and encouragement instilled in me even more determination to continue and see that the final product was complete.

• All the participants who agreed to help me by volunteering their time to help me conduct this study.
DEDICATION

To my husband, Harry, who encouraged me and had the faith in me to embark on this journey. I thank him from the bottom of my heart. The personal and financial sacrifices that we have endured have been many. Your support and continuous demonstration of love and patience are a measure of true devotion.

To my three boys, Alberto, John, and Robert, remember you need to fly higher than your mother. You have all been a source of inspiration, and I have tried to be a role model to all of you. I am very lucky to have three wonderful, caring, and loving boys. Siara, my hopes for you are for you to grow into a young lady who understands the importance of gaining knowledge and serving others.

To my brother and sisters, especially, Julie, my nephew, Kevin, and the rest of my family thank you for all your help, support, and unconditional love, and to my very close friends who have supported and encouraged me and have cheered me through the finish line.
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CHAPTER I
INTRODUCTION

Background for the study

The minority population of the United States continues to rise, with its largest minority group consisting of Hispanics (Campbell, 2009). In 2008, Hispanics comprised 15.1% of the United States population. A U.S. Census report released in the summer of 2008 indicated that by the year 2042, Hispanics will be the majority of the population of the United States. The challenges associated with this increase in population are numerous.

The challenges schools face to educate our racially, culturally, ethnically, linguistically, diverse (RCELD) students are many. They include unconscious race bias, teachers lacking the skills to teach culturally and linguistically diverse students, resource inequalities and power relationships between school authorities and minority parents (Fiedler, Chiang, Van Haren, Jorgensen et al., 2008). The documentation of RCELD students' academic achievement shows a significant gap on standardized test scores between minority and majority students, along with a high rate of suspension and dropout rates among minority students, especially males (Achilles, Arzubiaga, King, & Harris-Murri, 2008).

Statement of the Problem

In 1984 a study conducted by Achilles, Faires, Campbell, Martin & Jackson found that in the United States, there were students for whom the school system was not providing an adequate program or environment. In their study Achilles et al. (1984) affirmed that education is society's institution, the school is its organization, and the school personnel (teachers and administrators) are the individuals charged with the task of educating all. They further go on to
say that the ideal educational system should provide maximal opportunities for each individual. Inadequate educational programs persist today and students who are racially, culturally, ethnically and linguistically diverse are underachieving and are marginalized in our schools. The actual situation is that our system has not attained the ideal for all individuals and struggles to find ways to make it an ideal system for all.

Changes in the American perception of who gets educated and how they get educated are determined by socio-economic, social mobility, racial composition, and policy decisions factors. Consequently, policy makers, educators, enhanced accountability mandated at the national and state level, public awareness of how schools should be reformed, adequate student assessment, the conditions of poverty and the widening of the achievement gap between RCELD (racially, culturally, ethnically, linguistically diverse) students and their White counterparts are all implications affecting education and must be considered as the minority population in this country increases. The majority of RCELD students continue to be marginalized and disenfranchised in our schools. When compared to White students, they are underachieving, and often they are placed in separate settings and in many cases mislabeled when they show difficulty mastering the information and skills schools value. Thus, it is crucial that educators understand that when students experience academic challenges and/or behavior problems, it does not mean they should be labeled as having a learning disability (Harry & Klingner, 2007).

RCELD students, specifically males, earn lower grades, are represented in special education programs, receive disciplinary referrals, and have higher high school dropout rates than their White counterparts. The documentation of minority males' academic achievement shows a significant gap on standardized test scores between minority and majority students, along with the continued high
rate of suspensions and dropouts among minority males (Artiles, Arzubiaga, King, & Harris-Murri, 2008). High school dropout rates in turn have been linked to incarceration rates.

The underachievement and the representation in education of RCELD students are among the most important and enduring problems in the field of education. In an article titled “Turnaround or Full Speed Ahead?” (2010), House Committee members raised concerns regarding the number of schools that are underperforming. In his opening statement, Chairman George Miller addressed the dropout crisis and schools that have failed to turn around. “Turning around our schools is critical for our economy, our communities, and our students” (Alliance for Excellent Education, 2010).

Table 1

Descriptive Student Enrollment Data in Public Schools in the United States

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>1998</th>
<th>2008</th>
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<tbody>
<tr>
<td>White</td>
<td>62%</td>
<td>55%</td>
</tr>
<tr>
<td>African-American</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15%</td>
<td>22%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 1 presents the growth of our minority population in schools throughout the United States. The growth of RCELD students in our schools has implications for the future of this country.

A social or economic crisis of a large magnitude in this country may ensue when a significant number of our minority students are underachieving in school. The social and economic repercussions could be devastating for the future of the United States and its standing in the global economy.
The Commission on Excellence in Special Education was created by President Bush (2004) to ensure that every child is learning regardless of race, family background, or disability status. No Child Left Behind (NCLB) and Individuals for disability education act (IDEA) legislation have been enacted in response to concerns about the increase in the number of students identified with a specific learning disability (SLD) and the perceived limitations of the discrepancy model.

Congress defined SLD as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing or motor handicaps, of mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage (U.S. Office of Education, 1977, 65083).

As specified in the federal guidelines that accompany the federal law, state and local educational agencies have the responsibility of operationalizing these guidelines (2007, 13). There are three general criteria used by most states for identification of individuals with learning disabilities.

1. A significant discrepancy between intellectual ability and academic performance in at least one area of academic functioning listed in the definition.
2. Documented needs for services based on achievement below what would be expected for the child’s age, grade level, or both.
3. Evidence that the learning disability (LD) is not primarily the result of visual, hearing, or motor handicaps; mental retardation; emotional disturbance; or environmental, cultural, or economic disadvantage (U.S. Office of Education, 1977).

The discrepancy model, also referred to as the “wait-to-fail model” (Harry, Klingner & Cramer, 2007), since it is often not until the child is about nine years old when a reading delay will be sufficiently behind the chronological age expectation to qualify him or her for the required discrepancy, resulting in delayed implementation of
appropriate educational interventions for the child (2007, 13). The discrepancy model uses norm-referenced assessments to evaluate students' labeling of SLD or placement into a special education program. These tests have been found to be culturally biased (PCESE, 2002, Fuchs & Fuchs, 2005, Vaughn & Fuchs, 2003).

Additionally, federal legislation that holds educators accountable for the performance of all students has been continually reformed. As a result, educators are expected to report results for specific subgroups, such as RCELD and special education students. The provision of special education services under U.S. law—the Education for All Handicapped Children Act, 1975, and the IDEA, 2004—ensured that schools no longer marginalize students on the basis of perceived developmental, sensory, physical, or cognitive limitations.

Harry and Klingner (2006) posited that this law focused on the disability existing within a child and therefore the main criterion for eligibility for special education services has been proof of intrinsic deficit. The law's provision of disability categories for students who have learning and behavioral difficulties has become a way for schools to turn away from their responsibility to provide high quality education. Harry and Klingner (2006) quoted Reid and Valle (2004), "Why can't students' difficulties and challenges be seen as human variation rather than pathology?" (2006, 5).

The recommendations and policy changes enacted by the Federal Government and the U.S. Department of Education of Special Education Programs, include the following: a) a focus on results, not just process; (b) embrace a model of prevention, not a model of failure; and (c) consider children with disabilities as general education students.
These three points supported a response to intervention (RtI) framework for the labeling and misplacing students into special education settings.

The reauthorization of IDEA (2004) allows for a change in the discrepancy model by recommending tiered interventions by which schools can identify students when they begin to show signs of difficulty and provide intensive and individualized instruction without mislabeling them. IDEA articulated that in determining special education labeling and placement for students, states, not local educational agencies (LEAs), must mandate the use of a severe discrepancy between intellectual ability and achievement criterion (Martinez et al., 2006, 3). Under these regulations states must allow a process based on a child’s response to scientific, research-based intervention, a tiered approach known as Response to Intervention (RtI) (Spiegel, 2009).

Response to intervention is a structure created as a function of academic intervention to address students who are experiencing academic and/or behavioral challenges. RtI is a problem-solving structure used in schools, a term created by Frank Greshman (2003).

Wright (2007) asserted that educators must rise in support of the large number of academically marginal and disenfranchised students in their classrooms. He further stated that intervention resources must be implemented, but often they are limited and that when assistance is provided, it is poor and too late to benefit the student. Intervention resources, such as individualized instruction that might be effective if given at the point when struggling learners begin to fall behind, are often compartmentalized, not systematic, and kept off-limits to those students until they experience profound and chronic failure. Schools need a model for providing early intervention that delivers efficient and effective
assistance to at-risk learners to close the gap of skills or performance with peers (Wright, 2007).

To improve education outcomes for RCELD students, personnel in the district used in this study have been working closely with the Technical Assistance Center at New York University (TAC) in implementing an RtI structure to address issues involving students in its schools. The RtI model emphasizes intervention and prevention when students begin to show signs of academic and social/behavioral failures or are not learning at the same rate as their peers. The central issue of the aforementioned RtI structure is the determination of “adequate” or “inadequate” response to intervention. A number of experts (Denton, Vaughn, & Fletcher, 2003; Vaughn and Fuchs, 2003) posited that struggling learners must receive highly effective, proven instructional practice, and their progress must be monitored frequently.

The RtI-TAC (Response to Intervention—Technical Assistance Center) is part of the New York State Education Department personnel’s strategy to promote and build school district capacity to implement a systematic, response to intervention process that begins with appropriate core instruction, early screening, and identification of students who are struggling in academic and/or behavioral areas. Continuous monitoring of progress and how well these students respond to changes in targeted instruction to address their learning needs is also an essential component of the RtI structure. To ensure that underachievement in a student suspected of having a learning disability is not due to lack of appropriate instruction in reading, effective July 1, 2012, school districts in New York State must have an RtI process in place as part of their process to determine if a student in grades K-4 is a student with a learning disability in the area of reading.
Supporters of RtI espouse the belief that the structure has the potential to reverse the trends of concern present in the data on special education referrals and determination of eligibility (Spiegel, 2009).

The Response to Intervention structure initiated in the district under study needs to be examined to determine whether or not those with the task of its execution are doing whatever it takes to ensure that RCELD students are not neglected.

**Purpose of the Study**

The purpose in conducting this study was to examine the influence of a school-designed RtI structure on the achievement of and classification rate of RCELD students into special education by exploring a local school district’s processes that influence student achievement. Achievement was measured by the raw scores attained by the students referred to the instructional support team (IST) on the New York State (NYS) English Language Arts (ELA) and NYS Math standardized assessments. In doing this analysis, this researcher’s objectives were to describe a phenomenon and document the characteristics of the phenomenon by conducting a non-experimental research study (Johnson, 2001).

In quoting Richards et al., (2007), Spiegel, (2009) cited that research on RtI has been conducted mostly at the elementary level and has focused on reading intervention. Klinger and Edwards (2006) stipulated that the interventions used within the RtI structure have not been validated with RCELD populations and further added that RtI alone is not sufficient in determining the presence of a learning disability. This research addresses the middle and secondary grades, and it focuses on the achievement of students referred to the RtI (Levels 2-3) and the involvement of school personnel in the RtI process. The task
of implementation and the level of involvement in sustaining an RtI initiative are focal to the work of the instructional leader (the building principal), and the classroom teachers.

Research Questions

The research questions that guided this study were:

The Null Hypothesis states that RtI had no influence on the achievement of RCELD students in grades 5-9.

1. How has achievement of RCELD students been influenced following the use of a district-designed pyramid of intervention, as defined by scores attained on the NYS English Language Arts (ELA) and NYS Math assessments in grades 5-9 during the 2009-2010 school year?

2. How has the classification rate of RCELD students into special education been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the 2009-2010 school year?

3. How has the building administrator been involved in the implementation of the district-designed intervention (RtI) model?

4. How have the teachers in their respective buildings used the district-designed intervention (RtI) model?

Conceptual Framework

One study in particular conducted by Joseph Mahabir (2009) was to investigate, analyze, and examine the process by which students were referred for special education by teachers and to determine if the processes employed by the district were aligned and in compliance with state and federal mandated procedures. Mahabir's study (2009) in
In conjunction with George Sugai's (2007) research, an RtI pyramid presented for the National Summit on Shared Implementation of IDEA, were used as the groundwork for this study. The classroom interventions used by teachers before the referral process were also examined. Mahabir's study expounded on the federal concerns over the educational ability of culturally and linguistically diverse students with disabilities to obtain a high quality education. RCELD students have been disproportionately represented in special education programs such as self-contained classes. Mahabir described three theories that provided an understanding of how overrepresentation of RCELD students occurs (2009, 14-15).

Functional theorists espouse the belief that deviation from the norm in regular education is regarded as a reflection of deficits or pathologies inherent in the student. When students fail in the regular education environment, they are perceived as having deficits and therefore special education placement is seen as the answer for their academic or behavioral challenges. The critical theorists support the premise that education is designed to serve the needs of the dominant social, economic, and political classes and special education is designed to place minority students in a system of education that is compartmentalized and devalued. Critical theorists maintain the belief of a separate "special" educational system as being unjust to minority students and the regular education system as catering to the needs of the dominant social, economic, and political classes of society. The widespread use of achievement testing continues to expand the development of a body of educational theorists who subscribe to the deficit model. Education has been subjugated by the question of how to deal with students who fail in the regular education setting with rigor and respect. Two different responses have been manifested; one has been to focus on the student and his family to identify cognitive, social, emotional, or linguistic deficits and the second has been to focus on the outside environment in which the student survives to determine a cause for his failure. In addition, Mahabir (2009) quotes the work of Heller, Holtzman, and Mesnick who stated that disproportionality becomes a problem, when students are exposed to the likelihood of special education placement by virtue of receiving poor-quality regular instruction, and when the quality and academic relevance of the special education instruction block their educational progress, including decreasing the likelihood of their return to the regular classroom (Mahabir, 2009, 13-16).
Figure 1

A Problem-Solving Conceptual Framework Used in Constructing the Basis for This Study
Figure 1 presents a problem-solving conceptual framework of the policies; people who influence and make decisions about education opportunities for students. The figure also shows the trajectory of RtI when a student begins to show academic difficulty or behavioral difficulty that may lead to referral to IST and eventual classification.

Design of the Study

The researcher used a cross-sectional descriptive non-experimental research design (Johnson, 2001) that employed mixed (quantitative/qualitative) approaches that drew from conversations with school personnel involved in the general and special education process and the examination and presentation of district data collected on students who were referred to the Instructional Support Team (IST), Level 2 of the RtI pyramid during the 2009-2010 school year.

The researcher studied several areas: the number of RCELD students in grades 3-9 referred to IST, their demographic data, and socio-economic status (SES). The study also gathered data on the number of students who were referred to the Committee on Special Education (CSE) for classification during the 2009-2010 school year. This process involved gleaning whether there was a particular pattern by race, culture, ethnicity, or language diversity that may indicate an area of the referral process that needed further exploration.

District and state data were collected on students to determine what, if any, influence on achievement, as measured by the scores attained on the NYS ELA and Math assessments, pre and post interventions had on the outcomes for students referred to IST.
Data were also collected on students who were referred to the Committee on Special Education (CSE) and what the outcomes or eventual placement for students referred to this level were. Level 3 of the RtI pyramid of intervention is where CSE conducts its reviews of students referred. Data gathered through open-ended questions from district personnel interviewed were analyzed to determine the level of involvement of the processes followed in the schools to implement RtI structure through the lens of a single district in the Hudson Valley, New York State.

**Procedures**

To answer the research questions, a cross-sectional, descriptive, non-experimental, research design that used mixed methods involving the concurrent collection of qualitative/quantitative data was employed. This design incorporated the collection and analyses of qualitative/quantitative data to answer the research questions.

The quantitative portion of the study consisted of the collection and analysis of district data to present a picture of the achievement, as measured by the NYS ELA and Math standardized assessments, of students referred to the instructional support team (IST) and the number of students who went to the committee on special education (CSE). The quantitative portion of this study included district data collected from 2008-2009 and 2009-2010 school years from students in grades 5-9 who were referred to IST to determine what, if any, influence IST had on the achievement of students referred. The other portion of the data included the number of students referred to the CSE and what their eventual outcomes were.

The use of qualitative and quantitative methods provided a holistic portrayal of the impact of the district implemented RtI structure. The qualitative portion of this study
included structured interviews with open-ended questions and probes, which according to Patton (2002), produced in-depth responses about the teachers' and administrators' perceptions, opinions, and knowledge about the district-designed RtI model (Wright, 2007). Qualitative methods are often used to tell a program's story.

To recruit participants for the open-ended interviews, the researcher contacted the building administrators to request permission to conduct the study and each administrator contacted the teacher participants. District data from numerous sources were collected: the District Data Repository, New York State Education Department website, and Basic Educational Data Systems (BEDS). Permission was requested from and granted by the Superintendent of Schools to conduct this study and collect district data.

Significance of the Study

In this study, the researcher considered New York State mandates under federal legislation such as the No Child Left Behind Act (NCLB) and IDEA that have identified a number of districts with high numbers of RCEL D students labeled or placed in alternative settings. Under these mandates school districts are required by the state to implement systematic plans and interventions to address issues of representation in special education settings and representation in disciplinary referrals and students referred for disciplinary actions.

The findings from this study should bring attention to an issue of educational importance: the underachievement and overrepresentation in special education, alternative settings, discipline referrals, and classification rate of students referred to special education in the district. School personnel are pivotal in educating these students.
As Artiles et al., (2008) presented, in the past educators have placed blame on RCELD students when they underachieved or failed to progress by placing them in alternative settings or retaining the students in grade. Educators have often thought that RCELD students need more time to catch-up, need a separate location and a special education teacher to provide them with the support that the general education teachers feel they cannot provide. According to Artiles et al. (2008), these responses have exacerbated the problem and have not ameliorated this conundrum for RCELD students. These practices have continued to perpetuate the marginalization and disenfranchisement of students, not to mention the financial burden imposed on school districts.

In addition, study results may indicate how well practitioners, school administrators, and policy-makers provide feedback on whether or not an intervention model is working to help address the numbers of minorities who are underachieving in schools. The issue of marginalization and disenfranchisement of RCELD learners is important, and there is a scarcity of research information on how RtI influences academic outcomes, specifically during middle school and beyond. This study can be a valuable addition to the research literature. Much of the work that has been done on RtI has focused on the needs of students at the elementary level, leaving a gap in the literature for educators who work with students at the middle and secondary levels (Spiegel, 2009).

Limitations and Delimitations of the Study

A delimitation of this study was that it was conducted in one district in New York State, and the findings may not be representative of all districts. The researcher used information from three middle schools (grades 5-7) and the secondary school (grades 8-9). The schools in the district designed their own RtI
structure, also referred to as a pyramid of interventions framework. The pyramids' interventions may differ from school to school. The choice to conduct the study in all middle schools and the secondary school in one district was due in part to the differences in RtI frameworks in each of the schools. The involvement of the building administrator and other school personnel is important to the influence of this framework on student achievement. Data were collected from all four schools, and the findings may not be representative of other schools and school districts. The interviews conducted and the responses represent the views of the group participating in this study; therefore, their responses should not be considered as representative of the views of all general classroom teachers or an adequate representation of all general and special education programs in the district or other districts.

The researcher delimited the study to the population of students who were referred to IST during the 2009-2010 school year. The data used to measure achievement were the raw scores of the NYS English Language Arts (ELA) and Math assessments attained by the students referred to IST. The researcher also delimited the population to the building administrators in the four schools and teachers to a random sample of regular and special education classroom teachers of grades 5-9. Finally, the researcher delimited the analysis to the quantitative data obtained from the district for the school years 2008-2009 and 2009-2010 to present a picture of the achievement and representation of RCELD students referred to CSE and the outcomes of their referrals.

The demographics of the population of the district under study was a limitation of this research. The RCELD learners in grades 5-9 was the major group studied. Other participants included a random sample of classroom teachers who teach grades 5-9 and
one building administrator from each building. The data collected from the district and New York State Education Department included the total population enrolled in special education in one district and included a breakdown of demographics and enrollment of students in special education by disabilities. Other data collected included information specific to students who had any type of intervention.

In addition, the interviews conducted and the subsequent responses represented the views of the teachers and administrators participating in this study. Thus, the findings may not be representative of how the classroom teachers in the other buildings in the district are using the designed intervention structures. The pyramids were based on the RtI model and then modified by the personnel of each school. Subsequently, there is variation in interventions and strategies used at each tier (Figures 15, 16, 17 and 18).

Summary of Chapter One and Organization of the Study

The first chapter presented a growing phenomenon; the underachievement of RCELD students and the proportion of RCELD students underachieving and being placed in special education settings. This chapter included the purpose of the study, the background of the study, the significance of the study, the research questions, delimitations and limitations of the study, and the significance of the study as related to policy makers and educators in this country. The glossary of terms can be found in Appendix A. Since the issue of education outcomes of RCELD students is important and there is a scarcity of research information on the topic of RtI and its influence in educational outcomes for these students, this study can be a valuable addition to the literature.
Chapter 2 presents a review of research of literature, theory, and practice pertaining to the proportion of RCELD students placed in special education, referred for disciplinary actions and placed in alternative settings. In the literature review the writer discusses the factors that influence the reform efforts introduced by the passage of laws to address the issue of disproportionality as it relates to the educational achievement of RCELD students in special education, referred for academic and behavioral issues. This section also presents a historical description of the Response to Intervention structure and an analysis of practices implemented by the Federal government to rectify and address this phenomenon. A theoretical framework for the study is derived from material presented in Chapter 1 and Chapter 2.

In Chapter 3, the researcher explains the design of the study in conjunction with the methods and procedures through which the data were collected and analyzed.

In Chapter 4, the researcher provides the data used and the analyses employed. The responses to the interview questions were transcribed and analyzed for patterns and themes from answers provided in the interviews to ascertain how the classroom teachers were using a district designed intervention structure and how effective the pyramid of intervention has been in addressing the representation of RCELD students in special education. District data were obtained through the district’s data repository, the NYSED department website’s report card and Basic Educational Data System. These data were collected for any student who had IST intervention to determine if there were any changes in achievement or classification status. District data were analyzed to establish whether or not RtI has had any influence on the achievement and rate of classification of RCELD students and their education outcomes.
In Chapter 5, the researcher provides a summary of the findings presented in Chapter 4, conclusions and discussions relating the results of this study to the literature review and previous research findings. Recommendations for practice, policy and further research are included in Chapter 5.
CHAPTER 2

RELEVANT RESEARCH, THEORY AND PRACTICE

An effort was made to gather information from scholarly journals and dissertations to get an understanding of the topic and the information available. Computer databases were searched on the Seton Hall University Library Website. The databases accessed included ERIC and ProQuest. In addition, articles from the Teachers College Record, Review of Educational Research, Exceptional Children, Journal of Special Education, Childhood Education, National Association of Secondary School Principals, Learning Disabilities Research and Practice, Journal of Staff Development, Teaching Exceptional Children and dissertations and dissertation abstracts. U.S. Department of Education websites were also perused for information on the topic of minorities, education, minorities in education, and the state of education in the United States for minority students. Furthermore, the NYS TAC-RTI and the NYSED data bases and websites were also researched. The terms used in the search for sources included the following: special education, minority students, Hispanic males, African-American students, males in special education, education achievement of minority students, response to intervention, education and poverty, literacy and minority students, school leadership, culture and education outcomes, strategies for minority students, parent involvement and student success, the achievement gap, disproportionality, overrepresentation and minority students, and language diversity. These searches produced a myriad of material that provided the researcher with a strong research-based foundation to write the relevant review research and practice.

In this chapter, the researcher reviewed research, theory, and literature as they relate to the achievement and representation of RCELD students in education. Stokes (1997) stipulated that educational research in the United States fits with "Pasteur's Quadrant," defined as
educational research aimed to build fundamental theory while addressing practical problems of the world. Educational research has had a history of impacting the quality of learning opportunities for youth, particularly those who have had to face persistent intergenerational challenges due to race, ethnicity, poverty, gender, and disability. The challenges faced by RCELD students are institutional and structural, rather than systemic, and cannot be attributed to a single cause (Lee, 2008, 798). Lee also posited that education research in the United States has been limited by two factors; the first one has been a history of deficit assumptions rooted in conceptions about race, and the second factor has been an education apartheid in which academic disciplines and conceptual traditions are not synchronized with one another (Lee, in press).

Minority students are often disproportionately represented in school settings and programs that may deny them the opportunity to advance into a more rigorous curriculum that would place them on track to a college education. Disproportionality is the inappropriate over-representation and over-identification of ethnic minority children in special education. RCELD students are also overrepresented in discipline and suspensions, alternative academic placements, and high school dropout rates. In addition, they are underrepresented in honors, gifted and talented, advanced placement courses, and higher education enrollment. There is a discussion of disproportionality as a growing phenomenon and how it is a systemic issue in our schools. U.S. public schools continue to grapple with conceptions of equality. Minority students and White students have continued to receive unequal educational experiences.

Socio-cultural issues

An article by Janzen (2008) titled “Socio-Cultural Issues and English Language Learners” presented several key findings. In a five-year study examining the efficiency of different types of programs offered to ELL’s Thomas and Collier (2001) examined over
210,000 students across the country and found that most types of programs failed to bring students to average levels of achievement on standardized reading tests. They also stated that failure or stress were clearly multi-dimensional, ranging from institutional practices such as academic tracking (Janzen, 2008; Callahan, 2005; Sharley & Layser, 2000) to students' level of first language literacy to issues of poverty. One critical issue is that teachers are not prepared to work with non-native English speakers. A national survey determined that 41 percent of teachers have ELL's in their classes, but only 12 percent of those teachers had had eight hours or more of training on how to assist these students. Another study, in which 200 teacher participants in several states were canvassed, reached a similar conclusion that the majority of these teachers taught ELL students but had not received the proper training to help them (Janzen, 2008).

Contemporary education reforms espouse inclusive education as a basic premise; schools are about belonging, nurturing and educating all children and youth, regardless of differences in culture, gender, language, ability, class, and ethnicity. Inclusive education transforms education systems by offering alternatives to placement in general education classrooms (Artiles & Kozleski, 2007; Artiles et al., in press). We should seek opportunities to strengthen and improve access, opportunity and quality in our schools by targeting issues related to education equity. Legislation and reform efforts have been enacted on a national level mandating state education departments and local districts to implement practices to address issues of disproportionality.

Hilliard (1998) stated that assessment practices in general fail to account for the functioning of systems of oppression.
Forty years after Brown, Hilliard stated:

When children do not learn, systems are deficient. The race of the child does not tell us anything about the child's mental capacity to succeed in school. Socio-economic status is not a barrier to learning, if the student is exposed to good teaching. Racism and bigotry are negative factors in teaching and learning. Our children are not succeeding mainly because the masses of them have been abandoned. The courts can mandate physical desegregation, but not an educational environment that is high quality and nurturing. (Lee, p. 810)

Culturally responsive schooling has been a substantial and growing body of research and discourse focused on cultural differences and on improving the academic achievement of youth who are not part of the dominant group in the United States.

"Students of color and students from low socio-economic backgrounds consistently and persistently perform lower than their peers according to measures of school achievement because their home culture is at odds with culture and expectations of schools" (Castagno, McKinley Jones Brayboy, 2008).

The Achievement Gap and RCELD students in Special Education

The problem addressed in this study is the underachievement and representation of RCELD students in special education. The achievement gap, as defined by Anderson, Medrich and Fowler (2007), referred to the differences in scores on state and national achievement tests between various demographic groups. The achievement gap is of concern between RCELD students and their White counterparts. Gardner (2007) offered possible causes of the achievement gap between subgroups and the dominant White student population. These include low socio-economic status, school funding, the belief that minority students are less intelligent and less capable, unvalued cultures, parents' negative school experiences, racism, minorities' external locus of control, and student identity.
The representation of ethnic and language minority students in self-contained special education classrooms has raised civil rights and education concerns. Despite the legislation action of Brown vs. Board of Education to provide equal access to education, institutional structures, such as ability grouping and separate special education institutional structures, continue to keep minority students segregated from their White peers (Skiba et al., 2008). Schools in the United States have large populations of students who struggle to achieve and require some degree of individualized assistance. According to the U.S. Department of Education (USDOE), about 5% of students in grades 9-12 drop out of school and approximately 10% of the students in this country receive special education services. About half of the special education population nationally is identified as learning disabled (LD). This number has doubled since 1980 (Wright, 2007).

In a briefing to members of the U.S. Commission on Civil Rights, expert panelists discussed the nature, extent, and possible causes of misplacement of minorities, specifically Blacks, Hispanics, Native Americans and Limited English Proficient (LEP), in special education programs at a higher proportion than the general education student population (US Commission on Civil Rights, 2007). English Language Learners (ELLs) currently represent at least 10 percent of all students nationwide, and their numbers are likely to increase because of the projected growth of the Hispanic population (Campbell, 2009). According to U.S. Census figures, 11 million elementary and secondary students of immigrant families were enrolled in public schools in October 2005, representing 20% of all students (Gandara & Rumberger, 2009). Most of these students enter school as English Language Learners (ELLs), and most ELLs initially have exceptionally low performance on measures of academic achievement and attainment.
RCELD Students and Special Education

The high classification numbers of individuals with learning disabilities has received attention from the USDOE. In its twenty-second annual report to Congress, it drew attention to the increased identification of students with learning disabilities. Information on race and ethnicity of students with disabilities were included in this report (Mahabir, 2009).

The issue of representation of minority students in special education has been well documented in the research and was officially acknowledged thirty-eight years ago. Minority males drop out of school more frequently, face higher rates of unemployment, and are incarcerated at disproportionate rates compared with their White counterparts. In addition, students from low socio-economic status backgrounds were three times more likely to drop out of school. Jordan and Anil (2009) hypothesized that the odds of a student referral for disciplinary action increases in the middle grades if the child is male, a minority, in special education, or is poor.

In a review of the book Why Are So Many Minority Students Failing in Special Education?, Trainor (2008) extracted the results from Klinger’s ethnographic study on disproportionality. The results provided evidence for two principal arguments: (a) identification of disability is biased and flawed and (b) the use of disability labels does little to help educators provide effective instruction for children. Special education does not address cultural differences (Trainor, 2008).

Carlysle (2007) underscored the phenomenon of over-representation of minority students in special education and their placement into special education programs without accurate evaluation. According to Carlylse (2007), representation of minority students had been increasing and was the result of a series of social processes that had resulted in inevitable
outcomes of real conditions, such as finance and education policies, racial, ethnic and language diversity and lack on the part of educators to understand and teach students who are different from the majority students. The author interpreted the special education problem by focusing on the individuals who had been part of the student's life: administrators, teachers, and parents and their political-personal agendas.

Artiles, Klingner and Tate (2006) inferred that disproportionate placement of minority students is attributed to presenting conventional visions of human development in which culture, ideology, history, and power play influential roles. Blanchett (2006) documented that structural systems of disadvantage mediate the special education placement of minority students. The focus of the National Center for Culturally Responsive Educational Systems (NCCREST) was to affirm the significance of disproportionate representation, which has become a national problem affecting our minority students. What studies have failed to show is “the how and why” of over-representation, to pinpoint the reasons why minority students have been underachieving and have been over-represented in special education. Minority students are also overrepresented in the application of discipline referrals, school suspensions, and alternative placements.

The court cases, Milliken vs. Bradley (1994) and Milliken vs. Bradley II (1997) shaped the creation of new discourses by conceptualizing and transcending oversimplifications in the explanations of disproportionate representation. These cases address the theoretical poverty of the scholarship traditionally used to examine complex notions such as culture and its role in human development. Furthermore, educators should engage in interdisciplinary discourses to understand and address this problem. Until the present (2010), efforts have been limited in addressing the real conditions that affect the achievement gap of RCELD students. Educators must extend these discourses to address larger systemic issues.
Special education placement is the route that many teachers take when students are not performing in their classes. Special education is regarded as a "fix it all" solution by many educators for students whose needs exceed the skills or time constraints of the regular classroom teacher. They say that placement in special education will help the student get what he needs to succeed. The process of decision making in special education is biased because of the subjectivity inherent in the process. The presence of bias is defined when capricious referral practices are used or reluctance to refer has been demonstrated. The referral process is a major factor contributing to the disproportionate placement of culturally diverse/minority students in special education classes when educators perceive that language and culture are deficiencies rather than differences. The tendency is to blame the student for lack of success rather than to question the efficiency of the instruction provided (Reilly, 1991), commonly known as the "blame the victim" syndrome (Achilles, 2010).

Traditional explanations of why RCELD students are underachieving and why there is an achievement gap between this group and their White counterparts have been complicated by the notions that there has been a problem in theorizing disproportionate representation. Scholars and policy makers have contributed to a child-deficit approach. The role of biological and social influences in child development that prepare children in a different manner has been acknowledged by the National Research Council (NRC). In a 2002 report, members of the NRC stated that school factors also influence the problem of overrepresentation. A limited view of culture and its role in special education represents a missed opportunity to shed light on enduring issues related to minority underachievement and disproportionate representation, such as racism, structural discrimination, and alternative understandings of disability and human development (Artiles, et al., 2006).
In the United States, inclusive education is about access to general education programs. Ethnicity, race, culture, poverty and language diversity all complicate the underachievement and special education picture. Data obtained from the NRC (2002) suggest that Hispanic and African American students are more than three times as likely to be placed in more restrictive environments than their White counterparts. Equity dilemmas arise as educators grapple with issues such as the complexities of geography, cultural historical practices, and interpretations of policy that reflect local customs and practices. These constructs affect special education inclusion narratives and have enculturated generations of educators (Artiles & Kozleski, 2007).

Although a sizeable amount of scholarship has been produced on inclusive education, it has ignored the fact that poor ethnic and linguistic minority students are overrepresented in special education. This is not an accidental omission, since most of the research in this field and other field is “colorblind”... The latest NRC (2002) report acknowledged that the impact of special education interventions on minority students cannot be discerned because studies did not provide information about the ethnic or socioeconomic backgrounds of students. Categorical cultural markers (e.g. ethnicity, social class) and cultural practices or processes tend to be neglected in inclusion work (Artiles et al., 2007, p. 3).

A disproportionate number of students with disabilities are poor and are members of a minority group. Future inclusive education work should focus on participation and outcomes for students who have been marginalized due to ethnic identity and ability level in educational systems. These entities are laden with inequitable structural and social conditions and are lacking in an understanding of the students served by the schools. Transformative, inclusive schools invest in systemic, sustained programmatic attention to professional learning, the use of data driven decision making, and school capacity development (Artiles & Kozleski, 2007).

The National Board for Professional Teaching Standards is considered to reflect effective teaching. These standards were created in 1987 after the release of A Nation Prepared: Teaching for the 21st Century by the Carnegie Forum on Education and the Economy’s Task Force on...
Teaching as a Profession. The standards highlighted a vision for accomplished teaching (Lemons-Smith, 2008).

Minority Student Identity

Educational research on the role of culture and its role in learning for African-American students by Hilliard and others, translated ancient Kemetic texts and examined their contemporary relevance, in particular for the African-American community, while other groups of scholars engaged in empirical studies rooted in culturally coherent identity orientation among African and African-descent populations. These empirical studies were very much aligned with regard to historical, linguistic and philosophical investigations. There was a paradigm shift to reexamine the focus on measures of personality and identity from purely individual internal attributes to individual attributes that are situational or relational. Researchers looked at ethnic identity instead of individual identity. They also examined a nexus of constructs that are functionally related to identity, including self-esteem, self-efficacy, motivation, and relationships between these identity constructs and contextual issues. Graham and Hudley, 2005 (Lee, 2008) identified racial or ethnic identity as a person’s sense of belonging to his or her group, and the meaning attached to that group membership, including “self-labeling” (2008, p. 811). Education was viewed as a tool for African American self-reliance rooted in conceptualizing Pan-African identity as a tool for community empowerment (2008, p. 804). Thus the goals of education were viewed as more than the accumulation of knowledge for workforce participation, but also the development of communal identity and a valuing of the development of knowledge and character in tandem (2008, p. 804, King, 1994).
Academic achievement has been a topic of interest for years and a major focus has centered on the gap that exists between racial minorities and their White counterparts. Underachievement can have negative consequences. Dilorenzo (2009) examined the role of related-racial socialization (RS) and racial identity (RI) in the academic achievement of college students who were African American and Latino in a study that included a sample of 294 participants. The participants were comprised of 207 Latinos, 87 African Americans; 221 females and 72 males. Of the Latinos, 58.5% were second generation and 81.6% spoke Spanish as a second language and attended a racially diverse university. Racial-Socialization was assessed using the Racial Bias Preparation Scale and Racial Socialization Scale. Racial identity was assessed with the Multi-group Ethnic Identity Measure and Multidimensional Inventory of Black Identity. Achievement was assessed using GPA and SAT scores. This study employed hierarchical linear regression analyses. Gender, along with generational status and language, was used for Latino participants. With regard to African Americans, the study found that promotion of racial mistrust, cultural socialization, and assimilation were related to lower achievement for males, but higher for females. With regard to Latinos, proactive socialization was related to lower achievement for males and higher achievement for females. In addition, promotion of racial mistrust and public regard were related to higher achievement for second generation students, but lower achievement for first generation students. The findings showed how complex racial socialization and racial identity and the relationships between these constructs and achievement vary based on the racial group being measured as well as other differences; i.e., language and gender (Spiegel, 2009).

It is important to examine Hispanic students' identity, their experiences in school and how they view schooling experiences as well as their career expectations and aspirations. It is
essential that students form a connection between their identity, schooling and future plans.

Quiroz (1997) analyzed 47 Mexican and Puerto Rican student autobiographies which were written at the end of the students' eighth grade year and 27 written by the same cohort during their junior year of high school. This study aimed to learn whether or not there was any change in how the participants viewed their schooling experiences, career expectations and aspirations between eighth grade and the junior year in high school and what the differences and similarities were between the two groups. The autobiographies of these students offered a look at what makes up Latino students’ own life constructs. According to Quiroz (1997), the “student self” that emerged from the autobiographies of both the Mexican and Puerto Rican autobiographies suggested that schooling was largely a confusing and/or punishing experience for Latino students. The students identified several aspects of self identity unrewarding (Quiroz, 1997).

In general, the autobiographies signaled specific categories of difficulty from which the students derived negative evaluation of schooling: language problems, student mobility (movement from one country, city, neighborhood, house, or school), the inherent difficulties of school work, teacher mobility (frequent changes in teachers), discipline situations that included corporal punishment, and embarrassment resulting from interactions with teachers. In reviewing their elementary school years, students typically evaluated a given year in terms of the teacher along with the positive or negative events that transpired during that year (p. 7).

In comparing the Latino students’ autobiographies, Quiroz identified and described several shifts:

As students progressed through the educational process they continued to blame themselves for their poor educational experiences. As they matured, they also began to find fault with the educational institution. Eighth grade evaluations of teacher “meanness” evolved into junior’s evaluations of teachers as “boring and apathetic.” The confusion of elementary school often evolved into resentment and sometimes hostility toward the schooling process and its agents. Those students who retained their aspirations were better able to integrate the “critical” selves, in spite of, rather than because of assistance from staff. Although family
self was salient for the Mexican students, it did not appear to provide the type of school capital that facilitated an educational identity for those Latino students. An analysis of the autobiographies illustrated that the connection between education and future career was not well developed for Latino students.

The educational experiences of so many Latino students (failing tests, being placed in low ability tracks, experiencing discipline and or criticism by staff, socially distant or indifferent teachers and counselors) were generally so negative that it was difficult if not impossible for these students to tolerate the punishing aspects of schooling... Even the juniors who continued to express hope remained on a slow track, apparently, to nowhere. Only the most resilient students would survive the process and graduate (Quiroz, 1997, pp. 14-15).

Educational researchers have become increasingly interested in what has been referred to as the “school to work” transition. The aforementioned study underscored that it is important to make the assumption that linking future career aspirations and establishing educational pathways for attaining these goals begins at a much earlier stage of a youngster’s life (1997).

Social scientists who study identity have advocated that one’s identity consists of the presentation of several different selves. Incorporating different selves happens during adolescence. According to Farrell (1994), successful students exhibit six selves: the family, the career, the sexual, the peer, the student, and the affiliating. Farrell proposed that the integration of three selves is necessary for student success in school: the family, the student, and the career selves. Quiroz (1997) inferred that the presentation of the various selves in response to others is a crucial activity in the educational pursuits of students. The results of this analysis prompted two questions; how aware are RCELD children of their opportunities for social mobility? Does this awareness affect motivation? Education ought to be linked to the prospect of a career (Quiroz, 1997). Research conducted by the National Center for Educational Statistics (2007) suggested that foreign-born children and children of foreign-born parents tend to be of lower
socio-economic status (SES) than their U.S. born peers and may not perform as well as their U.S. born peers on measures of academic achievement.

The possible-selves theory (Clark, Lee, Goodman & Yacco, 2008) supported the notion of how individuals envision themselves in the future. This self theory offers educators a way to better understand the motivations and achievement of secondary students. Possible selves can propose a positive influence by contributing to qualities and lifestyles that individuals strive to attain. Alternatively, the construct can be negative, with characteristics that individuals want to avoid in the future (Clark, et al., 2008). Many times RCELD students are considered at risk, are under challenged academically, are disproportionately represented in special education and remedial classes, and do not have the best teachers (Nelson & Eckstein, 2008).

Yowell 2002 emphasized that studies of academic achievement have consistently shown that children’s hopes or aspirations for future success are among the strongest predictors of school achievement. In this study, the researcher examined ninth grade Latino students’ possible selves, by exploring three domains: the possible selves, the ideological content of specific selves, and the associations between those possible selves and risk for school dropout. “According to possible selves theory, the lack of balance between detailed and personalized expected and feared selves may compromise the school engagement and outcomes of Latino youth (2002).

Minority Disproportionality

Disproportionality is the inappropriate over-representation and/or over-identification of ethnic minority children in special education. Minority children are also over-represented in discipline issues and suspensions, alternative academic placements, and high school drop-out rates. In addition, they are under-represented in honors, gifted and talented, and advanced placement courses and higher education enrollment. There is a discussion of disproportionality
as a growing phenomenon and how it is a systemic issue in our schools. Legislation and reform efforts implemented on national, state, and local levels have required educators to implement practices to address the issues of disproportionality. The full complexity of existing RCELD student disproportionality has not yet been fully understood since there are so many factors that can contribute to representation when RCELD exists.

Behavioral Issues and RCELD Students

There is extensive literature in the area of school discipline and the existence of racial, gender, and socio-economic (SES) factors that affect school discipline referrals. The literature consistently supports that minorities are disproportionately represented in the administration of school discipline. Additionally, there is a wide range of literature on the connection between the race of teachers and student performance. Non-cognitive factors, for example, discipline can affect school and labor market outcomes, human capital development and the economic well being of communities. These factors can result in negative consequences for the United States’ standing as a competitive nation. Minority males drop out of school more frequently, face higher degrees of unemployment, and are incarcerated at a higher rate when compared with their White counterparts. Students from low socio-economic backgrounds (SES) were three times more likely to drop out of school than higher (SES) students. Jordan and Anil (2009) hypothesized that the odds of a student referral for disciplinary action increases in the middle grades if the child is male, a minority, in special education, or is poor. A study by Byrd, Weitzman & Anginer (1997) concluded that grade retention of adolescents is associated with increased rates of behavior problems.

Does student discipline contribute to placement into special education? Teacher perceptions, according to Uperti (2009), drive the decisions to refer students for disciplinary
consequences, eligibility for special education, and even suspension or expulsion. A number of factors may contribute to the formation of teacher perceptions. These may include teacher intrinsic factors, such as gender, teaching experience, teacher efficacy, teacher self-efficacy and teacher burnout (Upreti, 2009). It is clear that teachers' perceptions of student behavior affect students in a myriad of important ways. Among the educators working with our nation's youth, student behavior and discipline are often open to subjective interpretation. Teacher perceptions of student behavior appear to influence a wide range of school-related issues. Research from a study of school safety in 2009 has linked teacher perceptions of student behavior with excessively punitive discipline practices. Studies conducted on school climate have also found a strong relationship between teacher perceptions and student emotional outcomes (Upreti, 2009).

Certain behaviors that might be considered normal in a minority subculture may be viewed as aberrant by the White middle class (Reilly, 1991). Teachers' perceptions of ideal student behavior have been shown to be differently applied across minority and Caucasian populations. Reilly stated that some teachers base their judgment of student competence on race, sex, socio-economic status, and linguistic and cultural differences (1991). Reilly (1991) also stated that behavior disorders may be generically defined as behavior that violates cultural norms regarding what is appropriate and acceptable and includes behavior that deviates significantly from that appropriate to one's age. These behaviors may range from withdrawal to aggression. Specific characteristics include disrupting classroom procedures, stealing, defying authority, refusal to follow directions, insubordinate behavior, tantrums, and acts of destruction.

Other areas where minority students may be over-represented are in school suspension and alternative placements. Out-of-school suspensions are a common form of discipline used to respond to misbehavior in an attempt to maintain a positive climate in school. School suspension
is viewed by administrators as a consequence of outcomes and perceived by students and parents as punishment. However, suspension rarely has a logical, functional, or instructive connection to the offense or infraction. Negative outcomes such as academic failure, negative school attitudes, grade-retention and school dropout have been connected to suspension without interventions that focus on reinforcing or teaching pro-social or appropriate responses to difficult situations.

No Child Left Behind (NCLB, 2001) is being considered for revision and reauthorization by the administration of President Obama. Traditionally, attention to this act has focused on academic performance and accountability. According to Gastic (2010), the Unsafe School Choice Option (USCO), section 9532 under NCLB, states that students who attend "persistently unsafe and dangerous" schools or who themselves have been victims of violent crime at school are eligible to transfer to another public school (Gastic, 2010, U.S. Department of Education, 2004). USCO is the first legislation specifically addressing school safety concerns as grounds for school choice and its provision has been vetted. The shortcomings of the individual transfer option have gone relatively unexamined according to Gastic (2010).

In an article that appeared in the Educational Researcher in 2010, Gastic's purpose was to fill the gap and investigate how the individual transfer option would fail to adequately protect the students who are at greatest risk of being hurt at school. The individual transfer option fails to extend school choice to students in proportion to their risk of harm at school. Thus, it is indifferent to the disproportionate risk to which some student populations are subjected when it comes to other forms of serious school violence. For example, there are significant differences by sex and race/ethnicity in the degree to which students encounter weapons-related violence at school. In 2007, 10% of male students in grades 9-12 reported being threatened or injured with a weapon at school, as compared with 5% of female students. Latino and African American
students were also more likely than White students to have this experience, 9% for Latino and 10% for African American vs. 7% for White students (Gastic, 2010).

Language Diversity

According to the law, a student’s inability to speak and understand the English language should not exclude him or her from effective participation in an education program offered in a school district. District personnel must take steps to ensure that the student receives appropriate language interventions to rectify the deficiency (NCES, 2007). Students who speak a language other than English at home and speak English with difficulty in school may be in need of special services (NCES, 2007). Seventy percent of Hispanic elementary and secondary students spoke a language other than English at home compared to students from other racial/ethnic groups. Nineteen percent of Hispanics in the United States had the highest percentage of students who spoke English with difficulty (NCES, 2007). Among Hispanic students in kindergarten to 4th grade, 69% were the most likely to speak a language other than English at home and 20% of students in K-4 spoke English with difficulty (2007).

Generation 1.5 students are generally defined as English language learners who have been partially educated in the United States. However, Reberge, (2002) described these students using three different labels:

1. First generation, adult immigrants, foreign-born, foreign-educated, first language (L1) dominant.
2. Childhood immigrants, foreign-born, partially foreign educated and partially U.S. educated, can be L1 or English dominant.

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Groups similar to Generation 1.5 are also known as “In-migrants.” These may be people from Puerto Rico or other U.S. territories; “parachute kids,” who came to the United States alone to live with extended family members and attend K-12 schools; native-born, non-native speakers who are U.S. born students raised in linguistics enclave communities; “transitional,” those who have experienced complex patterns of back and forth immigration; and speakers of other Englishes (immigrant students from English schools abroad).

Despite the use of group identification, this group of students is remarkably diverse. Their language and education histories may share little in common, and their education and socialization in the United States will likely differ from one another. The individual stories of these students are critical to understanding their education needs and challenges. Researchers and educators need to gain knowledge and a full picture of this group of students because they are a fast-growing percentage of the U.S. student population. A study conducted by Lee Zwald (2009) on Generation 1.5 students and their academic writing process consisted of participants enrolled in the first year of college.

The findings suggested that individual characteristics and differences and factors such as age of arrival, language history, and educational experiences both before and after their arrival in the United States must be considered.

Parental Factors

National Center for Education Statistics (NCES, 2007) research has shown a link between levels of parental education and child outcomes such as education experiences and academic achievement. Differences in parental educational attainment levels persist across
racial/ethnic groups. Statistics from 2005 showed that only 10% of Hispanic children between the ages of 6 and 18 have mothers who possessed a bachelor's degree (NCES, 2007). In relation to the father's educational attainment, a different pattern existed. Eleven percent of Hispanic children had fathers with a bachelor's degree. In the lower levels of parental educational attainment, 41% of Hispanic children had the highest percentage of mothers and fathers who did not complete high school. Data from NCES (2007) included all dropouts regardless of when they last attended high school, as well as individuals who have never attended school in the United States, such as immigrants who did not attain a high school diploma in their home country (2007). These data excluded military personnel and those who are incarcerated.

Response to Intervention Definition

RtI refers to an integrated, school-wide framework of service delivery in general and special education that promotes successful school outcomes for all students. RtI is a structure involving high quality instruction and frequent student monitoring through formative assessment of progress. Thus, RtI involves systematic evaluation between academic and behavioral intervention and a student's response to the intervention (Martinez, 2006, p. 1). According to Graner, Faggella-Luby, & Fritschmann, 2005 in Martinez, 2006), RtI is rooted in well-documented special-education practices and early reading intervention (2006).

According to Samson (2009), RtI provides answers to many of the most pressing questions facing school educators. It provides a systematic framework of interventions to identify students who may be at risk. RtI can provide feedback to educators as to whether the model is effective in reducing the number of students placed in special education. The literature suggests that RtI is taking center stage as a possible solution to the many problems that have
been exposed in public schools throughout the country. However, it has not been scientifically validated as an effective framework (Samson, 2009).

Background and History of RtI

IDEA (2004) did not specifically cite the RtI structure. The federal regulations allowed for changes in Specific Learning Disability (SLD) identification that employ RtI methods. The federal legislation requires educators to adopt criteria for determining the presence and/or identification of a student with an SLD. IDEA (2004) stipulates that there must be a process based on the student’s response to specific, research-based interventions as a part of the evaluation procedures (IDEA, 300.307 (a)(2)). The language used in this legislation has attracted significant attention as a means of fulfilling the call for scientific, research-based intervention, especially within the field of education.

The push behind the surge of current RtI initiatives stems from needed improvement in the traditional general and special education systems and the widespread accessibility of best research-proven methods (Martinez, 2006). During the 1990s researchers began to study the problems present in general and special education systems. They included the sharp contrast of service delivery between special and general education settings, the lack of emphasis on prevention and early intervention, (wait-to-fail model), and the limited weight given to the importance of research-based instruction and intervention.

The identification and eligibility and the types of interventions given to students in special education have caused intense debate about the effectiveness of the primary method used to identify students with an SLD; the IQ-achievement discrepancy model. This situation has prompted researchers and educators to develop alternative methods. To understand the
momentum that RtI has attained, educators must understand the limitations of the IQ-achievement discrepancy model (2006).

A statutory definition of SLD first appeared in the federal Education for All Handicapped Children Act of 1975 (PL 94-142).

This law required that as part of the identification procedures a student exhibit "...a severe discrepancy between achievement and intellectual ability" in one or more of seven achievement areas (e.g., reading comprehension and mathematics calculation) (Martinez, 2006, p. 2).

As a result, there have been significant inconsistencies in the process and instruments used and the magnitude for determining the presence of SLD. A severe discrepancy resulted across and within states. These inconsistencies and flaws inherent in the model have made it an unreliable source for the determination of the presence of SLD. Martinez (2006) quoted Reschly (2003) who noted that the reliance on the use of the discrepancy model for identification of the presence of SLD is "unreliable and unstable, invalid, and as a way to undermine best practices harmful" (p. 2).

IQ-Achievement Discrepancy Model

This model has been described as lacking reliability and stability because it involves gathering assessment data from one point in time. Achievement scores change over time and different assessment instruments may yield different scores in the same area. The extent of variations across and within state lines may identify a child with a learning disability. However, the same child may no longer be eligible for special education services in another state or district.
In addition, the IQ achievement discrepancy model was founded under the assumption that a student's IQ score can assess achievement. In spite of this, researchers have questioned the degree to which IQ predicts achievement (Martinez, 2006). IQ results do not measure reading, spelling, phonological processing, or other language memory tasks.

In general, minimal group differences exist between students with commensurate IQ achievement scores and discrepant IQ achievement scores (2006, p. 3).

Finally, the IQ achievement model may undermine best practice because traditional standardized testing procedures are not related to any aspect of the design, implementation, or evaluation of classroom instruction. Greshman (2002) is quoted by Martinez (2006): “There is simply not a direct link between traditional assessment procedures and the resulting interventions that are given to students in special education.”

The IQ achievement discrepancy model has also been known as the “wait-to-fail model.” Students must be at least nine years old or far enough along in the elementary years to demonstrate a severe discrepancy between ability and achievement. Hence, according to the discrepancy model, students must demonstrate and experience significant and persistent failure across the elementary years before they are identified as having an SLD. This model is harmful for students because waiting to serve children until later in the elementary years, according to Greshman, VanderHeyden & Witt (2005), increases their odds of being identified as having a learning disability by 450%.

A Tiered Pyramid: Theoretical Framework: Response to Intervention

In this study, the researcher considered New York State Mandates under federal legislation such as the No Child Left Behind Act and Individuals with Disabilities Act that have identified a number of districts with high numbers of RCELD students labeled or placed in
alternative settings. Under these mandates educators are required by state personnel to implement systematic plans and interventions to address issues of representation in special education settings and in disciplinary referrals. The population used in this study resides in the Lower Hudson Valley, New York. The district has 11 schools serving about 8000 students in grades K-12.

In April 2000, district administrators were part of the educators in 364 districts in New York State who were notified of possible issues pertaining to rates of representation of minority students in special education and referred for disciplinary referrals. The New York State Education Department (NYSED) provided support to educators in districts that had been cited for over-identification and representation of RCELD students. The educators in the district, as part of NCLB and IDEA (2004) legislation, implemented a Response to Intervention (RtI) framework.

Educators who adopt intervention resources in an efficient manner are afforded an opportunity to provide more intensive, individualized support as students display increased learning difficulties. RtI is also a diagnostic model which provides evidence that students with significant learning delays may have a learning disability if they fail to catch up with peers despite well-implemented interventions (Wright, 2007, p. 3). RtI has been hailed as a viable framework for improvement of the overall education system and as an alternative to traditional identification of the presence of an SLD.

The RtI pyramid is a framework that espouses requiring educators to monitor student progress through the administration of formative assessments, data collection, and analysis. Students who do not demonstrate Adequate Yearly Progress (AYP) are identified early and
provided with access to interventions. By using the RtI pyramid structure, students are served in a multi-tiered education service-delivery system (Samson, 2009).

The main features of RtI are the focus and emphasis on prevention. This model has its roots in public health and disease control and occurs at three levels: primary, secondary and tertiary (Sugai, 2007). Each level has prescriptive instructions for educators to follow in the general education setting. This framework includes several tenets: providing a swift instructional response to the needs of struggling students, providing supplemental and differentiated instruction based on results of formative assessments, monitoring student progress with increased frequency as students receive more specialized instruction, and using research-based but not yet proven effective practices in the classroom (Bryant and Barrera, 2009).

**Tier 1 or Level 1**

The primary level, or Tier one, is also known as primary prevention. At this level services are in place for all students. The first tier is also considered to be the universal tier. RtI Tier 1 or Level 1 involves a high quality school and classroom environment, scientifically sound core curriculum and instruction, and intentional instructional practices. In this tier, school personnel must objectively and systematically evaluate curriculum materials for quality that are backed by research. Administrators must also evaluate a teacher's instructional strategies to ensure delivery of the curriculum or intervention program (Martinez, 2006). Assessments and data gathering of results are used to monitor whether or not students are making adequate progress.

With regard to discipline, the classroom teacher must implement structures and expectations for all students by implementing the core social curriculum to prevent the
development of behavioral problems. At this level the teacher can identify students whose behaviors are not responsive to that core or level.

Tier 2 or Level 2

The secondary tier includes targeted, supplemental instruction and behavioral standards for students who are considered “at risk” and for whom universal instruction was not sufficient. These students may be flagged as “at risk.” Services at Tier 2 (Level 2) are more intense and are focused on specific needs of a student or group of students. Interventions at Tier 2 may consist of delivering reading interventions of a specific amount of time during the school day or week. According to Pauls, Moch, Morgan & Young (2003), Tier 2 interventions can be applied through one of two methods, standard protocol/researcher approach or problem solving/school practitioner approach. Barnett, Daly, Jones and Lentz, (2004) espoused a combination of these two approaches and problem-solving methods. In standard protocol approaches, all children whose scores or data indicated difficulty in a certain academic area (e.g., reading fluency) are given the same intervention that has been empirically validated to promote progress in that academic area. At Tier 2, disciplinary issues are dealt with by specialized support staff in the school to reduce the current frequency and extent of problem behavior.

The second approach to the selection and delivery of appropriate Tier 2 interventions involves the problem-solving model. This model involves building or grade level problem-solving teams or instructional support teams (IST) who systematically review student data and make decisions as to which interventions are best for the child depending on the difficulty the student is experiencing. The rationale for these intervention teams is that a group of professionals using multiple criteria would make sounder decisions than an individual acting alone.
**Intervention Support Team**

The intervention support team concept is known by many names: IST, (Instructional Support Team), SST (Student Study Team), MDT (Multi-Disciplinary Team), CST (Child Study Team), TAT (Teacher Assistance Team), and PIT (Pre-referral Intervention Team) (Mahabir, 2009). The term used to identify this team is not important; what is important is that the intervention team is a problem-solving and decision-making process that involves a coordinated approach from several stakeholders—families, teachers, counselors, administrators—to help students maximize their potential (2009). Whatever label is used to identify any of these groups or “intervention teams,” they are created to serve the same purpose.

**Tier 3 or Level 3**

Despite the efforts made on the strategies and assessments used at Tiers 1 and 2, some students may continue to struggle; more intensive services may be warranted. The interventions at Tier 3 are more intense and individualized than in Tier 2, and progress is monitored more frequently. Fuchs & Fuchs (2005) suggested that current best practices in the field indicate that students who do not make adequate progress in Tiers 2 or 3 be further evaluated to rule out conditions such as mental retardation or emotional disability. Additionally, Fuchs, et al, (2003) substantiated that students who fail to make academic gains at Tiers 2 and 3 may have a learning disability.

At the tertiary tier, teachers focus on individualized and intensive behavior support to reduce complications, intensity and/or severity of existing problem behavior (Sugai, 2007).

**School Personnel and Implementation of the Pyramid as Response to Intervention**

The pyramid of intervention logic has direct influence on both academic and behavioral supports. The principal’s role is important in the endeavor to implement RtI structures such as
the three-tiered or three-level pyramid. The successful implementation of the RtI structure is contingent on the principal to view himself or herself as a participant in all aspects of implementation, monitoring, and sustaining the process. He or she has to be a manager and a leader by working collaboratively with the teachers, promoting the initiative, providing resources and enabling teacher capacity building. In a study conducted to identify and examine the leadership characteristics of secondary-level principals who successfully implemented RtI, Spiegel (2009) found that there were six principal leadership characteristics. The study included 12 study participants, 3 high school principals, and 9 certified professional staff. Using two established theoretical models, Fullan’s Framework for Leadership and the Interstate School Leaders Licensure Consortium (ISLLC) Standards, interviews were constructed and conducted with the 12 participants. Six leadership characteristics emerged: (1) principals as participants, (2) strong communication skills, (3) support of staff, (4) allocation of resources, (5) identification and use of expertise, and (6) data proficiency. When comparing the observed leadership characteristics and the leadership roles as self-reported by the practitioners in the implementation, such as RtI, four important roles were suggested: principal as participant, principal as data manager, principal as recruiter and principal as resource provider (Spiegel, 2009).

A study conducted at an Indiana secondary school of students with emotional disabilities whose purpose was to examine the perceptions of Indiana’s special and general education administrators and teachers regarding service delivery, instructional models, and transitional outcomes for this population of students, found that administrators and teachers, regardless of specialty area, perceived that their students with emotional disability (ED) were educated in a general education setting.
Legislation

The NCLB act emphasizes that all students will learn and will continue to make substantial improvements, placing tremendous accountability on educators. IDEA (2004) also requires accountability and interventions. The focus of IDEA is to increase general education options for students with disabilities and to reduce the over-identification of minority students placed in special education. These Federal laws require educators to create plans that will reduce the number of minority students over-identified in special education settings and in discipline referrals. Part of the plans that states are adapting include a Response to Intervention (RtI) model, an intervention linked by the IDEA to reduce special education eligibility determination (Hardcastle and Justice, 2006). It is the responsibility of educators to produce quality teaching and improved student outcomes (2006).

The report, A New Era: Revitalizing Special Education for Children and Their Families, underscored that young people with disabilities drop out of high school at twice the rate of their peers. The Commission on Excellence in Special Education was created by President Bush in 2004 to ensure that every child learns, regardless of race, family background, or disability status. This Commission recommended reforms to improve America’s special education system and ensure that it be a culture of accountability and results. To address the issue of the over-representation of minority students in special education, IDEA (1997) and its reauthorization, IDEIA (2004), recommended that all educators use and implement procedures to ensure that all instruments used to determine eligibility for special education are non-discriminatory. Public Law 108-446 IDEA, (1997) & IDEIA, (2004) require that SED personnel develop and submit a six year State Performance Plan (SPP) to the Office of Special Education Programs (OSEP) at USDOE. The State Performance Plans are created to monitor and assess the states’ efforts to
Implement the requirements and purposes of IDEA and IDEIA. OSEP requires that plans in their states address three areas of priority which include 20 indicators used to meet these areas. State leaders must establish how educators will accomplish its measurable and rigorous targets with activities that will improve the outlined areas.

New York State Education Department, Chapter 405, sets parameters for what needs to be reported, data to be collected and submitted, and deadlines for reporting. State Performance Plans have been designed to evaluate the States' efforts to implement the requirements, purposes, and implementation of such plans under the IDEA act.
Topics explored in the Review of Literature
Summary of Literature, Theory and Practice

The United States is a diverse nation, and it is experiencing demographic metamorphic shifts. These demographic shifts are changing the fabric, color and cultures of its people. Our nation's schools are experiencing this dynamic and are currently being challenged to become more knowledgeable about the assumptions, attributes, and norms of a range of cultures. Many educators have failed to take cross-cultural communication issues into account, which can contribute to the problems that many students are facing in schools. The neglect of cross-cultural communication and cultural responsive instruction is evident and is shown by the disproportionality of RCELD students underachieving and placed in special education.

This phenomenon, known as disproportionality, has been well documented for over thirty years. Skiba, et al. (2008) define disproportionality as the representation of a group in a category that exceeds our expectations for that group, or differs substantially from the representation of others in that category.

"Although concerns have historically tended to focus on issues of overrepresentation in special education or specific disability categories, groups may also be underrepresented in a category or setting" (Fiedler, et al., 2008). A complex interplay of economic and demographic variables including poverty, culture, geography and language are factors which contribute to disproportionality (2008).

The literature reminds us that Latin American and Caribbean peoples are the largest group of immigrants replacing Europeans in the United States. The Census Bureau predicts that Hispanics, the largest minority group, will be about 20% of the national population by the year 2042 (Campbell, 2009). These demographic changes may also influence the achievement gaps.
The dropout rate for Hispanics has become the highest among all groups in the United States. Hispanics are disproportionately placed in special education. They are also overrepresented in discipline and suspensions and alternative academic placements and underrepresented in honor courses, gifted and talented programs, advanced placement courses, and higher education enrollment.

Special education has been regarded as a solution for students whose needs exceed the skills or time constraints of the regular classroom teacher. Classroom teachers believe that the placement into special education will help the student get what he or she needs in order to succeed. The NCLB and IDEA laws require accountability and interventions that mandate district personnel to gather and report data and to set plans to reduce the numbers of students overrepresented in special education settings.

Response to Intervention is one plan to change behaviors as a function of intervention. The goal is to produce a discrepancy between the baseline and post-intervention levels of performance. Within a problem-solving framework a problem is defined as a discrepancy of what is current and the desired levels of performance. Data collection and analysis are essential components of the RtI Model. Data drive the decision making to modify or change the nature of interventions. Gresham, VanderHayden & Witt (2005) have stated that the central issue in using an RtI model is the determination of "adequate" or "inadequate" response to intervention. The decision must be made at local and individual levels by an assessment team and will vary from school to school. RtI has shown promise at the elementary level. The literature is still lacking on the influence of RtI on older RCELD students' achievement, placement into special settings, and high school graduation rates.

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CHAPTER 3

DESIGN AND METHODOLOGY

The researcher's purpose for conducting this study was to examine the influence of a district-designed RtI structure on the achievement and classification rate into special education of RCELD students in special education by exploring a local school district's processes that may contribute to student achievement and special education placement. This chapter describes the researcher's design and methods used in conducting this study that included mixed methods, both quantitative and qualitative data collection. One New York State district's three middle schools, which house grades 5-7, and the secondary school which houses grades 8-9 were used in the study.

The structure of the research design and the rationale for using this particular design, the selection of participants, instrumentation, methods of data collection and analysis, and the reliability and validity of the research conducted are also presented. The involvement of school personnel in the implementation of the RtI structure adopted by school district personnel was examined. Holding the student as the central focus and collecting and using data gathered to direct and inform the most appropriate interventions were tenets used to examine the influence of the RtI structure. Additionally, the use of the best research practices available to provide the student with a comprehensive systematic approach to improve academic outcomes through the implementation of the district-designed RtI structure were also analyzed.

Johnson (2001) stipulated that the study's primary objective as well as when data were collected and the time dimension of the study are essential in determining the design of a study.
Table 2
Types of Research Obtained by Crossing Research Objective and Time Dimension (Johnson, 2001, p. 10)

<table>
<thead>
<tr>
<th>Research Objective</th>
<th>Retrospective</th>
<th>Cross-sectional</th>
<th>Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive</td>
<td>Retrospective, descriptive study (Type 1)</td>
<td>Cross-sectional, descriptive study (Type 2)</td>
<td>Longitudinal, descriptive study (Type 3)</td>
</tr>
<tr>
<td>Predictive</td>
<td>Retrospective, predictive study (Type 4)</td>
<td>Cross-sectional, predictive study (Type 5)</td>
<td>Longitudinal, Predictive study (Type 6)</td>
</tr>
<tr>
<td>Explanatory</td>
<td>Retrospective, explanatory study (Type 7)</td>
<td>Cross-sectional, explanatory study (Type 8)</td>
<td>Longitudinal, explanatory study (Type 9)</td>
</tr>
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</table>

Research Design

The single typology shown in Table 2 is the result of the systematic cross classification of two meaningful dimensions, research purpose and time dimension (Johnson, 2001).

The problem and purpose direct the design of the study and the methods are dictated by the design. A cross-sectional, descriptive non-experimental design (Type 2, Johnson, 2001) was appropriate for this study because most education research problems do not lend themselves to experimentation, although many education phenomena lend themselves to controlled inquiry of the non-experimental kind (Johnson, 2001). The research design should achieve the most valid and reliable results possible.

The cross-sectional descriptive (Type 2) and non-experimental design of this study (Johnson, 2001) is appropriate given the boundaries and limitations of the current research. This design provided the structure needed to present the results, along with...
their interpretation, in a clear and meaningful way that would contribute and perhaps add to the current knowledge in the field. Under normative conditions, schools are places that serve everyone and therefore must ensure equal academic success, treatment, and outcomes for all who attend. Descriptive non-experimental research design of this type is important.

As stated by Kerlinger (1986) non-experimental research is an important design employed by many researchers. Researchers use a classification system of non-experimental methods that is highly descriptive of what educators do and also allows them to communicate effectively in an interdisciplinary research environment (Kerlinger, 1986).

Kerlinger (1986) defined non-experimental research as "a systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable" (p. 9). In examining the processes of representation of RCELD students, researchers must review factors that might be responsible for student placement. Inferences among variables are made without direct intervention, from concomitant variation of independent and dependent variables (Johnson, 2001). The significance of the variation of these variables and the differences between them were tested using descriptive statistics. Repeated Measures of Analysis of Covariance (ANCOVA) were performed by examining two points in time 2008-2009 and 2009-2010.

Johnson noted that non-experimental research could also enhance experimental designs by providing corroboration and increased evidence of the external validity of previously established experimental findings.
This researcher used mixed methods which incorporated qualitative and quantitative data collected from the district under study to present a picture of the representation of minority students in special education programs in the district. The popularity of these approaches has increased because research continues to evolve and the use of mixed methods is another step forward, using the strengths of qualitative and quantitative research (Creswell, 2009). The combination of both qualitative and quantitative approaches provides more insight than either method alone. Although there is some debate among quantitative and qualitative methods purists about the use of mixed methods, many authors have stated that the benefits of each method can improve the quality of a study, particularly if used for complementary purposes within a single study (Clark, Lee, Goodman & Yacco, 2008).

"Mixed-methods research is an approach to inquiry that combines or associates both qualitative and quantitative methods. It involves philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing of both procedures in a study. It is more than simply collecting both kinds of data; mixed methods combines the use of both approaches in tandem so that the overall strength of the study is greater than either qualitative or quantitative research" (Creswell, 2009, p. 4).

Although philosophical ideas remain largely hidden in research, they still influence the practice of researchers and need to be identified. Creswell recommended that individuals preparing a research proposal make explicit the larger philosophical ideas they espouse. This information will help the researcher decide specifically why the methods for his or her research were chosen (2009).

Worldview is a term used by Creswell to identify a basic set of beliefs that guide action. He describes worldviews as a general orientation about the world and the nature
of research that a researcher holds. These worldviews are shaped by the discipline area of the researcher, the beliefs of the advisers and faculty in a researcher's area of interest and past research experience.

Creswell (2009) identified four worldviews: post-positivism, constructivism, advocacy/participatory, and pragmatism. In providing a rationale for using a specific method based on one's philosophical view of the world, this researcher holds assumptions of social constructivist and advocacy/participatory philosophical worldviews. Social constructivists seek to understand the world in which they live.

One goal of the researcher was to rely as much as possible on the participants' views of the situation being studied (Creswell, 2009). Another assumption held by this researcher was that of the advocacy/participatory worldview which holds that research inquiry contains an agenda for action to change the lives of the participants, the institutions in which they work or live, and the researcher's life. Moreover, specific issues that need to be addressed may speak to important social issues, such as inequality, empowerment, oppression, domination, suppression and alienation. This philosophical worldview focuses on the needs of groups and individuals in our society who may be marginalized or disenfranchised (Creswell, 2009).
Setting

This study was conducted in a suburban district in the Hudson Valley in New York. Four schools of the district were used in the study. The district consists of 11 schools, one high school, grades 10-12, one secondary school comprised of grades 8 and 9, three middle schools made up of grades 5-7, four K-4 elementary schools, one K-2 elementary school, and one alternative high school, grades 9-12. The School District data were gathered from the district data repository and the NYS Report Card.

Table 3
District Building Breakdown and Grades Served

<table>
<thead>
<tr>
<th>Building</th>
<th>Number</th>
<th>Grades Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>1</td>
<td>10-12</td>
</tr>
<tr>
<td>Secondary School</td>
<td>1</td>
<td>8-9</td>
</tr>
<tr>
<td>Middle Schools</td>
<td>3</td>
<td>5-6</td>
</tr>
<tr>
<td>Elementary Schools</td>
<td>4</td>
<td>K-4</td>
</tr>
<tr>
<td>Elementary School</td>
<td>1</td>
<td>K-2</td>
</tr>
<tr>
<td>Alternative High School</td>
<td>1</td>
<td>9-12</td>
</tr>
</tbody>
</table>

Table 3 presents the district's building information and grades served in each one.

The racial or ethnic origin breakdown of the number of students who are American Indian or Alaska Native is 36 or >1%, Black or African American is 994 or 12%, Hispanic or Latino 2,979 or 37%, Asian or Native Hawaiian or other Pacific Islander is 252 or 3%, Caucasian is 3,727 or 47%. The number of students who are multiracial is 4, which was less than 1% of the total sample. The enrollment of students with limited English proficiency is 847 or 11%. This information is presented in Table 4.
### Table 4

**Total District Enrollment by Ethnicity**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Total District Student Enrollment</th>
<th>7,988</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or American Native</td>
<td>36</td>
<td>.45%</td>
</tr>
<tr>
<td>African-American or Black</td>
<td>994</td>
<td>12.25%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>2,979</td>
<td>37%</td>
</tr>
<tr>
<td>Asian, Hawaiian, Pacific Islander</td>
<td>252</td>
<td>3.1%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>3,727</td>
<td>46.55%</td>
</tr>
</tbody>
</table>

**Population, Sampling, and Instrumentation**

Quantitative data collected included the following demographic data: ethnicity, LEP, SES, grade level of students referred to IST (n = 66), and students referred to CSE (n = 55) during the 2009-2010 school year. In addition, NYS ELA and Math assessment scores for IST students were collected. The quantitative data collected was analyzed using descriptive statistics.

Qualitative data were gathered from responses of structured interviews consisting of open-ended questions conducted with personnel. The participants in this study were a building administrator from each of the buildings used in the study (n=4) and regular and special education teachers (n=8) of grades 5-9. The researcher planned to have wide representation of the participants, grade level, and courses taught selected from each of the buildings used in the study. The participating administrators of all four schools were currently employed as full-time administrators in their respective buildings. Classroom
teacher participants were currently employed as full-time middle school and secondary school teachers.

Table 5
School Personnel Participants and the Schools Used in the Qualitative Portion of the Study:

<table>
<thead>
<tr>
<th>Administrator</th>
<th>Teachers</th>
<th>Grade</th>
<th>Subject Taught</th>
<th>Ethnicity</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>5</td>
<td>Math</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Language Arts</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>5</td>
<td>Math</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Language Arts</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>7</td>
<td>Language Arts</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>6</td>
<td>Language Arts</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Math</td>
<td>Hispanic</td>
<td>Male</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>9</td>
<td>Science</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>8</td>
<td>Math</td>
<td>Hispanic</td>
<td>Male</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>5</td>
<td>Language Arts</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>7</td>
<td>Science</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
</tbody>
</table>

Table 5 shows the participants' buildings used in the study.
For identification purposes numbers were assigned to the schools and administrators and letters were assigned to teacher participants. These codes are known only to the researcher.

The table above presents information on the district personnel in the buildings used in the study for the qualitative portion of the study. The eight teacher participants were general and special education teachers. These volunteer participants were selected due to their willingness to participate in the study. Interviews were conducted by the researcher in a private location at a time, date, and location agreed to by the participants and the researcher. Interviews were between 20 and 25 minutes in length and were recorded but the transcriptions of the responses do not identify the participant in any way.

The researcher used a coding system for participant identification, such as Participant A, B, C, etc. This coding was known only to the researcher in order to maintain the confidentiality and anonymity of each participant. Each session was listed by a number with no identifiable connection to the participant. The researcher transcribed all of the digital recordings.

A teacher interview schedule of questions created by Mahabir (2009) and modified was used. This researcher requested and was granted permission from Mahabir (Appendix H) to use and modify the interview questions for teachers and administrators. Structured open-ended interviews were used to gather information from the classroom teachers and building administrators. These responses provided information on classroom and school processes that have been implemented as part of the RtI model to assist struggling learners and examine other factors that might contribute to the referral process.
They also provided the researcher with an understanding of respondents' level of involvement and the implementation of the district-designed intervention pyramid.

Methods

A mixed-method approach, using both qualitative and quantitative data, was used to answer the research questions in reference to the achievement and rate of classification into special education of RCELD students referred. The use of this method showed what influence, if any, the implementation of the RtI structure had on the achievement of students referred to IST and CSE and what the final outcomes were for students referred to CSE (Level 3) of the RtI structure. The analysis and results of the data described what influence, if any, RtI had on the students referred for the 2009-2010 school year.

Quantitative data were collected from the district's data repository, the New York State Education Department Website and BEDS. These data provided an overview of the total number of students who went to CSE using categories of race/ethnicity, LEP, SES, and grade. Data were also obtained on who recommended the student to CSE and what the final outcome was for each student, classification and placement or ineligibility to receive services. Permission was requested from and granted by the Superintendent of Schools to conduct the study in the selected district.

The qualitative data showed to what level the district personnel, teachers, and administrators were involved in the implementation of the district-designed RtI model. Qualitative methods were employed to collect information from school personnel regarding the processes used and the involvement in the RtI process. Interviews that included open-ended questions were conducted with classroom teachers and building administrators to gather a wide range of data to answer the guiding questions.
Research Questions

The research questions that guided this study were:

The null hypothesis - H₀ states that RtI had no influence on the achievement of RCELD students in grades 5-9.

1. How has achievement, as defined by scores attained by students referred to IST on the NYS English Language Arts (ELA) and NYS Math assessments of RCELD students, been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?

2. How has the classification rate of RCELD students been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?

3. How has the building administrator been involved in the implementation of the district-designed intervention model?

4. How have the teachers in the respective buildings used the district-designed intervention (RtI) model?

Questions Numbers 1 & 2

1. How has achievement as defined by scores attained by students referred to IST on the NYS English Language Arts (ELA) and NYS Math assessments of RCELD students been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?
2. How has the classification rate of RCELD students been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?

The purpose of the first research question was to examine what, if any, influence the RtI structure had on the achievement as measured by the scores attained on the NYS ELA and Math assessments on the students who were referred to IST (Level 2) of the RtI pyramid.

To answer the first research question, a quantitative method was employed. Data were also gathered from the New York State Basic Educational Data Survey (NYS BEDS), the NYS Department of Education's School Report Card, and the District's data repository.

The introduction of this plan contains descriptive tables of data collected from the District and the NYS Report Card used in the study. The data include information on students referred to IST (Level 2) of RtI, ethnicity, grade, gender, student language diversity, poverty level, and NYS ELA and Math assessments to measure achievement for the students referred to IST in grades 5-9. Repeated Measures (ANCOVAs) were used to determine if achievement, as measured by a change in the raw scores attained on the NYS assessments, differed significantly for the students referred to IST from one year to the next. The interaction between covariates, gender, ethnicity, grade, LEP and SES, and the independent variables were also tested for any significance.

The purpose for the study was to evaluate what, if any, influence IST had on the classification rate of RCELD students. Data were also collected on the number of students referred to the next level of the RtI pyramid, students who went from Level 2 to
Level 3, the Committee on Special Education (CSE), and what the final outcomes were for these students.

Other information collected were data of students who were referred to CSE during the 2009-2010 school year in addition to demographic data and information on the disability determination made by the CSE (classified as learning disabled, mentally retarded, speech and language impaired, and emotionally disturbed).

Information and data were gathered from personnel in the three middle schools (grades 5-7) and the secondary school (grades 8-9), since all students from the middle schools go to the secondary school.

Questions Number 3 and 4

3. How has the building administrator been involved in the implementation of the district-designed intervention model?

4. How have the teachers in the respective building used the district-designed intervention model?

The researcher's purpose for these questions was to gain information on the processes currently being used in the schools to monitor student's academic progress and the processes followed to place students into special education. School personnel who were interviewed volunteered to participate in the study; a building administrator and two teachers were interviewed from each building to provide the researcher with insight as to how involved the administrators and the teachers were regarding the implementation of the RtI structure and the processes followed to provide intervention for students who were showing signs of academic or behavioral difficulty.
Qualitative methods were used to answer research questions three and four. The data to answer these questions were drawn from the interview instruments for administrators (Appendix C) and teachers (Appendix B). The interview instrument used to interview the administrators and the teachers were adapted from Mahabir’s (2009) protocol. Permission (Appendix G) was requested and granted by this researcher to use the interview schedule.

The adaptations made to the interview schedule created by Mahabir were tested for validity and reliability by a panel of experts who were asked to review the questions to be used in the interviews and complete an interview-schedule assessment form (Appendix I) in which they provided information regarding the wording of the questions, whether or not the question should be rejected or accepted and which research question the particular question addressed.

Research Procedures

Approval by the Institutional Review Board (IRB) of Seton Hall University was given to conduct the research study (Appendix D). The approval by IRB testified that the researcher followed established procedures to ensure protection and maintain anonymity of participants. Permission was requested from and granted (Appendix F) by the Superintendent of Schools to conduct the study in the district. Data used in the study were gathered from the New York State Education Department website, BEDS (Basic Educational Data Systems). The researcher contacted each of the building principals and requested to speak with the staff at a faculty meeting to present faculty with the study to be conducted and its purpose. The staff was also informed of the need for participants to participate in structured open-ended interviews for the qualitative portion of the study.
The staff was assured that protection and anonymity of participants would be maintained. After the researcher visited each building to present the study to the staff, a flyer was sent to all staff members of each building describing the study, its significance and outlining the questions to be answered through the research and requesting their willingness to participate in the study (Appendix E). This mailing included an informed consent form (Appendix E) which described the purpose and methodology of the study, guaranteed anonymity, maintained participant protection, explained the right for a participant to withdraw from the interview at any time during the study, and offered a report of the results of the study upon individual request. Those who consented to participate in the study were required to sign and return necessary documentation. A self-addressed, stamped envelope was also included in the mailing.

After the signed consent was received, the researcher provided each participant (administrator or teacher) with a form on which to schedule an appropriate time for the interview. The interview locations and times were decided by each participant within their respective buildings. Interview length, confidentiality, participant anonymity, and environment were factors deeply considered by the researcher. Each interview was conducted using a digital recorder to capture the responses, thoughts, and expressed beliefs of the participants regarding the implementation of the school-designed intervention pyramid. The interviews consisted of open-ended questions to provide information to enhance the results of the study. Teacher and administrator interview transcriptions are included in Appendices J and K, respectively.
Validity and Reliability

The quantitative portion of the study consisted of collecting district data from the NYSED, BEDS 2008-2009 and 2009-2010. New York State requires all districts to submit data and create and submit plans according to mandates outlined in IDEA (2004) and the OSE (Office of Special Education).

The interview instrument questions were tested for content validity. Permission was requested to use the interviews for participants (teachers and administrators) created by Joseph O. Mahabir (2009) (Appendix G). Modifications were made by the researcher to build around the pyramid of interventions. The content validity of an instrument is determined by the extent to which the instrument is a representative sample of the content area being measured (Leedy & Ormond, 2005).

Reliability of the interview instrument is the extent to which it yields consistent results when the characteristic being assessed has not changed (2005). Inter-rater agreement was used to test the reliability of the interview questions, using three raters to evaluate the instruments and provided the same judgments about the open-ended questions to be used in the interview for the qualitative portion of this study. The purpose of piloting the interview instrument was to ensure that the interview participants understood the wording of the questions and that the questions were effectively designed to gather the information presented by the research questions and the theoretical framework guiding this study.

Summary of Chapter 3

In Chapter 3 the researcher detailed the design, methods, and procedures in the data analysis plan, described how the data were gathered, compiled and analyzed in the
current research. Chapter 3 also provided a description of the research, objective, and time dimension in which data were collected to answer the questions that guided this research.

Chapter 4 presents the data and data analyses. For the qualitative portion of the study, responses to the interview questions were transcribed and analyzed by the researcher searching for patterns and themes from the responses of the participants to the guiding questions established. The responses were analyzed using the ACH method. This method requires that the evidence of participants' responses are entered into a matrix and a hypothesis that is aligned is created. Quantitative district data on the demographics of students referred to IST, the attained NYS ELA and Math assessment scores (2008-2009 and 2009-2010) and data on students referred to CSE were collected during 2009-2010 for school year. These data were analyzed to determine what, if any, influence the RtI intervention (IST) had on student achievement and on the classification rate during 2009-2010.
CHAPTER 4

ANALYSIS OF RESULTS

This chapter presents the data and statistical analyses of data collected to examine the influence of a school-designed Response to Intervention structure on the achievement and classification rate of Racially, Culturally, Ethnically, Linguistically, Diverse (RCELD) students in special education by exploring a local school district’s processes that may have contributed to student achievement and/or classification.

The quantitative portion of the study included demographic data from all four schools used in the study 2009-2010 school year. Test data were collected for the surveyed students for the 2008-2009 and 2009-2010 school years. Using qualitative data, the researcher enriched the study analysis with administrator and teacher interviews. RtI is a problem-solving process implemented to provide students with interventions as soon as they begin to experience academic or behavioral difficulty. Theoretically, if these difficulties are caught early and specific interventions and monitoring take place, then there is no need for the student to be placed in a separate setting or program. This structure allows school personnel to provide and monitor interventions before recommending a student for special education. The structures used by the personnel in the schools used in this study are in the shape of a pyramid with three or four levels or tiers depending on the school. At the first tier, 80% of the students are assessed and monitored by their teachers in their general education classroom setting. Teachers at the first tier provide instruction to meet the needs of all students in their classes. In Tier 2, about 15% of students who have shown academic or behavioral difficulties are referred to
the building’s instructional support team (IST) through a process detailed by the building personnel. In Tier 3 there are more intense interventions, such as recommendation for students to go to CSE for testing and possible placement in a separate setting.

In the first section of this chapter the researcher describes the setting for the study. In the second section a table provides a visual representation of the questions that guided this study along with the data collected and the analyses used. The third section includes a computer analysis of the semi-structured interviews conducted. The teacher and administrator protocol are presented in Appendices J and K.

Setting for the study

This study was conducted in a suburban school district that served approximately 7,988 students in the Hudson Valley of New York. The district was comprised of 46.55% White, 37.65% Hispanic, 12.25% Black, and 3.1% other. The district is considered to be both ethnically and economically diverse. The racial or ethnic origin breakdown of the students who are American Indian or Alaska Native is 36 or >1%, Black or African American is 994 or 12%, Hispanic or Latino is 2,979 or 37.65%, Asian or Native Hawaiian or other Pacific Islander is 252 or 3%, and Caucasian is 3,727 or 47%. The number of students who are multiracial is 4, which was less than 1% of the total sample. The enrollment of students with limited English proficiency is 847 or 11%.
Table 6

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Total District Student Enrollment</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or American</td>
<td>36</td>
<td>45%</td>
</tr>
<tr>
<td>Native</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>994</td>
<td>12.25%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>2,979</td>
<td>37.53%</td>
</tr>
<tr>
<td>Asian, Hawaiian, Pacific Islander</td>
<td>252</td>
<td>3.1%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>3,727</td>
<td>46.53%</td>
</tr>
</tbody>
</table>

Table 6 shows the racial/ethnic breakdown of the students in the district (2010).

Descriptive information is presented in Table 7 for each of the schools used in the study.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Configuration</td>
<td>5-7</td>
<td>5-7</td>
<td>8-9</td>
<td>5-7</td>
</tr>
<tr>
<td>Student Enrollment</td>
<td>N=545</td>
<td>N=563</td>
<td>N=1,200</td>
<td>N=703</td>
</tr>
<tr>
<td>Student Socio-Economic</td>
<td>N=172</td>
<td>N=240</td>
<td>N=343</td>
<td>N=173</td>
</tr>
<tr>
<td>Status</td>
<td>31%</td>
<td>43%</td>
<td>49%</td>
<td>6%</td>
</tr>
<tr>
<td>Percent of SES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>N=43</td>
<td>N=77</td>
<td>N=107</td>
<td>N=44</td>
</tr>
</tbody>
</table>

Table 7 represents a profile of the schools used in the study, including grade configuration, student enrollment, socio-economic status, SES enrollment, and Limited English Proficient students. This data was obtained from the 2010 NYS Report Card.
Following are descriptive and frequency tables that explain the variables used to test the null hypothesis. The following tables represent information that would clarify what data were collected before they were analyzed. Table 8 presents the statistics of the academic achievement variables, NYS ELA and NYS Math Assessments from two different years 2008-2009 and 2009-2010. The assessment scores for the population used in this study are represented in Table 8. It is important to note that there were no scores for ninth grade students, as they do not take either assessment in the ninth grade.

The tables that follow describe variables used in the study for their influence on achievement. Socio-economic status membership was determined by students who receive “free or reduced lunch” and students who do not receive “free or reduced lunch” (Table 9), students considered SES, n = 44 and students not considered SES, n = 22. Racially, culturally, and linguistically diverse students were the focus of this study.

Table 10 represents the membership of RCE students. They are represented as minority (RCE) or non-minority, n = 56 (includes Hispanic and African American students combined). Grade was another variable used because of the configuration used in the schools under study. The middle schools are comprised of grades 5-7, and the secondary school is made up of grades 8 and 9; grade 5, n = 21, grade 6, n = 9, grade 7, n = 12, grade 8, n= 20 and grade 9, n = 4 (Table 11).

Table 12 is a frequency table representing gender membership; male, n=34 and female, n = 32. The next table used is a frequency table that presents the LEP group membership, represented by no, n = 56 (not considered LEP status) and yes, n = 10 (considered LEP status), Table 13.
Table 8

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA Raw Score 2009 - 2010</td>
<td>59</td>
<td>564</td>
<td>686</td>
<td>650.00</td>
<td>20.927</td>
</tr>
<tr>
<td>MATH Raw Score 2008 - 2009</td>
<td>62</td>
<td>455</td>
<td>704</td>
<td>647.03</td>
<td>38.340</td>
</tr>
<tr>
<td>MATH Raw Score 2009 - 2010</td>
<td>59</td>
<td>480</td>
<td>719</td>
<td>649.03</td>
<td>31.148</td>
</tr>
</tbody>
</table>

Table 8 represents scores of assessments used to measure achievement.

Table 9

Frequency Table of SES Group Membership.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>22</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Low SES</td>
<td>44</td>
<td>66.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SES status of students referred to IST represented in Table 9.
The ethnicity membership of students referred to IST is represented in Table 10.

**Table 10**

<table>
<thead>
<tr>
<th>Frequency Table of Ethnicity Group Membership</th>
<th>Valid</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Non-minority Student</td>
<td>10</td>
<td>15.2</td>
</tr>
<tr>
<td>Valid Minority Student</td>
<td>56</td>
<td>84.8</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The ethnicity membership of students referred to IST is represented in Table 10.

**Table 11**

<table>
<thead>
<tr>
<th>Frequency table of student grade.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Valid 5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Table 12**

<table>
<thead>
<tr>
<th>Frequency table of gender group membership.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Valid Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Gender group membership of students referred to IST is represented in Table 12.
Table 13

Frequency table of LEP group membership

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>No</td>
<td>56</td>
<td>84.8</td>
<td>84.8</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>10</td>
<td>15.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>66</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 13 shows the number of LEP and non-LEP student status.

The mixed method was employed in collecting quantitative and qualitative data.

Johnson's (2001) table of types of research obtained by crossing research objective and time dimensions, used in this study, is presented in Table 14.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Time Dimension</th>
<th>Design</th>
<th>Data Collection</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How has the achievement of RCELD students been influenced following the use of a district-designed pyramid of intervention, as defined by scores attained on the NYS ELA and NYS Math students b Assessments in grades 5-9 during the 2009-2010 School year?</td>
<td>Cross-Sectional Panel Studies</td>
<td>Descriptive</td>
<td>District data</td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-experimental Type 2 (Johnson, 2001)</td>
<td>BEDS</td>
<td>Inferential</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NYSED</td>
<td>Statistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VADIR</td>
<td>Repeated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2009-2010</td>
<td>Measures; ANCOVA</td>
</tr>
<tr>
<td>2. How has the Classification rate of RCELD Students into special education been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the 2009-2010 school year?</td>
<td>Cross-Sectional Panel Studies</td>
<td>Descriptive</td>
<td>District data</td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-experimental Type 2 (Johnson, 2001)</td>
<td>BEDS</td>
<td>Inferential</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NYSED</td>
<td>Statistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VADIR</td>
<td>Repeated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2009-2010</td>
<td>Measures; ANCOVA</td>
</tr>
<tr>
<td>3. How has the building administrator been involved in the implementation of the district-designed intervention (RtI) model?</td>
<td>Cross-Sectional</td>
<td>Descriptive</td>
<td>Structured Interviews</td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-experimental</td>
<td>Open ended Interviews</td>
<td>Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Instructional</td>
<td>Transcriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Support Team</td>
<td>Analysis of Competing Hypotheses (Heuer, 1976)</td>
</tr>
<tr>
<td>4. How have the teachers in their respective buildings used the district-designed intervention (RtI) model?</td>
<td>Cross-Sectional</td>
<td>Descriptive</td>
<td>Structured Interviews</td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-experimental</td>
<td>Open ended Interviews</td>
<td>Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Instructional</td>
<td>Transcriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Support Team</td>
<td>Using ACH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Analysis of Competing Hypotheses (Heuer, 1976)</td>
</tr>
</tbody>
</table>
Table 14 provides the reader with a visual representation of how the questions that guided this study were answered: time dimension employed, the design and data collection methods, statistical analysis, and the methodology employed to analyze the information to answer all questions that guided the study.

**Data Analysis and Results**

**Research Question Number 1**

How has achievement as defined by scores attained by students referred to IST on the NYS English Language Arts (ELA) and NYS Math assessments of RCELD students been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?

The researcher collected data from the district’s data repository system and data that have already been reported to the NYS Education Department. A null hypothesis was developed.

The null hypotheses $H_0$ states: IST intervention had no influence on the achievement of RCELD male students as measured by the scores on the NYS ELA and Math exams for the 2008-2009 and 2009-2010 school years.

To answer question number one, the null hypothesis, separate Repeated Measures Analysis of Covariance (ANCOVA) were performed for the NYS ELA and NYS Math Assessments, examining two points in time 2008-2009 and 2009-2010. The ANCOVA analyses were used to determine if achievement, as measured by a change in the raw...
scores attained on the NYS assessments, differed significantly for the students who were referred to IST from one year to the next.

In the proposed analysis, the dependent variables were achievement scores, while the independent variable was IST participation (represented by time; i.e., pre- and post-IST), and several covariates were tested for their influence on academic achievement. Additionally, demographics were also tested for interaction effects, to determine if the impact that the IST had varied by these demographics. Covariates that were examined included ethnicity, gender, grade, LEP, and SES. Since the sample size of the current analysis was somewhat modest (n = 66), covariates were tested separately in analysis, as a model that included all covariates would lack statistical power to detect significance.

The mean scores for ELA, compared by gender (males to females), are presented in Table 15. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 vs. 2008-2009) and between-subjects effects (male/female).
Table 15
Descriptive Statistics for ELA scores for 2008-2009 and 2009-2010, compared by gender

<table>
<thead>
<tr>
<th>Student Sex/Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA Raw Score 2008-2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>29.948</td>
<td>28</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>14.847</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>23.737</td>
<td>55</td>
</tr>
<tr>
<td>ELA Raw Score 2009-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>14.212</td>
<td>28</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>21.808</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>18.189</td>
<td>55</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that ELA scores did not change significantly from the 2008-2009 to the 2008-2009 school year (Pillai’s Trace=.020, F[1]=1.071, p>.05; Table 16), holding gender constant. Additionally, results also indicated that the change in ELA scores over time did not significantly vary by gender, as the interaction term of “Time*Gender” was not significant (Pillai’s Trace=.022, F[1]=1.206, p>.05; Table 16).
### Table 16

Testing of Within-Subjects Effects of Change in ELA Scores over Time and of the Time-by-Gender Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Hypothesis Error</th>
<th>Effect Value</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td>.020</td>
<td>1.071</td>
<td>1.000</td>
<td>53.000</td>
<td>.305</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td></td>
<td>.980</td>
<td>1.071</td>
<td>1.000</td>
<td>53.000</td>
<td>.305</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td></td>
<td>.020</td>
<td>1.071</td>
<td>1.000</td>
<td>53.000</td>
<td>.305</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td></td>
<td>.020</td>
<td>1.071</td>
<td>1.000</td>
<td>53.000</td>
<td>.305</td>
</tr>
<tr>
<td>Time * Gender</td>
<td></td>
<td>.022</td>
<td>1.206</td>
<td>1.000</td>
<td>53.000</td>
<td>.277</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td></td>
<td>.978</td>
<td>1.206</td>
<td>1.000</td>
<td>53.000</td>
<td>.277</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td></td>
<td>.023</td>
<td>1.206</td>
<td>1.000</td>
<td>53.000</td>
<td>.277</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td></td>
<td>.023</td>
<td>1.206</td>
<td>1.000</td>
<td>53.000</td>
<td>.277</td>
</tr>
</tbody>
</table>

Changes in ELA scores over time, compared by male and female, were plotted in a line graph (Figure 3) and support these conclusions, showing that the growth trajectory of ELA scores was approximately equivalent between males and females. Figure 3 also demonstrated that neither males nor females experienced substantial change in score between years.
Figure 3
*Estimated marginal means of ELA, comparing student gender*

This figure shows the estimated marginal means of ELA by comparing male and female scores over two points in time: 2008-2009 (Time 1) and 2009-2010 (Time 2).
Between-subjects effects determine whether the mean ELA scores were significantly different between gender groups (male vs. female, Table 17). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately at each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were no significant omnibus effects by gender ($F[1] = 0.203, p > 0.05$; Table 17), indicating that males and females did not significantly differ in their ELA scores. These findings supported lack of apparent differences in group mean scores at either time point in Figure 3.

Table 17

Tests of Between-Subjects Effects of Gender on ELA Scores

<table>
<thead>
<tr>
<th>Measure: ELA</th>
<th>Transformed Variable: Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Type III Sums of Squares</td>
</tr>
<tr>
<td>Intercept</td>
<td>23231141.857, 1</td>
</tr>
<tr>
<td>Gender</td>
<td>57.037, 1</td>
</tr>
<tr>
<td>Error</td>
<td>14876.963, 53</td>
</tr>
<tr>
<td>df</td>
<td>Mean Square</td>
</tr>
<tr>
<td>Intercept</td>
<td>23231141.857</td>
</tr>
<tr>
<td>Gender</td>
<td>57.037</td>
</tr>
<tr>
<td>Error</td>
<td>2806.997</td>
</tr>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Intercept</td>
<td>82762.222, .000</td>
</tr>
<tr>
<td>Gender</td>
<td>203, .654</td>
</tr>
<tr>
<td>Error</td>
<td>83 -</td>
</tr>
</tbody>
</table>
Next, differences between males and females were further examined, comparing changes in math scores from 2008-2009 to 2008-2009. Descriptive statistics are presented in Table 18. Results of Repeated Measures (ANCOVA) with within-subjects effects for math scores (2008-2009 vs. 2000-2010) and between-subjects effects of gender (male/female) are presented in Table 19.

Table 18

<table>
<thead>
<tr>
<th>Student Sex/Gender</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Raw Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-2009</td>
<td>Male</td>
<td>653.52</td>
<td>26.345</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>642.64</td>
<td>42.168</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>648.18</td>
<td>35.134</td>
</tr>
<tr>
<td>Math Raw Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009-2010</td>
<td>Male</td>
<td>657.97</td>
<td>20.566</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>645.14</td>
<td>21.739</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>651.67</td>
<td>21.925</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that math scores did not significantly change from the 2008-2009 to the 2009-2010 school year (Pillai’s Trace = 0.009, $F[1] = 0.497$, $p > .05$; Table 19), holding gender constant. Additionally, results also indicated that the change in Math scores over time did not significantly vary by gender, as the interaction term of “Time*Gender” was not significant (Pillai’s Trace = 0.001, $F[1] = 0.039$, $p > .05$; Table 19).
Table 19

Testing of Within-Subjects Effects of Change in Math Scores over Time and of the Time-by-Gender Interaction.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Test</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis</th>
<th>df</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Pillai's Trace</td>
<td>0.009</td>
<td>0.497</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>0.991</td>
<td>0.497</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>0.009</td>
<td>0.497</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>0.009</td>
<td>0.039</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>0.001</td>
<td>0.039</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>0.001</td>
<td>0.039</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>0.001</td>
<td>0.039</td>
<td>1.000</td>
<td>55</td>
<td>55</td>
<td>.484</td>
</tr>
</tbody>
</table>

a. Exact statistic
b. Design: Intercept + Gender; Within Subjects Design: Time

Changes in math scores over time, compared by male and female, were plotted in a line graph (Figure 4) and support these conclusions, showing that the growth trajectory of math scores was approximately equivalent between males and females. Figure 4 also demonstrated that neither males nor females experienced substantial change in score between years.
Figure 4
Estimated marginal means of math, comparing student gender

This figure shows the estimated marginal means of Math by comparing male and female scores over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).
Between-subjects effects determine whether the mean math scores were significantly different between gender groups (male vs. female, Table 20). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately at each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were significant omnibus effects by gender (F(1) = 4.077, p<.05; Table 20), indicating that males and females significantly differed in their math scores. These findings are further supported by the differences between group mean scores at both time points, which are evident in Figure 4. Specifically, during the 2008-2009 school year, male students (M = 653.52, SD=26.345) demonstrated higher math raw test scores than did female students (M = 642.64, SD=42.168). A similar trend was observed during the 2008-2009 school year, as male students (M=657.97, SD=20.566) earned higher math scores than did female students (M=645.14, SD=21.739).
### Tests of Between-Subjects Effects of Gender on Math Score

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.406E7</td>
<td>1</td>
<td>2.406E7</td>
<td>49048.789</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>1999.906</td>
<td>1</td>
<td>1999.906</td>
<td>4.077</td>
<td>.048</td>
</tr>
<tr>
<td>Error</td>
<td>26980.989</td>
<td>55</td>
<td>490.563</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ELA and math scores were also examined, respectively, for their change over time, relative to the student's Limited English Proficiency (LEP) status. Mean scores for ELA, compared by LEP status (LEP to non-LEP), are presented in Table 21. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 vs. 2009-2010) and between-subjects effects (LEP vs. non-LEP).

- 88 -
Table 21

Descriptive Statistics for ELA Scores for 2008-2009 and 2009-2010, compared by LEP status

<table>
<thead>
<tr>
<th>Limited English Proficient (LEP)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELA Raw Score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-2009</td>
<td>No</td>
<td>652.79</td>
<td>19.557</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>620.88</td>
<td>28.955</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>648.15</td>
<td>23.737</td>
</tr>
<tr>
<td>2009-2010</td>
<td>No</td>
<td>653.57</td>
<td>18.357</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>641.75</td>
<td>13.926</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>651.85</td>
<td>18.189</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that ELA scores changed significantly from the 2008-2009 to the 2009-2010 school year (Pillai's Trace=.086, F[1]=4.988, p<.05; Table 22), holding LEP status constant. Additionally, results also indicated that the change in ELA scores over time significantly varied by LEP group, as the interaction term of “Time*LEP” was significant (Pillai’s Trace=.075, F[1]=4.289, p<.05; Table 22).

Changes in ELA scores over time, compared by LEP and non-LEP, were plotted in a line graph (Figure 5) and support these conclusions, showing that the growth trajectory of ELA scores differed between LEP and non-LEP. Specifically, Figure 5 shows that the gap in ELA scores between students LEP status (M= 620.88, SD=28.955) and students considered non-LEP (M=652.79, SD=19.557) was widest during the 2008-2009 school year, while the gap diminished during the 2009-2010 school year. Non-LEP students experienced little or no change in their ELA scores for the 2008-2009 school year (M=653.57, SD=18.387), while LEP students saw an increase in scores over time (M=641.75, SD=13.926; Table 22; Figure 5).
Testing of Within-Subjects Effects of Change in ELA Scores over Time and of the Time-by-LEP Status Interaction

### Multivariate Tests

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.086</td>
<td>4.988*</td>
<td>1.000</td>
<td>53.000</td>
<td>.030</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>.914</td>
<td>4.988*</td>
<td>1.000</td>
<td>53.000</td>
<td>.030</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>.094</td>
<td>4.988*</td>
<td>1.000</td>
<td>53.000</td>
<td>.030</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>.094</td>
<td>4.988*</td>
<td>1.000</td>
<td>53.000</td>
<td>.030</td>
</tr>
<tr>
<td><strong>Time * LEP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.075</td>
<td>4.289*</td>
<td>1.000</td>
<td>53.000</td>
<td>.043</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>.925</td>
<td>4.289*</td>
<td>1.000</td>
<td>53.000</td>
<td>.043</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>.081</td>
<td>4.289*</td>
<td>1.000</td>
<td>53.000</td>
<td>.043</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>.081</td>
<td>4.289*</td>
<td>1.000</td>
<td>53.000</td>
<td>.043</td>
</tr>
</tbody>
</table>

- Exact statistic
- Design: Intercept + LEP; Within Subjects Design:
Figure 5

*Estimated marginal means of ELA, comparing student LEP status (LEP to students not considered LEP)*

This figure shows the estimated marginal means of ELA by comparing scores of students' LEP status over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).
Between-subjects effects determine whether the mean ELA scores were significantly different between LEP groups (LEP and non-LEP, Table 23). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were no significant omnibus effects by LEP (F[1]=14.855, p<.05), indicating that males and females did not significantly differ in their ELA scores. These findings are further supported by the lack of apparent differences in group mean scores at either time point in Figure 5.
Table 23

Tests of Between-Subjects Effects of LEP on ELA Score

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Parameter</th>
<th>B</th>
<th>S.E.</th>
<th>t</th>
<th>Sig.</th>
<th>95% C.I. Lower Bound</th>
<th>95% C.I. Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA Raw Score</td>
<td>Intercept</td>
<td>620.875</td>
<td>7.439</td>
<td>83.464</td>
<td>.000</td>
<td>605.955</td>
<td>635.795</td>
</tr>
<tr>
<td></td>
<td>[LEP=0]</td>
<td>31.912</td>
<td>8.047</td>
<td>3.966</td>
<td>.000</td>
<td>15.772</td>
<td>48.053</td>
</tr>
<tr>
<td></td>
<td>[LEP=1]</td>
<td>0*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELA Raw Score</td>
<td>Intercept</td>
<td>641.750</td>
<td>6.375</td>
<td>101.523</td>
<td>.000</td>
<td>629.084</td>
<td>654.416</td>
</tr>
<tr>
<td></td>
<td>[LEP=1]</td>
<td>0*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This parameter is set to zero because it is redundant.

Mean scores for math, compared by LEP status (LEP vs. non-LEP), are presented in Table 24. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 vs. 2009-2010) and between-subjects effects (LEP vs. non-LEP).
Table 24

Descriptive Statistics for Math scores for 2008-2009 and 2009-2010, compared by LEP status

<table>
<thead>
<tr>
<th>Limited English Proficient (LEP)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Raw Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008 - 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>649.98</td>
<td>36.740</td>
<td>48</td>
</tr>
<tr>
<td>Yes</td>
<td>638.56</td>
<td>24.229</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>648.18</td>
<td>35.134</td>
<td>57</td>
</tr>
<tr>
<td>Math Raw Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009 - 2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>653.98</td>
<td>20.793</td>
<td>48</td>
</tr>
<tr>
<td>Yes</td>
<td>639.33</td>
<td>24.995</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>651.67</td>
<td>21.935</td>
<td>57</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that math scores did not change significantly from the 2008-2009 to the 2009-2010 school year (Pillai's Trace=.002, F[1]=0.125, p>.05; Table 25, holding LEP status constant. Additionally, results also indicated that the change in math scores over time did not vary significantly by LEP status, as the interaction term of "Time*LEP" was not significant (Pillai's Trace=.001, F[1]=0.057, p>.05; Table 25).

Changes in math scores over time, compared by LEP to non-LEP students, were plotted in a line graph (Figure 6) and support these conclusions, showing that the growth trajectory of math scores was approximately equivalent between LEP and non-LEP students. Figure 6 also demonstrated that neither LEP nor non-LEP students experienced substantial change in score between years.
Table 25

Testing of Within-Subject Effects of Change in Math Scores over Time and of the Time-by-LEP Status Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Pillai's Trace</th>
<th>F</th>
<th>df</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>.002</td>
<td>.125</td>
<td>1.000</td>
<td>55.000</td>
<td>.725</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.998</td>
<td>.125</td>
<td>1.000</td>
<td>55.000</td>
<td>.725</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.002</td>
<td>.125</td>
<td>1.000</td>
<td>55.000</td>
<td>.725</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.002</td>
<td>.125</td>
<td>1.000</td>
<td>55.000</td>
<td>.725</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect</th>
<th>Pillai's Trace</th>
<th>F</th>
<th>df</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time * LEP</td>
<td>.001</td>
<td>.057</td>
<td>1.000</td>
<td>55.000</td>
<td>.812</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.999</td>
<td>.057</td>
<td>1.000</td>
<td>55.000</td>
<td>.812</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.001</td>
<td>.057</td>
<td>1.000</td>
<td>55.000</td>
<td>.812</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.001</td>
<td>.057</td>
<td>1.000</td>
<td>55.000</td>
<td>.812</td>
</tr>
</tbody>
</table>

Levene's Test of Equality of Error Variances

Between-subjects effects determine whether the mean math scores were not significantly different between LEP status groups (LEP to non-LEP, Table 26). Between-subjects effects are first tested for overall effects (omnibus effects) and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were no significant omnibus effects by LEP status (F[1]=2.557, p>.05; Table 26), indicating that LEP and non-LEP students did not significantly differ in their math scores. These findings are further supported by the lack of apparent differences between group mean scores at either time point in Figure 6.
Figure 6
Estimated marginal means of math, comparing scores of student LEP status

This figure shows the estimated marginal means of math by comparing scores of students considering their LEP status over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2); yes, considered LEP; no, considered non-LEP.
Table 26

Tests of Between-Subjects Effects of LEP Status on Math Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>12630192.781</td>
<td>1</td>
<td>12630192.781</td>
<td>25084.157</td>
<td>.000</td>
</tr>
<tr>
<td>LEP</td>
<td>1287.693</td>
<td>1</td>
<td>1287.693</td>
<td>2.557</td>
<td>.116</td>
</tr>
<tr>
<td>Error</td>
<td>27693.20</td>
<td>55</td>
<td>503.513</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ELA and math scores were also examined, respectively, for their change over time, relative to the student’s grade in school (grades 5-8). Mean scores for ELA, compared by grade, are presented in Table 27. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 vs. 2009-2010) and between-subjects effects (grade).

Table 27

Descriptive Statistics for ELA Scores for 2008-2009 and 2009-2010, compared by Grade

<table>
<thead>
<tr>
<th>Student Grade</th>
<th>ELA Raw Score</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009</td>
<td>5</td>
<td>646.70</td>
<td>36.222</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>652.14</td>
<td>11.097</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>642.36</td>
<td>9.636</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>651.94</td>
<td>13.836</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>648.15</td>
<td>23.737</td>
<td>55</td>
</tr>
<tr>
<td>2009-2010</td>
<td>5</td>
<td>656.25</td>
<td>12.238</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>633.43</td>
<td>32.928</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>650.82</td>
<td>8.852</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>644.12</td>
<td>18.296</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>651.85</td>
<td>18.189</td>
<td>55</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that ELA scores did not significantly change from the 2008-2009 to the 2009-2010 school year (Pillai’s Trace=.001, F[1]=0.054, p>.05; Table 28). Additionally, results also indicated that the change in ELA scores over
time did not significantly vary by grade, as the interaction term of "Time*Grade" was not significant (Pillai’s Trace=.106, F[1]=2.007, p>.05; Table 28).

Table 28

Testing of Within-Subject Effects of Change in ELA Scores over Time and of the Time-by-Grade Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>.001</td>
<td>.054*</td>
<td>1.000</td>
<td>51.000</td>
<td>.817</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.999</td>
<td>.054*</td>
<td>1.000</td>
<td>51.000</td>
<td>.817</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.001</td>
<td>.054*</td>
<td>1.000</td>
<td>51.000</td>
<td>.817</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.001</td>
<td>.054*</td>
<td>1.000</td>
<td>51.000</td>
<td>.817</td>
</tr>
<tr>
<td>Time*grade</td>
<td>.106</td>
<td>2.007*</td>
<td>3.000</td>
<td>51.000</td>
<td>.125</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.894</td>
<td>2.007*</td>
<td>3.000</td>
<td>51.000</td>
<td>.125</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>.118</td>
<td>2.007*</td>
<td>3.000</td>
<td>51.000</td>
<td>.125</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.118</td>
<td>2.007*</td>
<td>3.000</td>
<td>51.000</td>
<td>.125</td>
</tr>
</tbody>
</table>

a. Exact statistic
b. Design: Intercept + grade; Within Subjects Design: Time

Changes in ELA scores over time, compared by grade, were plotted in a line graph (Figure 7) and support these conclusions, showing that the growth trajectory of ELA scores was approximately equivalent between students of different grade levels. Although some modest differences in trajectory are evident in Figure 7 between students of different grade levels, the differences were not statistically significant. It should be noted that the sample size of the current analysis was not large and failure to find significance, in some instances, may be related to a lack of power.
Estimated Marginal Means of ELA

Figure 7
Estimated marginal means of ELA, comparing scores by grade level

This figure shows the estimated marginal means of ELA by comparing scores by students' grade level over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).

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Between-subjects effects determine whether the mean ELA scores were significantly different between students of different grade levels. Between-subjects effects are first tested for overall effects (omnibus effects) and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were no significant omnibus effects by grade ($F[1]=.709, p>.05$; Table 29), indicating that students of different grades did not differ significantly in their ELA scores. These findings are further supported by the lack of substantial differences between group mean scores for students from different grades at either time point in Figure 7.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1965433.116</td>
<td>1</td>
<td>1965433.116</td>
<td>6991.693</td>
<td>.000</td>
</tr>
<tr>
<td>grade</td>
<td>597.690</td>
<td>3</td>
<td>199.230</td>
<td>.709</td>
<td>.551</td>
</tr>
<tr>
<td>Error</td>
<td>14336.310</td>
<td>51</td>
<td>281.104</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean scores for math, compared by grade, are presented in Table 30. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 vs. 2009-2010) and between-subjects effects (grade).

Within-subjects results indicated that math scores did not significantly change from the 2008-2009 to the 2009-2010 school year ($Pillai's Trace=.046, F[1]=2.577, p>.05$; Table 31). Additionally, results also indicated that the change in math scores over
time varied significantly by grade, as the interaction term of "Time* Grade" was significant (Pillai’s Trace=.137, F[1]=2.803, p<.05; Table 31).

Table 30

Descriptive Statistics for Math Scores for 2008-2009 and 2009-2010, compared by grade

<table>
<thead>
<tr>
<th>Student Grade</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Raw Score 5</td>
<td>645.67</td>
<td>25.716</td>
<td>21</td>
</tr>
<tr>
<td>2008-2009 6</td>
<td>628.75</td>
<td>74.580</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>647.09</td>
<td>23.115</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>661.12</td>
<td>18.196</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>648.16</td>
<td>35.134</td>
<td>57</td>
</tr>
<tr>
<td>Math Raw Score 5</td>
<td>646.00</td>
<td>29.533</td>
<td>21</td>
</tr>
<tr>
<td>2009-2010 6</td>
<td>659.63</td>
<td>21.091</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>658.82</td>
<td>13.022</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>659.29</td>
<td>13.443</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>651.67</td>
<td>21.935</td>
<td>57</td>
</tr>
</tbody>
</table>

Table 31

Testing of Within Subject Effects of Change in Math Scores over Time and of the Time-by-Grade Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Pllai’s Trace</th>
<th>Wilks’ Lambda</th>
<th>Hotelling’s Trace</th>
<th>Roy’s Largest</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>0.46</td>
<td>2.577</td>
<td>1.000</td>
<td>53.000</td>
<td>.114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>0.54</td>
<td>2.577</td>
<td>1.000</td>
<td>53.000</td>
<td>.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hotelling’s Trace</td>
<td>0.49</td>
<td>2.577</td>
<td>1.000</td>
<td>53.000</td>
<td>.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roy’s Largest</td>
<td>0.49</td>
<td>2.803</td>
<td>1.000</td>
<td>53.000</td>
<td>.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time* grade</td>
<td>0.137</td>
<td>2.803</td>
<td>3.000</td>
<td>53.000</td>
<td>.049</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>0.863</td>
<td>2.803</td>
<td>3.000</td>
<td>53.000</td>
<td>.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hotelling’s Trace</td>
<td>1.59</td>
<td>2.803</td>
<td>3.000</td>
<td>53.000</td>
<td>.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roy’s Largest</td>
<td>1.59</td>
<td>3.000</td>
<td>53.000</td>
<td>.049</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Exact statistic
b. Design: Intercept + grade; Within Subjects Design: Time

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Changes in math scores over time, compared by grade, were plotted in a line graph (Figure 8) and support these conclusions, showing that the growth trajectory of math scores was somewhat different between students of different grade levels (Figure 8). The figure demonstrates that the greatest gains in math scores were experienced by 6th graders, while modest gains were also seen in 7th graders (Figure 8) and 5th and 8th graders experienced a slight decline or no change, respectively (Figure 8).
This figure shows the estimated marginal means of math by comparing scores by students' grade level over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).
Between-subjects effects determine whether the mean math scores were significantly different between students of different grade levels. Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were no significant omnibus effects by grade (F[1]=.819, p>.05; Table 32), indicating that students of different grades did not significantly differ in their math scores, even though they did differ at the rate at which their math scores changed over time (within-subjects effects).

Table 32

Tests of Between-Subjects Effects of Grade on Math Scores
Measure: Math
Transformed Variable: Average

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>209,496,179.975</td>
<td>1</td>
<td>209,496,179</td>
<td>400,88,604</td>
<td>.000</td>
</tr>
<tr>
<td>grade</td>
<td>128,408.03</td>
<td>3</td>
<td>42,802.67</td>
<td>.819</td>
<td>.409</td>
</tr>
<tr>
<td>Error</td>
<td>276,963.892</td>
<td>53</td>
<td>5,22,583</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Socio-economic status (SES) was also examined as a covariate of the change of ELA and Math scores over time, with students dichotomized into “Free/Reduced” (received free or reduced lunch) and “Not Free/Reduced.” The mean scores for ELA, compared by SES (received free or reduced lunch) are presented in Table 33.
Table 33

**Descriptive Statistics for ELA Scores for 2008-2009 and 2009-2010 Compared by SES**

<table>
<thead>
<tr>
<th>SES</th>
<th>ELA Raw Score 2008-2009</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not</td>
<td>659.94</td>
<td>18.257</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Free/Reduced</td>
<td>642.87</td>
<td>24.200</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>648.15</td>
<td>23.737</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>ELA Raw Score 2009-2010</td>
<td>657.00</td>
<td>15.383</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>649.55</td>
<td>19.050</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Free/Reduced</td>
<td>649.55</td>
<td>19.050</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>651.85</td>
<td>18.189</td>
<td>55</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that ELA scores did not significantly change from the 2008-2009 to the 2009-2010 school year (Pillai’s Trace=.005, F[1]=0.244, p>.05; Table 34). Additionally, results also indicated that the change in ELA scores over time did not significantly vary by SES group, as the interaction term of “Time*SES” was not significant (Pillai’s Trace=.030, F[1]=1.613, p>.05; Table 34).
Table 34

Testing of Within-Subject Effects of Change in ELA Scores over Time and of the Time-by-SES Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Pillai's Trace</td>
<td>.005</td>
<td>1.000</td>
<td>53.000</td>
<td>.623</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>995</td>
<td>1.000</td>
<td>53.000</td>
<td>.623</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>005</td>
<td>1.000</td>
<td>53.000</td>
<td>.623</td>
</tr>
<tr>
<td>Roy's Largest</td>
<td>.163</td>
<td>1.000</td>
<td>53.000</td>
<td>.623</td>
<td></td>
</tr>
<tr>
<td>Time*SES</td>
<td>Pillai's Trace</td>
<td>.030</td>
<td>1.000</td>
<td>53.000</td>
<td>.210</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>070</td>
<td>1.000</td>
<td>53.000</td>
<td>.210</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>030</td>
<td>1.000</td>
<td>53.000</td>
<td>.210</td>
</tr>
<tr>
<td>Roy's Largest</td>
<td>.030</td>
<td>1.000</td>
<td>53.000</td>
<td>.210</td>
<td></td>
</tr>
</tbody>
</table>

a. Exact statistic
b. Design: Intercept + SES; Within Subjects Design: Time

Between-subjects effects determine whether the mean ELA scores were significantly different between SES groups (Free/Reduced vs. Not Free/Reduced). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were significant omnibus effects by SES group (F(1)=7.105, p<.05; Table 35), indicating that students in the “Free/Reduced” group significantly differed in their ELA scores, when compared to students from the “Not Free/Reduced” group. These findings are further supported by the moderate differences in group mean scores at either time point in Figure 9.
This figure shows the estimated marginal means of ELA by comparing scores by students’ grade level over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).
Table 35

Tests of Between-Subjects Effects of SES on ELA Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.999E7</td>
<td>1</td>
<td>1.999E7</td>
<td>80466.749</td>
<td>.000</td>
</tr>
<tr>
<td>SES</td>
<td>1765.449</td>
<td>1</td>
<td>1765.449</td>
<td>7.105</td>
<td>.010</td>
</tr>
<tr>
<td>Error</td>
<td>13168.551</td>
<td>53</td>
<td>248.463</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since significant omnibus between-subjects effects were found (Table 35), each year was analyzed individually to determine the nature of the overall differences between SES groups (Table 35). Results of this univariate analysis indicated that students of differing SES status only differed from one another during the 2008-2009 school year (B=17.073, SE=6.586, p<.05), as students from the “not free/reduced” group demonstrated significantly higher ELA scores. However, analysis of the 2009-2010 school year indicated that these differences were diminished over time and were no longer detectable as statistically significant.

Changes in ELA scores over time, compared by SES group, were plotted in a line graph (Figure 9) and supported the conclusions that the change in ELA scores did not vary by SES group, showing that the growth trajectory of ELA scores was approximately equivalent between the “free/reduced” group and the “not free/reduced” group (Figure 9).

The mean scores for math, compared by SES, are presented in Table 36. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 vs. 2009-2010) and between-subjects effects (free/reduced vs. not free/reduced).
Table 36

Descriptive Statistics for Math Scores for 2008-2009 and 2009-2010, Compared by SES

<table>
<thead>
<tr>
<th>SES</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH Raw Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008 - 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Low SES</td>
<td>662.11</td>
<td>23.992</td>
<td>18</td>
</tr>
<tr>
<td>Low SES</td>
<td>641.74</td>
<td>37.778</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>648.18</td>
<td>35.134</td>
<td>57</td>
</tr>
<tr>
<td>2009 - 2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Low SES</td>
<td>657.67</td>
<td>16.691</td>
<td>18</td>
</tr>
<tr>
<td>Low SES</td>
<td>648.90</td>
<td>23.654</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>651.67</td>
<td>21.935</td>
<td>57</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that ELA scores did not significantly change from the 2008-2009 to the 2009-2010 school year (Pillai's Trace=.001, F[1]=0.067, p>.05; Table 37). Additionally, results also indicated that the change in math scores over time did not significantly vary by SES, as the interaction term of "Time*SES" was not significant (Pillai's Trace=.022, F[1]=1.222, p>.05; Table 37).
Table 37

Testing of Within-Subject Effects of Change in Math Scores over Time and of the Time-by-SES Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Hypothesis</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pillai’s Trace</td>
<td>F</td>
</tr>
<tr>
<td>Time</td>
<td>.001</td>
<td>.067*</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.999</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>.001</td>
</tr>
<tr>
<td>Time * SES</td>
<td>Pillai’s Trace</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.978</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>.022</td>
</tr>
</tbody>
</table>

a. Exact statistic
b. Design: Intercept + SES; Within Subjects Design: Time

Between-subjects effects determine whether the mean math scores were significantly different between SES groups (free/reduced vs. not free/reduced). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were significant omnibus effects by SES group (F[1]=5.452, p<.05; Table 38), indicating that students in the “free/reduced” group significantly differed in their math scores, when compared to students from the “not” free/reduced” group. These findings are further supported by the moderate differences between group mean scores at either time point in Figure 10.
Changes in math scores over time, compared by SES group, were plotted in a line graph (Figure 10) and supported the conclusions that the change in math scores did not vary by SES group, showing that the growth trajectory of math scores was approximately equivalent between the "free/reduced" group and the "not free/reduced" group (Figure 10).
Figure 10

*Estimated marginal means of math, comparing scores by SES*

This figure shows the estimated marginal means of math by comparing scores by students' grade level over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).
Since significant omnibus between-subjects effects were found (Table 38), the math score from each year was analyzed individually to determine the nature of the overall differences between SES groups (Table 38). Results of this univariate analysis were similar to that of ELA, as students of differing SES status only differed from one another during the 2008-2009 school year (B=20.368, SE=9.722, p<.05) and students from the "Not Free/Reduced group demonstrated significantly higher math scores. However, analysis of the 2009-2010 school year indicated that these differences were diminished over time and were no longer statistically significant during the second year of the study.

### Table 38

**Tests of Between-Subjects Effects of SES on Math Scores**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Parameter</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Raw Score 2008</td>
<td>Intercept</td>
<td>641.744</td>
<td>5.463</td>
<td>117.468</td>
<td>17.468</td>
<td>.000</td>
<td>630.795</td>
</tr>
<tr>
<td></td>
<td>[SES=.00]</td>
<td>20.368</td>
<td>9.722</td>
<td>2.095</td>
<td>.041</td>
<td>.885</td>
<td>39.850</td>
</tr>
<tr>
<td>Math Raw Score 2009</td>
<td>Intercept</td>
<td>648.897</td>
<td>3.481</td>
<td>186.390</td>
<td>1.415</td>
<td>.163</td>
<td>641.921</td>
</tr>
<tr>
<td></td>
<td>[SES=.00]</td>
<td>8.769</td>
<td>6.195</td>
<td>1.415</td>
<td>.163</td>
<td>-3.646</td>
<td>21.185</td>
</tr>
</tbody>
</table>

*This parameter is set to zero because it is redundant.*
The mean scores for ELA, compared by ethnicity (minority vs. non-minority) are presented in Table 39. The ethnicity variable was re-coded from Caucasian, African American and Hispanic to two variables, minority and non-minority. Results of Repeated Measures (ANCOVA) are reported for both within-subjects effects (2008-2009 and 2009-2010) school years and between-subjects effects (minority to non-minority).

Table 39

<table>
<thead>
<tr>
<th>Recoded Ethnicity</th>
<th>2008 - 2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELA Raw Score 0</td>
<td>662.75</td>
<td>22.613</td>
</tr>
<tr>
<td></td>
<td>645.66</td>
<td>23.242</td>
</tr>
<tr>
<td></td>
<td>648.15</td>
<td>23.737</td>
</tr>
<tr>
<td>Non-Minority (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELA Raw Score 0</td>
<td>661.38</td>
<td>16.509</td>
</tr>
<tr>
<td></td>
<td>650.23</td>
<td>18.123</td>
</tr>
<tr>
<td></td>
<td>651.85</td>
<td>18.189</td>
</tr>
</tbody>
</table>

Within subjects results indicated that ELA scores did not differ significantly from the 2008-2009 and 2009-2010 school years (Pillai’s Trace = .002, F[1] = .101, p > .05; Table 40), holding ethnicity constant. Additionally, results also indicated the change in ELA scores over time did not vary significantly by ethnicity, as the interaction term of “Time-Ethnicity R” was not significant (Pillai’s Trace = .007, F[1] = .350, p > .05).
<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Pillai's Trace</td>
<td>.002</td>
<td>.101&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.999</td>
<td>.101&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.002</td>
<td>.101&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>.002</td>
<td>.350&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
<tr>
<td>Time * Ethnicity_r</td>
<td>Pillai's Trace</td>
<td>.007</td>
<td>.350&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.993</td>
<td>.350&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>52.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.007</td>
<td>.350&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>.007</td>
<td>.350&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest</td>
<td>.007</td>
<td>.350&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td>53.000</td>
</tr>
</tbody>
</table>

<sup>a</sup> Exact statistic

Between-subjects effects determine whether the mean ELA scores were significantly different between ethnicity groups (minority vs. non-minority). Between-subjects effects are first tested for overall effects ( omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were significant omnibus effects by ethnicity group (F[1]=5.319, p<.05; Table 41), indicating that students in the minority group significantly differed in their ELA scores, when compared to students from the non-minority group. These findings are further supported by the moderate differences between group mean scores at either point in Figure 11.
This figure shows the estimated marginal means of ELA, comparing scores by students' ethnicity over two points in time: 2008-2009 (Time 1) and 2009-2010 (Time 2).
Since significant omnibus between-subjects effects were found (Table 41), each year was analyzed individually to determine the nature of the overall differences between ethnicity groups (Table 41). Results of this univariate analysis indicated that students of differing ethnicity status only differed from one another during the 2008-2009 school year (Table 42; B=17.090, SE=8.858, p=0.059), and that difference only approached significance in 2008-2009 (Table 42). In that year, non-minority students scored higher than minority students on ELA (Table 42). The non-significant difference found in the 2009-2010 school year (Table 42) between ethnicity groups indicates that those differences were ameliorated over time.
Table 42

**Parameter Estimates of Univariate Effects of Ethnicity, Separately by School Year.**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Parameter</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA Raw Score 2008</td>
<td>Intercept</td>
<td>645.660</td>
<td>3.378</td>
<td>191.125</td>
<td>.000</td>
<td>638.884</td>
</tr>
<tr>
<td>Score 2008 [Ethnicity = 0]</td>
<td>17.090</td>
<td>8.858</td>
<td>1.929</td>
<td>.059</td>
<td>-.676</td>
<td>34.857</td>
</tr>
<tr>
<td>Score 2009 [Ethnicity = 1]</td>
<td>650.234</td>
<td>2.614</td>
<td>248.785</td>
<td>.000</td>
<td>644.992</td>
<td>655.476</td>
</tr>
<tr>
<td>Score 2010 [Ethnicity = 1]</td>
<td>657.60</td>
<td>8.264</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This parameter is set to zero because it is redundant.

Table 43

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Recoded Ethnicity</th>
<th>M</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Raw Score 2008 Non-minority Student</td>
<td>664.25</td>
<td>16.705</td>
<td>8</td>
</tr>
<tr>
<td>2009 Minority Student</td>
<td>645.55</td>
<td>36.734</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>648.18</td>
<td>35.134</td>
<td>57</td>
</tr>
<tr>
<td>Math Raw Score 2009 Non-minority Student</td>
<td>657.60</td>
<td>8.264</td>
<td>8</td>
</tr>
<tr>
<td>2010 Minority Student</td>
<td>650.71</td>
<td>23.341</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>651.67</td>
<td>21.925</td>
<td>57</td>
</tr>
</tbody>
</table>

Within-subjects results indicated that math scores did not differ significantly from the 2008-2009 and 2009-2010 school years (Pillai’s Trace = .000, F[1] = .013, p > .05; Table 43), holding ethnicity constant. Additionally, results also indicated the change in Math scores over time did not vary significantly by ethnicity, as the interaction term of “Time*Ethnicity” was not significant (Pillai’s Trace = .013, F[1] = .713, p > .05). These results indicate that the change in math scores (or lack thereof) over time did not vary by ethnic group (Table 43).
Testing of Within-Subject Effects of Change in Math Scores over Time and of the Time-by-Ethnicity Interaction

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypotheses df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>.000</td>
<td>.013a</td>
<td>1.000</td>
<td>55.000</td>
<td>.911</td>
</tr>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>1.000</td>
<td>.911</td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling’s Trace</td>
<td>.000</td>
<td>.013a</td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>Roy’s Largest</td>
<td>.000</td>
<td>.713a</td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td>Time *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pillai’s Trace</td>
<td>.013</td>
<td></td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>.987</td>
<td>.713a</td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling’s Trace</td>
<td>.013</td>
<td></td>
<td>1.000</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>Roy’s Largest</td>
<td>.013</td>
<td></td>
<td>1.000</td>
<td>55.000</td>
</tr>
</tbody>
</table>

a. Exact statistic
b. Design: Intercept + Ethnicity_R
Within Subjects Design: Time

Between-subjects effects determine whether the mean math scores were significantly different between ethnicity groups (minority vs. non-minority). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were not significant omnibus effects by ethnicity group (F[1]=2.204, p>.05; Table 44), indicating that students in the minority group did not significantly differ in their math scores, when compared to students from the non-minority group. These findings are further supported by the lack of substantial differences between group mean scores at either time point in Figure 12.
Figure 12
*Estimated marginal means of math, comparing scores by ethnicity (minority status)*

This figure shows the estimated marginal means of math by comparing scores by students' ethnicity over two points in time: 2008-2009 (Time 1) 2009-2010 (Time 2).
Table 45

Tests of Between-Subjects Effects of Ethnicity on Math Scores.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.178E7</td>
<td>1</td>
<td>1.178E7</td>
<td>23260.054</td>
<td>.000</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1116.632</td>
<td>1</td>
<td>1116.632</td>
<td>2.204</td>
<td>.143</td>
</tr>
<tr>
<td>Error</td>
<td>27864.763</td>
<td>55</td>
<td>506.623</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary of Analysis for Question 1

First, it is important to note that in reviewing Frequency Table 9 the number of students considered SES status referred to IST was n = 44 or 66.7%, while students not considered SES was n = 22 or 33.3%. SES has been linked to poor achievement in school. Regarding the number of students referred to IST considered non-minority was n = 10 or 15.2% and minority was n = 56 or 56% (Table 10) of the population of students referred to IST. In addition, in looking at Table 11, grade was another focal detail was that grade 5 and grade 8 students were n = 21 or 31.8% and n = 26 or 30.3% respectively, making these two grades of the four grades studied the highest number of students referred to IST.

Results from the Repeated Measures of Covariance (ANCOVA) did not provide evidence to reject the null hypothesis that there were no significant differences in student achievement as measured by the NYS English Language Arts and Math assessments scores found in students who were referred to IST. The results of a series of variables tested to explore whether or not IST referral had any influence on achievement showed that there were no significant changes in assessments scores.
For the limited English proficient status covariate, results showed that English Language Arts scores changed significantly from 2008-2009 to 2009-2010. Additionally, results also indicated that the change in ELA scores over time varied significantly by LEP group. These findings suggest that LEP students who were referred to IST demonstrated achievement in ELA (Pillai's Trace=.086, F[1]=4.988, p<.05; Table 16), holding LEP status constant. However, it is important to note that the percentage of LEP students was 15.2% compared to 84.8% non LEP status students. Students considered LEP showed improvement, while RCEL/D students did not show any significant difference in scores in either ELA or Math.

Between-subjects effects determine whether the mean math scores were significantly different between gender groups (male vs. female, Table 20). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were significant omnibus effects by gender (F[1]=4.077, p<.05; Table 20), indicating that males and females significantly differed in their math scores. These findings are further supported by the differences between group mean scores at both time points, which are evident in Figure 4. Specifically, during the 2008-2009 school year male students (M=653.52, SD=26.345) demonstrated higher math raw test scores than did female students (M=642.64, SD=42.168). A similar trend was observed during the 2008-2009 school...
year, as male students (M=657.97, SD=20.566) earned higher math scores than did female students (M=643.14, SD=21.739).

Research Question Number 2

How has the classification rate of RCELD students been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?

To answer this question the researcher obtained quantitative data from the District’s Data Repository; these data were reported to NYS as part of the district profile for accountability purposes. Statistical analyses were not used due to the modest sample size of students in grades 5-9 referred to CSE during the 2009-2010 school year.

Table 46
Special Education Enrollment for Grades 5-9, 2007-2008, 2008-2009 and 2009-2010 School Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: PK-12</td>
<td>N = 1,463</td>
<td>1,372</td>
<td>1,315</td>
</tr>
<tr>
<td>Grades: 5-9</td>
<td>474</td>
<td>433</td>
<td>399</td>
</tr>
<tr>
<td>% of 5-9 Students Enrolled</td>
<td>32.39%</td>
<td>31.56%</td>
<td>30.34%</td>
</tr>
</tbody>
</table>

The district special education enrollment and the enrollment for grades 5-9 were displayed in Table 40, showing a time duration of three years.

For PK-12 the total special education enrollment during the 2007-2008 and 2008-2009 school years decreased by n = 91 students. For 2008-2009 and 2009-2010, the total special
education enrollment decreased by $n = 57$. Between the years 2007-2008 and 2008-2009 there was a decrease of .83% in the number of students in grades 5-9 enrolled in special education. Between 2008-2009 and 2009-2010 there was a decrease of 2.05%.

For the year 2009-2010, $n = 45$ students in grades 5-9 were referred to CSE. Of the 45 students referred to CSE, 25 were building-initiated and 20 were parent-initiated. The CSE found 10 students ineligible for special education services and 38 were found eligible. A breakdown of students classified by disability is as follows: Emotionally Disturbed, $n = 5$, Learning Disabled, $n = 23$, Other Health Impaired, $n = 5$, Speech and Language Impaired, $n = 3$, Autism, $n = 1$ and one student was designated as 504.

In summary, it is important to note that there was a decrease in enrollment in special education from the previous year. The number of African American students referred to the CSE was $n=5$, (female, $n=1$ and males, $n=4$), Caucasian, $n=19$; females, $n=7$ and males, $n=12$; Hispanic, $n=23$; females, $n=6$ and males, $n=17$.

Research Questions 3 and 4

Questions 3 and 4 were analyzed using qualitative data. In conducting interviews with building personnel, the researcher wanted to explore the level of involvement of the building personnel in the implementation of the district-designed pyramid of intervention. The researcher wanted to examine the processes and procedures implemented that might have contributed to the achievement and classification rates of RCELD students into special education. The interview protocols used were adapted from Mahabir (2009). Inter-rater agreement was used to test the reliability of the interview questions, using three raters to evaluate the instruments who provided the same judgments about the open-ended
questions to be used in the interviews for the qualitative portion of this study. The purpose of piloting the interview instrument was to ensure that the interview participants understood the wording of the questions, and that the questions were effectively designed to gather the information presented by the research questions and the theoretical framework guiding this study.

The Analysis of Competing Hypothesis (ACH) software program was used to analyze the responses provided during interviews conducted with building volunteer participants. The interviewees' answers were recorded and then transcribed. To maintain confidentiality and anonymity, each participant was given a letter or number identification in order to code their responses. This coding system was known only to the researcher. These transcriptions were used as the "evidence" in the ACH software. The responses of all participants were entered into a matrix using the ACH software. The matrix was created using the participants' responses along with hypotheses that aligned with the questions used in the interviews.

Research Question Number 3

How has the building administrator been involved in the implementation of the district-designed intervention model?

The Analysis of Competing Hypothesis (ACH) software program was used to analyze the responses provided during interviews conducted with building administrators (n = 4). The matrix was created using the participants' responses along with eight hypotheses developed. The hypotheses developed were written from the questions used
during the open-ended structured principal interviews (Appendix C). The administrator matrix used to analyze the responses of the interviews consisted of $n = 32$ pieces of evidence (respondents' answers) and eight hypotheses.

The evidence ($n = 32$) was assessed against the following hypotheses:

1. Student achievement did not determine the implementation of the district-designed intervention.
2. The components of the RtI structure used in your building were not determined by building personnel.
3. There is no systematic process for when a student first shows signs of academic difficulty.
4. Specific data are not collected often on all students.
5. Data collected are not analyzed to make decisions about student performance.
6. There is no consistency among the schools in the district as to what programs (interventions) to include in the respective building RtI pyramid.
7. The building's RtI structure does not show a clear process (trajectory) to monitor students' academic and behavioral progress.
8. Building leader is not directly involved in monitoring the RtI process.
Student achievement did not determine the implementation of the district-designed intervention.

The components of the RtI structure used in your building were not determined by building personnel.

There is no systematic process for when a student first shows signs of academic difficulty.

Specific data are not collected often on all students.

Data collected are not analyzed to make decisions about student performance.

There is no consistency among the schools in the district as to what programs (interventions) to include in the respective building RtI pyramid.

The building's RtI structure does not show a clear process (trajectory) to monitor students' academic and behavioral progress.

Building leader is not directly involved in monitoring the RtI

Figure 13 shows the inconsistencies with the hypothesis-stated relating to the administrator interview questions.
To analyze the responses of the interviewed administrators against each hypothesis, the researcher determined to divide the ratings into two groups: ratings of inconsistencies that had ratings between 0-16.0 and those that had ratings greater than 16.5. Responses from the participants were used to reject or validate the hypotheses.

Hypothesis Number 1—Student achievement did not determine the implementation of the district-designed intervention—had an inconsistency rating of 26.0, highlighting that the statements made by the administrators interviewed were inconsistent with the hypothesis. The following responses made by the interviewees are not consistent with the stated hypothesis.

“Basically, initially, the determination was made based on, initially, some of the programs that we have in the three schools that the group felt were programs that were working, and the group felt were working and where they fit into the pyramid, but as time has moved on we have tried to evolve our pyramid to be more student specific.”

“We needed a systematic way to address students that were not working up to the ability of the curriculum and that were not having success in the classroom, and using the RtI structure, we were able to systematically look at ways to address students' weaknesses.”

Hypothesis Number 8—Building leader is not directly involved in monitoring the RtI process—received a rating of 26.0, highlighting that this hypothesis is inconsistent with statements made by the administrators. Following are two interviewees’ responses regarding the determination of programs or what components to implement into the RtI structure.

“...at the building level, as we got a little more detail and building specific, it was myself as well as the School Improvement Team (SIPT), as well as input from the assistant principal.”
...administrators, special education teachers, regular education teachers, and guidance counselors were involved; we had a number of teachers both from special education teachers, who have been involved in success academics and programs like that.

Hypothesis Number 7—The building's RtI structure does not show a clear process (trajectory) to monitor students' academic and behavioral progress—received an inconsistency rating of 21.5. The following statements were examples made by several interviewees:

"Well, initially we will look at information that we've compiled on the student, based on their previous years' academic year, school grades, scores on standardized assessments."

"The teachers are involved by providing interventions at the Tier 1 level basically for everyone in the classroom and by differentiating their instruction for students...also involved in providing other intervention programs such as the Read 180 and the Academic Intervention Services (AIS)."

"We looked at need, we looked at resources. We looked at availability in terms of what the district was supporting. So we have to use all those structures to try to figure out what we can use. For example, one of the reading interventions is also a multi-sensory reading intervention and is district-wide so we have to use what is provided to us."

Hypothesis Number 3—There is no systematic process for when a student first shows signs of academic difficulty—received a rating of 20.0. The next few statements were provided by several participants.

"...we put a manual that we created and we use in the building...We have conversations with the child, the parent, the team, the larger team in RtI team in the process. Then we look to go to the actual S&I team to actually be inserted in that process. Then we move to the Tier 1, Tier 2, and Tier 3 interventions."

"We needed a systematic way to address students that were not working up to the ability of the curriculum and that were not having success in the classroom, and using the RtI system we were able to systematically look at ways to address some of the students' weaknesses."
"...we identify students whether it is to the IST process, where teachers will identify students to their IST team...where we discuss students who we have academic or behavioral concerns for and how we can meet the needs of those students through proper placement."

Hypothesis Number 2—The components of the RtI structure used in your building were not determined by building personnel—received a rating of 17.0.

Three hypotheses—Specific data are not collected often on all students (Hypothesis Number 4), Data collected are not analyzed to make decisions about student performance (Hypothesis Number 5), and There is no consistency among the schools in the district as to what programs (interventions) to include in the respective building RtI pyramid (Hypothesis Number 6)—received a score of 16.0 or less (Figure 13) and their inconsistencies were not found to be significant.

To summarize Question Number 3 in all of the buildings studied, interviewees discussed the importance of data collection on the placement and provision of interventions for all students. The administrators stated that some of the data used were state assessment scores from previous years, final averages, scores on formative assessments, and summative scores. This information was significant for proper student academic placement.

Research Question Number 4

How have the teachers in the respective buildings used the district-designed intervention (RtI) model?

The participants in these interviews were teachers n= 8; there were two teachers from each of the buildings under study. Responses from the teachers' interviews were
entered into a matrix consisting of six hypotheses relating to the questions used in the interview protocol for teachers (Appendix B) and the responses were entered into the teacher matrix (Appendix L) to analyze the responses given by the teachers against the stated hypotheses.

The total number of responses (n = 72) were assessed against the following hypotheses:

1. Teachers use the Rti pyramid in their classes to monitor student progress.
2. Teachers have a process to recommend a student for special education.
3. Teachers use student information to make decisions as to what interventions to recommend for students showing academic and/or behavioral difficulty.
4. There is a systematic process to recommend students through the Rti structure.
5. Teachers collect data on students to impact instructional and disciplinary practices.
6. Special education services result in beneficial outcomes for students.
Inconsistencies per Hypothesis

- Special education services result in beneficial outcomes for students.
- Teachers have a process to recommend a student for special education.
- There is a systematic process to recommend students through the RtI structure.
- Teachers use the RtI pyramid in their classes to monitor student progress.
- Teachers use student information to make decisions as to what interventions to recommend for students showing academic and behavioral difficulty.
- Teachers collect data on students to impact instructional and disciplinary practices.

Figure 14
Teacher Inconsistency Graph

Figure 14 shows the inconsistencies with the hypotheses stated relating to the teacher interview questions.
There were 72 statements from the teacher interviews that were transcribed and entered as evidence into the ACH software to create the teacher matrix that analyzed whether or not the respondents' answers were consistent or inconsistent with the stated hypotheses.

In rating the responses of participants, Hypothesis Number 4—Teachers use the RtI pyramid in their classes to monitor student progress—had an inconsistency rating of 27.5, highlighting that most of the teachers' responses were not consistent with this statement.

When asked, "How familiar are you with the district-designed pyramid of intervention?" and "What do you know about the RtI structure used in your building?" teachers did not recognize the RtI structure as evidenced by their responses:

"I really...I'm not too familiar with the RtI model besides the information that you sent me.

"I know some of the interventions that are used at different levels of the pyramid, the interventions they are used in, but I do not know what interventions are included at each level.

"I am familiar with it. I don’t claim to know it very well...and conversations that we have had about it...there are three tiers and I am not sure, a little fuzzy about how the tiers melt into the next one..."

"To be honest, not very familiar...the reason probably being that I'm pretty much "old school." And, what I’ve been doing over the years has worked, and I've been very successful in my results with the kids, and I don’t think that I would change much."
Hypotheses 2, 3 and 6, respectively—Teachers have a process to recommend a student for special education, There is a systematic process to recommend students through the RtI process, and Teachers use student information to make decisions as to what interventions to recommend for students showing academic and or behavioral difficulty—had the same inconsistency score of 5.0.

Two hypotheses, Numbers 1 and 5, respectively, had the same inconsistency score of 2.5. Teachers collect data on students to impact instructional and disciplinary practices, and Special education services result in beneficial outcomes for students. Teachers’ responses were consistent with regard to the use of data to make instructional decisions about teaching and learning strategies to use for students. They monitor their students’ progress. The following is a statement made by one of the interviewees.

“The first thing we do is discuss it (student performance and behavior) amongst our team because in middle school we have teams and we decide what the needs are for the student. On our team level, we institute some of the interventions such as double checking for homework and making sure the parent is informed on the issues the student is having. If the interventions that we do on a team level don’t work, then we will go to the IST. Most of the time the ISTs are used rarely now, I am seeing, because it has been taken care of prior to meeting seventh grade.”

In summary, many of the responses provided by teacher interviews showed that the teachers don’t know or understand the RtI structure used in their respective buildings. Many of the teachers interviewed were not familiar with what RtI is and do not know the RtI pyramid, even though they are following steps to monitor students’ academic and behavioral difficulties. They are not aware that all the steps they take are actually part of the RtI. Middle school teachers were more familiar about using a process to monitor student progress. There is a team-teaching approach at each of the middle schools, and the team meets often to discuss student progress. Many of the teachers interviewed
believe that special education settings benefit student outcomes. They also believe that the placement of students into special education is a decision that must be made after certain steps have been taken by the general education teacher. This is not the case at the secondary level; in grades 8 and beyond, teachers' responses indicated that they work alone to do what they feel needs to be done to monitor student progress. At the secondary level, it is crucial for all teachers to be aware of the RtI pyramid and to understand how it works and why it is important.
Figure 7: Response to Intervention Pyramid used in one of the schools:

Figure 15
Pyramid structure used in one school
Figure 16
Pyramid Structure
Figure 17
Pyramid Structure
Figure 19
Pyramid of Intervention for English Language Learners
Chapter 4 presented a description of the participants, data, and analyses conducted to answer the questions that guided this study. There were demographic data collected as well as other data gathered and analyzed to determine whether or not the referral to the Instructional Support Team had any influence on these demographics. Covariates that were examined included: ethnicity, gender, grade, LEP, and SES. Since the sample size of the current analysis was somewhat modest (n=66), covariates were tested separately in analysis, as a model that included all covariates would lack statistical power to detect significance. Overall, the quantitative data analyzed using Repeated Measures Analysis of Covariance did not show that there were any significant changes in achievement of RCELD students referred to IST. The covariate with the most significant change was LEP students and their ELA scores. “Within-subjects results indicated that ELA scores changed significantly from the 2008-2009 and 2009-2010 school years (Pillai’s Trace = .086, F[1]=4.988, p<.05; Table 22), holding LEP constant. In addition, results also indicated that the change in ELA scores over time varied significantly by LEP status, as the interaction term of Time*LEP was significant (Pillai’s Trace=.075, F[1]=4.289, p<.05; Table 22).” With regard to the referral of RCELD students referred to CSE, the population sample was small to detect any statistical power. A table containing the number of students who went to CSE through a building referral was created to show what the CSE determinations for these students were.

Finally, the qualitative data, open-ended interviews conducted with volunteer building administrators and teachers participants (n = 12), analyzed with Analysis of
Competing Software (ACS), highlighted that administrators are very engaged in monitoring student progress and achievement, but were not very involved with overseeing the RtI process. The teacher participant responses highlighted that they are not very familiar with the RtI process used in their building.
CHAPTER 5

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Discussion of the Findings

This study examined the influence of a district-designed Response to Intervention structure on the achievement and rate of classification of racially, culturally, ethnically and linguistically diverse students into special education by exploring a local school district's processes that may contribute to student achievement and rate of classification. In doing this analysis, this researcher's objectives were to describe a phenomenon and document the characteristics of the phenomenon by conducting non-experimental research (Johnson, 2001).

The study was conducted in one suburban school district in the Hudson Valley in New York.

From the search of the literature on RCELD students and their educational outcomes, several consistent findings were noted: the underachievement of these students, the achievement gap between RCELD students and their White counterparts, and the classification rate of RCELD students into special education. The United States is a diverse nation and it is experiencing demographic metamorphic shifts. These demographic shifts are changing the fabric, color, and cultures of its people. Our nation's schools are experiencing this dynamic and are currently being challenged to become more knowledgeable about the assumptions, attributes, and norms of a range of cultures. Failing to take cross-cultural communication issues into account can contribute to the problems that many students are facing in schools. The neglect of cross-cultural communication and cultural responsive instruction is evident and is shown by the disproportionality of RCELD students underachieving and placed in special education.

Artiles, et al. (2008) stipulated that the academic achievement of minority students shows a significant gap on standardized test scores between majority and
minority students, coupled with high incidence of suspensions and dropout rates. Gardner (2007) offered several possible causes for the achievement gap between RCELD student sub-groups and the dominant white student population, including low SES, school funding, the belief that minority students are less intelligent and less capable, unvalued cultures, parents' negative school experiences, racism, minorities' external locus of control, and student identity.

This study used a comparative, descriptive, non-experimental design in which quantitative and qualitative data were collected. The quantitative portion of the study consisted of collecting data on students who were referred to Instructional Support Team (Level 2) of the district-designed pyramid from the four schools used in the study.

The qualitative portion of the study consisted of 12 interviews of administrators and teachers who worked in the schools under study. These interviewees were volunteers who participated in the study. The interview instruments used for the qualitative portion of the study were developed to determine the level of involvement of building personnel in the implementation of the RtI process in their respective buildings. The interview instruments were designed to extract information from the interviewees on the following: type and amount of data collected on students, how the data were collected and used, and whether student information had assisted building personnel in making decisions about student program and placement.

Quantitative data were used to explore the null hypothesis for which separate Repeated Measures Analysis of Covariance (ANCOVAs) were performed for the New York State English Language Arts and New York State Math Assessments, examining two points in time 2008-2009 and 2009-2010. The ANCOVAs were used to determine if
achievement, as measured by a change in the raw scores attained on the NYS assessments, differed significantly for the students who were referred to IST from one year to the next. In the analyses performed, the dependent variables were achievement scores, while the independent variable was IST participation (represented by time; i.e., pre- and post-IST); several covariates were tested for their influence on academic achievement. Additionally, demographics were also tested for interaction effects, to determine if the impact that the IST had varied by these demographics. Covariates that were examined included: ethnicity, gender, grade, limited English proficiency, and socio-economic status. Since the sample size of the current analysis was somewhat modest (n=66), covariates were tested separately in analysis, as a model that included all covariates would lack statistical power to detect significance.

The choice to conduct this research project was due in part to the philosophical values espoused by the researcher. Although philosophical ideas remain largely hidden in research, they still influence the practice of researchers and need to be identified. Creswell (2009) recommended that individuals preparing a research proposal make explicit the larger philosophical ideas they espouse. This information will help the researcher decide specifically why the methods for his or her research were chosen (2009). Worldview is a term used by Creswell to identify a basic set of beliefs that guide action. He described worldviews as a general orientation about the world and the nature of research that a researcher holds. These worldviews are shaped by the discipline area of the researcher, the beliefs of the advisors and faculty in a researcher’s area of interest and past research experience.
Creswell (2009) identified four worldviews: post-positivism, constructivism, advocacy/participatory, and pragmatism. In providing a rationale for using a specific method based on one's philosophical view of the world, this researcher holds assumptions of social constructivist and advocacy/participatory philosophical worldviews. Social constructivists seek to understand the world in which they live.

One assumption held by this researcher was that of the advocacy/participatory worldview which holds that research inquiry contains an agenda for action to change the lives of the participants, the institutions in which they work or live, and the researcher’s life. Moreover, specific issues that need to be addressed may speak to important social issues, such as inequality, empowerment, oppression, domination, suppression and alienation. This philosophical worldview focuses on the needs of groups and individuals in our society who may be marginalized or disenfranchised (Creswell, 2009).

Findings

The answers to the questions that guided this study used a cross-sectional, descriptive, non-experimental design involving a mixed method that included both quantitative and qualitative data collection.

Question Number 1: How has IST referral influenced the achievement of RCELD students, as defined by scores attained on the NYS English Language Arts (ELA) and NYS Math assessments, following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010?

First, it is important to note that in reviewing Frequency Table 9, the number of students considered SES status referred to IST was n = 44 or 66.7% while students not considered SES was n = 22 or 33.3%. SES has been linked to poor achievement in
school. The number of minority students referred to IST considered non-minority was \( n = 10 \) or 15.2%, and minority was \( n = 56 \) or 56% (Table 10) of the population of students referred to IST. These two points highlight Lee’s (2008) comments that educational research has had a history of impacting the quality of opportunities to learn for youth, particularly those who have and continue to face persistent intergenerational challenges due to race, ethnicity, poverty, gender and disability (2008). In addition, in looking at Table 11, grade was another focal detail. Grade 5 and grade 8 students were \( n = 21 \) or 31.8% and \( n = 20 \) or 30.3%, respectively. In these two grades of the four grades studied, the highest number of students were referred to IST.

Results from the Repeated Measures of Covariance (ANCOVAs) did not provide evidence to reject the null hypothesis that there were no significant differences in student achievement as measured by the NYS ELA and Math assessments scores found in students who were referred to IST. The results of a series of variables tested whether or not IST referral had any influence on achievement, showed that there were no significant changes in assessments scores. These results could point to the possibility that language diversity, such as students’ proficiencies in their first and second language, as well as students’ life experiences and the context in which they are taught (Esparza and Brown, 2008) might have contributed to the lack of improvement on standardized assessments and need to be considered by educators. Students who speak a language other than English at home and speak English with difficulty in school may be in need of specific language interventions in the general education setting, Tier 1 (Level 1) or Tier 2 (Level 2) of the pyramid. In addition, ethnic background, cultural background, and SES status for these students might not have been considered with regard to what interventions were
implemented. Teaching strategies and the absence of culturally responsive teaching and schooling might not have been modified for RCELD students.

For the limited English proficient status covariant, results showed that English Language Arts scores changed significantly from 2008-2009 to 2009-2010. Additionally, results also indicated that the change in ELA scores over time significantly varied by LEP group. These findings suggest that LEP students who were referred to IST demonstrated achievement in ELA (Pillai's Trace=.086, F(1)=4.988, p<.05; Table 16), holding LEP status constant. However, it is important to note that the percentage of LEP students was 15.2% compared to 84.8% non-LEP status students. Students considered LEP showed improvement, while RCELD students did not show any significant difference in scores in either ELA or Math. An explanation to this significance could be that LEP students are going to show improvement regardless by nature of their increased exposure to the English language. However, the study did not look at factors such as how long these students have been learning English or how long they have been in this country. The failure to find significance with regard to students referred to IST and the improvement of scores on the ELA and the Math assessments could be attributed to the procedures followed in the referral process to refer students to the IST and how they were monitored. What academic difficulties were these students having and how were they addressed? Since results of the analyses showed no significant changes in students’ scores, exploring other possible interventions tailored to the student population would be a way to address the achievement level of the RCELD students.
Between-subjects effects determine whether the mean Math scores were significantly different between gender groups (male vs. female, Table 20). Between-subjects effects are first tested for overall effects (omnibus effects), and then tested separately each year if the omnibus effects are found to be significant. If omnibus differences are not found to be significant, individual comparisons by year were not considered valid and were not examined. Results indicated that there were significant omnibus effects by gender ($F[1]=4.077, p<.05$; Table 20), indicating that males and females differed significantly in their Math scores. These findings are further supported by the differences between group mean scores at both time points, which are evident in Figure 4. Specifically, during the 2008-2009 school year male students ($M=653.52$, $SD=26.345$) demonstrated higher Math raw test scores than did female students ($M=642.64$, $SD=42.168$). A similar trend was observed during the 2009-2010 school year, as male students ($M=657.97$, $SD=20.566$) earned higher Math scores than did female students ($M=645.14$, $SD=21.739$).

Question Number 2: How has the classification rate of RCELD students been influenced following the use of the implementation of a district-designed intervention model in grades 5-9 during the school year 2009-2010? In the buildings used in the study, there were 25 building initiated student referrals to the Committee on Special Education. There was a decrease in enrollment in special education from the previous year. The number of African American students referred to the CSE was $n=5$, females $n=1$ and males $n=4$; Caucasian was $n=19$, females $n=7$ and males $n=12$; and Hispanic was $n=23$, females $n=6$ and males $n=17$. Concerning the classification rate of RCELD students in grades 5-9 used in the study, there were two findings; the first is that of the students referred to CSE, Hispanic males ($n=12$) were
classified as Learning Disabled, highlighting that Hispanic males tend to be labeled as LD more often than other labels. The other finding is that of the Hispanic students who were referred to CSE, n=23, n=12 were identified as dual language speakers. All students referred to CSE were identified as Hispanics fitting into any of the labels of generation 1.5. RCELD students’ overrepresentation in special education settings; the numbers still tell us that disproportionality and/or the inappropriate overrepresentation and/or over-identification of ethnic minority children in special education is still a concern. There is a discussion of disproportionality as a growing phenomenon and how it is a systemic issue in our schools. Legislation and reform efforts implemented on national, state, and local levels have required educators to implement practices to address the issue of disproportionality. The full complexity of existing RCELD student disproportionality has not yet been fully understood, since there are so many factors that can contribute to representation when RCELD exists.

Question Number 3: How has the building administrator been involved in the implementation of the district-designed intervention model? This was answered using open-ended interviews with volunteer building administrators. The interviews were conducted to enrich the research and probe how involved the administrators were in the implementation and monitoring of the RtI process. While the responses from the interviews conducted with building administrators showed that they were all very involved in student achievement, their focus was increasing the number of students making adequate yearly progress (AYP) on state assessments. Their responses also indicated that data collected on students included previous years’ assessment scores, final averages for past grades, classroom and formative assessment scores, and teacher
recommendations. These data were used to inform the administrator as to program placement for students.

Question Number 4: How have the teachers in their respective buildings been involved in the implementation of the district-designed intervention (RtI) model? Teacher responses presented the RtI model as district-structure, not a process in which they needed to be involved. However, the teachers' responses did highlight their concerns for their students and students on their teams. They discussed how they collect data and how the information gathered helped them make decisions as to which pedagogical strategies would best help students in their classes. The middle school teachers had structured time to meet with team members to discuss students who were experiencing academic or behavioral difficulty. The meetings at this level were informal and no documentation was kept. They also discussed that the type of data they collected were student grades, which included homework and test grades. Systematic data collection on students was not consistent within or among the middle schools. A review of the RtI pyramids used in each building showed that there are inconsistencies among the buildings with regard to the interventions included at each level. Inconsistencies also existed in the collection and dissemination of data, as well as the process used to recommend students to IST.

Influencing Factors

The examination of the influence of the district-designed pyramid on the achievement of and rate of classification of RCELD students suggests RCELD students continue to be marginalized and disenfranchised in our schools. In comparing minority students to their White counterparts, populations of RCELD students continue to lag behind, are underachieving, and often are placed in separate settings and programs that
provide inferior educational opportunities for them. Our minority populations earn lower grades in school and often are represented in separate and unequal educational tracks. Carlyle (2007) posited that the representation of minority students had been increasing and that it is the result of a series of social processes that have resulted in inevitable outcomes of real conditions. Finance and education policies, racial, ethnic, and language diversity, and lack of understanding on the part of educators to teach students who are different from majority students influence student achievement. Artiles, et al. (2006) inferred that conventional visions of human development in which culture, ideology, history, and power play are attributes that play a significant role in the achievement gap between RCELD students and their White counterparts and the classification into special education of our minority student population. Special education has been regarded as a “fix it all” solution by many educators for students whose needs exceed the skills or time constraints of the regular classroom teacher.

Comparison to Previous Research

The issue of marginalization and disenfranchisement of RCELD learners is important and there is a scarcity of research information on how RtI influences academic outcomes, specifically during middle school and beyond. Much of the work done on RtI has focused on the needs of students at the elementary level, leaving a gap in the literature for educators who work with students at the middle and secondary levels (Spiegel, 2009). A study conducted by Kucera (2008) indicated that the early intervention strategy (RtI) did not impact third-grade reading achievement or the proportion of students referred to special education. The findings in Kucera’s research are consistent with the findings of this study that the RtI process did not improve the
academic achievement and/or reduce the number of classified RCELD students into special education (2008).

Conclusions

The RtI structure was introduced to mitigate the problems associated with the “wait-to-fail” discrepancy model (IDEA, 2004). The RtI process requires documentation that students have been unable to respond to appropriate interventions based on educationally and scientifically proven principles that are provided and monitored over a period of time in the mainstream classroom (USDOE, 2006). With its focus and emphasis on prevention, this model has its roots in public health and disease control and occurs at three levels: primary, secondary and tertiary (Sugai, 2007). Each level has prescriptive instructions for educators to follow in the general education setting. This framework includes several tenets: providing a swift instructional response to the needs of struggling students, providing supplemental and differentiated instruction based on results of formative assessments, monitoring student progress with increased frequency as students receive more specialized instruction, and using research-based, but not yet proven, effective practices in the classroom (Bryant and Barrera, 2009).

Despite the claims that RtI will reduce the classification rate of RCELD students by providing students who may need “more time to catch up” with more direct, intense, research based instruction, its influence on achievement was not supported in this study. Based on the quantitative analyses performed in this study, the findings indicate that referral to Instructional Support Team had no influence on the achievement of RCELD students on the New York State English Language Arts or Math scores or classification of these students into special education.

It is important to note that the district used in this study had been cited by the New York State Education Department as a district identifying students in
disproportionate numbers to special education settings. Since then, the district has been strongly committed to ensuring that systems are in place to provide interventions for all students before they are referred. The district has been working closely with NYU and Chapter 405 to address the problem of disproportionality of labeling and placement into special education programs of minority students. A word of caution concerning biases present in our schools; the referral process is a major factor contributing to the disproportionate placement of culturally diverse minority students in special education settings when educators perceive that language and culture are deficiencies rather than differences (Reilly, 1991). To continue serving the student population in this district, it is essential that all work that is done concerning the student population is inclusive of all district personnel, specifically classroom teachers and building principals with regard to teacher knowledge building about and development in addressing these issues.

The successful educational outcomes of our minority student population are contingent upon the people who are a part of their lives, directly or indirectly; i.e., policymakers, parents, teachers and administrators. Factors such as student educational experiences and district policies enacted that take into account their racial, ethnic, cultural, socio-economic and linguistic diversity can shape schools into transformative institutions that tailor interventions and programs to the population being served.

The primary objective of this study was to examine the influence of a school-designed RtI structure on the achievement of and classification rate of RCELD students into special education by exploring a local school district's processes that may contribute to student achievement.
Much of the debate surrounding RCELD students' underachievement and their overrepresentation into special education has included mandates at the federal and state level; laws such as IDEA and NCLB and their reauthorizations by the federal government have been passed to ensure equity and equality in education for all. These laws have prompted our educators to act to ensure that all public school students in America receive a quality and equitable education.

First, the NCLB act emphasizes that all students will learn, that no child will be left behind and will continue to make substantial improvements, placing tremendous accountability on educators (IDEA, 2004). This law also requires that educators be held accountable to ensure that there are processes in place, such as RtI, before recommending students for special education.

The Commission on Excellence in Special Education was created by President Bush (2004) to ensure that every child is learning regardless of race, family background, and disability status. This Commission recommended reforms to improve America's special education system and move it to be a culture of accountability and results. IDEA (1997) and its reauthorization (IDEIA, 2004) recommended that all educators use and implement procedures to ensure that all instruments used to determine eligibility for special education are non-discriminatory. These laws are mandating states and local school agencies to implement models such as RtI and programs such as academic intervention services. Inclusive education transforms education systems by offering alternatives to placement in general education classrooms (Artiles & Kozleski, 2007; Artiles, et al., in press). We should seek opportunities to strengthen and improve access, opportunity, and quality in our schools by targeting issues related to education equity. Legislation and reform efforts have been enacted on a national level mandating state
education departments and local districts to implement practices to address issues of disproportionality.

In the district studied, one of the observations made from this research is the number of RCELtD students who were referred to IST and the number of students who were referred to CSE for testing and placement. Although the number of students classified for special education has been decreasing over the last three years, the number of minority students referred to the Committee on Special Education and classified, continues to be disproportionate when compared to the number of students referred in grades 5-9 in the 2009-2010 school year. Another observation concerned the achievement of RCELtD students. In using the NYS ELA and Math assessments scores attained by the students who were referred to IST, there were no significant changes in scores from one year to the next. A third observation made was that building administrators were committed to student achievement and in raising standardized assessment scores, but the commitment to the RtI process was not noted. The fourth observation was that while the teachers were involved in their students' academic development and knew what to do for them when they showed signs of academic or behavioral difficulties, the teachers were not familiar with the entire picture of RtI, its components, or the processes that should be followed.

Recommendations

For Policy

If equity issues are to truly be addressed, policy makers need to consider the funding of their mandates. In an article titled, “Turn Around or Full Speed Ahead” (2010), House
Committee members raised concerns regarding the number of schools with students that are underperforming and dropping out of school. The students in our schools must be provided with an education and issues that are impeding them from attaining success must be addressed. The United States' economy and its standing and competence in the global economy, our security, and the quality of life in our communities are at stake.

For Practice

The district under study has a growing minority population, specifically Hispanic, and the implications of this growth are many for all stakeholders involved in students' education. The recommendations provided are mainly for the RCELD population enrolled in this district. District personnel must commit to creating an RtI structure that takes into account the demographics, specifically ethnicity and language diversity of the student population of the district. First, the district must ensure that every level of the RtI process is clearly articulated to all district personnel and that the process at all levels is prescriptive. The pyramid of intervention logic has direct influence on both academic and behavior supports (Sugai, 2007) (Appendix M).

In order for RtI to truly function as a problem-solving model, a deep commitment from all involved in its implementation and monitoring is required. It is essential for all stakeholders to be trained to follow specific protocols regarding the implementation of intervention strategies and the monitoring of progress. "The what and the how" specific to the populations targeted must be included in the protocols.

The successful implementation of the RtI structure is incumbent on the principal to view himself or herself as a participant in all aspects of implementation, monitoring, and sustaining.
the process. He or she has to be a manager and a leader by working collaboratively with the teachers, promoting the initiative, providing resources and enabling teacher capacity-building. Spiegel observed that practitioners successful in the implementation of a structure such as RtI displayed four important roles: principal as participant, principal as data manager, principal as recruiter, and principal as resource provider (Spiegel, 2009).

Student academic success is usually measured by standardized test scores. In an effort to meet mandated accountability reforms regarding student achievement, the focus is on the scores and ensuring that students make adequate yearly progress. Many times this method of placing students into academic intervention classes does not address other needs that may not be transparent with regard to the student's academic difficulties. Knowing more about the student population in a building than just scores attained on assessments is necessary to provide the child with what he needs in order to be successful.

In establishing culturally responsive schooling for the minority population, it is important for administrators, teachers, and other school personnel to examine students' identity, their experiences in school, and how they view schooling experiences as well as their career expectations and aspirations. It is essential that students form a connection between their identity, schooling, and future plans (Quiroz, 1997). Reilly (1991) stated that some teachers base their judgment of student competence on race, sex, socio-economic status, and linguistic and cultural differences.

The components and strategies included at all levels of the RtI structure must be clearly defined and research based. For example, at Tier 1, or the universal level, the delivery of the curriculum must be monitored and measured using proven research-based practices. An essential component at this level is the administration of frequent formative assessments to
measure and monitor the delivery of the curriculum. Data derived from assessment scores must be considered to inform decisions about whether or not a student is progressing.

Transformative, inclusive schools invest in systemic, sustained programmatic attention to professional learning and the use of data driven decision making and school capacity development (Artiles & Kozleski, 2007). As part of the district professional development program, all professional staff should receive training on culturally responsive teaching.

For Future Research

In conducting this study there were two confounding observations that would benefit from further research; the highest number of students referred to IST were 5th grade (n=21) and 8th grade (n=20). In the district under study, 5th grade is the first year of middle school and 8th grade is the first of two years at the secondary school (8-9 Center). A possibility for future research would be to focus on the transition of students, specifically RCELD students, from elementary school to middle school and from middle school to secondary school.

Another recommendation for future study would be a longitudinal study on the language achievement of students who are considered generation 1.5 language learners. The setting of the study would be in one building, not four. The focus would be on identifying the generation 1.5 learners and their achievement trajectory over a period of time, what Johnson (2001) refers to as a "longitudinal descriptive study," or Type 3 (Table 1).

Summary

The education system in the United States has failed to educate all public school students equally. America is a nation of diversity, a nation built on a foundation of differences. However, factors such as poverty, race, ethnicity, culture, language, and
diversity have contributed to the marginalization and disenfranchisement of a group of students in our schools.
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Elementary and Middle School Assistance Center, 2009.

Glossary of Terms

The following are terms and acronyms used throughout the study. These are definitions of the terms as they apply in the study.

**AIS** - Academic Intervention Services

**Alternative Placement** - Placement of a student in another environment from school necessary to ensure a more appropriate environment for the student, as well as to ensure the safety of all students.

**Classification Rate** - Number of students with disabilities (SWD) in a racial/ethnic group divided by the total number of students in the same racial ethnic group multiplied by one hundred.

**CSE** - Committee on Special Education - a committee of professionals in a school district (district level) who make decisions regarding the classification or determination of whether a child should be classified or not after reviewing assessment scores and building level recommendations.

**CST** - Child Study Team - a team of professionals who function in a school building comprised of special education teachers, school psychologist, school counselor, regular education teacher, and special area teacher who make recommendations after data has been collected to move a student to the district committee on Special Education.

**Disproportionality** - The over or underrepresentation of a particular group of students at a rate different from that found in the general population. Disproportionate numbers refer to either a significantly larger or smaller percentage of students from a specific minority background placed in special education than the percentage of that minority in general education.

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Education for All Handicapped Children Act – Public Law 94-142. Federal legislation passed in 1975 that makes available a free and appropriate public education (FAPE) for all handicapped children in the United States. This piece of legislation was the forerunner to IDEA.

Education Records – Records directly related to a student and maintained by an educational agency or institution or by a party acting for the agency or institution. The definition of “education records” has legal significance in terms of the privacy of student records; see FERPA for a definition, as well as your state’s regulations or statutes on this.

FAPE – Free and Public Education. In monitoring Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE) according to this law, there are 20 indicators used by the State of New York to determine whether or not a district is complying with federal and state mandates regarding the rates of suspensions and expulsions and disproportionality (Indicator 4 and Indicators 9-10, SPP 2005-2010).

Hispanic – A person of Cuban, Dominican, Puerto Rican, Mexican, South or Central American origin or any other Spanish culture regardless of race.

Human Capital – Defines education as a highly profitable investment. It focuses on the individual’s earning potential and affirms that a society can foster growth and development by fostering the skill levels of its citizens.

IDEA – Individuals with Disabilities Education Act - PL 101-476. This legislation was formerly known as the Education for All Handicapped Children Act. IDEA was amended in 1997 as Public Law 105-17 and is usually just referred to as “IDEA” or “IDEA ’97.” This piece of federal legislation is the heart of entitlements to special
education. IDEA also empowers parents as partners in their special needs child’s educational planning.

IDEIA – (IDEIA, 2004) – Individuals with Disabilities Education Improvement Act is the landmark legislation, originally enacted in 1975 as the Education for All Handicapped Children Act. This legislation guides how states and school districts must educate children with disabilities (Wyatt-Ross, 2007).

Inclusion – In special education, the term means to provide services to the student in the regular classroom (instead of pulling the students out of class for services or segregating them in special classes). In different areas, the term “inclusion” may take on additional meanings such as modifying the curriculum that may not be rigorous or challenging so that a student who would not be able to keep up with the school work of a “regular” class can be educated in the regular classroom.

IST – Instructional Support Team – a group of stakeholders in a school charged with making decisions regarding setting goals, program decisions, and monitoring for a student who has been referred to the team due to academic and/or behavioral issues.

LRE – Least Restrictive Environment – The usual or most typical environment possible for instruction, treatment, and/or living. When applied to education, the least restrictive environment is the regular (mainstream) classroom, for that is the least restrictive environment that will enable the student to function and benefit from their educational program. One of the considerations in determining LRE is that the proposed setting or placement provides the student contact with children without disabilities "to the maximum extent appropriate” (while meeting all of the child’s learning needs and
physical requirements). Consideration and requirement of IEPs is an important component under IDEA.

Pathological Impairment – Having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, rheumatic fever, asthma, hemophilia, and leukemia, which adversely affect educational performance. Relating to or caused by disease. Of, relating to, or manifesting behavior that is habitual, maladaptive, and compulsive.

Odds ratios – The odds ratio is a way of comparing whether the probability of a certain event is the same for two groups. (http://www.childrensmercy.org/stats/definitions/or.htm

Overrepresentation – Numbers that are disproportionately high in the representation of students in specific disability-related categories that are above state and national averages.

Overidentification – The overrepresentation of students in special education programs/services that is above state and national averages; identification of more students for services through special education than the proportion of that population in the general population.

SpEd, SPED – Special education

Special Education – Instruction specifically designed to meet the unique needs of a student with a disability, including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions.

Specific Learning Disability – A classification under IDEA: (1) General: a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen.
think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. (2) Disorders not included: learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

**SPP** - State Performance Plan

**Suspension** - A disciplinary action that requires the student to be excluded from the school building for a specified period of time (Christle, Nelson, & Jolivette, 2004).

**SWPBS** - School-wide positive behavior support and responsiveness to-intervention (Sugai, 2007).

**Chapter 405** - Chapter 405 (1999) is part of the New York State Chapter Bill enacted by the State legislature to address the major issues the Board of Regents had identified as critical to improving special education services in New York State. Chapter 405 includes provisions for addressing and improving results in problem areas (i.e., high rates of identification of students with disabilities, low rates of declassification of students with disabilities, high rates of placement of students with disabilities in separate sites, and/or significant disproportion based on race and ethnicity in identification and placement in particular settings of students with disabilities). These provisions include technical assistance by the New York State Department of Education and, if appropriate, the development of corrective action plans by districts (http://www.vesid.nysed.gov/specialed/chapter405).

**VESID** - Vocation and Education for Students with Disabilities
Appendix B

Teacher Interview Protocol
Teacher Interview Protocol

1. How does the placement of students into special education result in beneficial outcomes for those students?
2. What process do you follow to recommend a student for placement into special education?
3. Do you believe there is a difference between the curriculum for students placed in special education and the curriculum for students in general education?
4. What type of data have you collected on your students?
5. How has the information you have on your students impacted your instructional practices?
6. How familiar are you with the District designed pyramid of intervention?
7. What do you know about the pyramid used in your building?
8. How is the model being implemented in your classes?
9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?
Appendix C
Administrator Interview Protocol
1. What determined the implementation of the RtI pyramid used in your building?
2. How was the determination made?
3. Who participated in the design of the pyramid for your building?
4. What is the process outlined for a student needing intervention?
5. How are the teachers involved with and involved in the RtI process?
6. Describe the process used in your building to recommend interventions for your students.
7. Describe the process used in your building to recommend interventions for your students.
8. What type of data do you collect on your students?
9. How are the data analyzed?
10. How are students monitored in your building?
October 27, 2010

Reina Martinez
17 Pierce Dr.
Staten Island, NY 10308

Dear Mrs. Martinez,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled “The Evaluation of the Influence of a Distinctive Drop-Out Prevention Program on the Rate of Classification and Achievement of BECLED (Racially, Culturally, Ethnically and Linguistically) Diverse Students in Grades 5-9: A Snapshot of a District.” Your research proposal is hereby approved as reviewed through expedited review. The IRB reserves the right to recall the proposal at any time for full review.

Enclosed for your records are the signed Request for Approval form, the stamped Recruitment Flyer, and the stamped original Consent Form. Make copies only of these stamped forms.

Use Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research proposal must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after initial approval. You will receive communication from the IRB Office for this several months before the anniversary date of your initial approval.

Thank you for your cooperation.

In accordance with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,

Mary J. Reznikoff, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Barbara Stobart

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REQUEST FOR APPROVAL OF RESEARCH, DEMONSTRATION OR RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS

PROJECT TITLE: An Evaluation of the Influence of a District - Designed RRI (Response to Intervention) Pyramid on the Rate of Classification and Achievement of RCI (Racially, Culturally, Ethnically and Linguistically) Diverse Students in Grades 5-9: A Snapshot of a District

CERTIFICATION STATEMENT:

In making this application, I(We) certify that I(We) have read and understood the University's policies and procedures governing research, development, and related activities involving human subjects. I(We) shall comply with the letter and spirit of these policies. I(We) further acknowledge my(our) obligation to notify within twenty-four hours of significant deviations from the originally-approved protocol before making those deviations, and to report immediately any adverse effects of the study to the subjects to the Director of the Institutional Review Board. Seton Hall University, South Orange, NJ 07079.

signature: ___________________________ date: 1/15/99

RESEARCHER(S) OR PROJECT DIRECTOR(S):

[Signature]

Please print or type out names of all signatories below signature. Use separate sheet of paper, if necessary.

My signature indicates that I have reviewed the attached materials and consider them to meet IRB standards.

signature: ___________________________ date: 1/15/99

RESEARCHER(S) ADVISOR OR DEPARTMENTAL SUPERVISOR: [Signature]

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects. The application was approved / not approved by the Committee. Special conditions were / were not set by the IRB. (Any special conditions are described on the reverse side.)

signature: ___________________________ date: 1/15/99

RESEARCHER(S) ADVISOR OR DEPARTMENTAL SUPERVISOR: [Signature]

[Signature]

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects. The application was approved / not approved by the Committee. Special conditions were / were not set by the IRB. (Any special conditions are described on the reverse side.)

signature: ___________________________ date: 1/15/99

RESEARCHER(S) ADVISOR OR DEPARTMENTAL SUPERVISOR: [Signature]

[Signature]

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects. The application was approved / not approved by the Committee. Special conditions were / were not set by the IRB. (Any special conditions are described on the reverse side.)

signature: ___________________________ date: 1/15/99

RESEARCHER(S) ADVISOR OR DEPARTMENTAL SUPERVISOR: [Signature]

[Signature]
Appendix E
Solicitation Notice, Solicitation Letter and Volunteer Consent Form
Consent Form for Classroom Teachers and Building Administrator to participate in the Research study:

An Evaluation of the Influence of a District—Designed RtI (Response to Intervention) Pyramid on the rate of classification and achievement of RCELD (Racially, Culturally, Ethnically, Linguistically) students in Grades 5 - 9: A Snapshot of a District

You are being asked to participate in a research study. Before you volunteer to participate, it is important that you read the following information and ask any questions you may have regarding this investigation of a district—designed Response to Intervention (RtI) structure.

Researcher’s Affiliation

The researcher, Reina Martinez, is conducting research into the influence of a district—designed pyramid of intervention (RtI) structure on diverse students in grades 5 – 9. The researcher is currently an educator in the North Rockland Central School District and is conducting this work as part of her doctoral work at Seton Hall University. The researcher works in the high school of the district being studied, therefore, there is no daily contact with the participants of this study.

Purpose of the Study

The purpose for this research is to examine the influence of a school designed RtI structure on the rate of representation of diverse male students placed in special education, specifically in grades 5 – 9, by exploring local school dynamics and processes that may contribute to inappropriate classroom settings. The RtI structure was implemented several years ago in the district to ensure that students receive appropriate interventions as soon as they begin to show signs of failure. Since this process involves gleaning whether there is a particular pattern by RCELD (race, culture, ethnicity, language diversity) that may indicate an area of the referral process that needs further exploration.

The purpose is to analyze the influence of the RtI structure and how this model influenced the achievement and eventual outcomes for diverse students during the 2009 – 2010 school year in grades 5 – 9.

The purpose of this study is to evaluate the influence of the RtI structure on the achievement and classification rate of diverse students into special education settings in 4 schools in the district by collecting district data from the NYSED, BEDS (Basic Educational Data Systems), VADIR and VESID. Student information gathered will be confidential and coded using student identification numbers. This coding will ensure anonymity. The data will be provided by a district Information Specialist. The study will also involve administrator and teacher interview information to analyze the involvement of the personnel in the RtI process. The information gathered from this interview will add a qualitative component to the data analysis. Confidentiality and anonymity will be maintained using a coding system.
Consent Agreement:

The signature below indicates that the individual has read the information in this document and has had the opportunity to ask questions about the study. This signature also indicates agreement to participate in the study.

The signature also confirms knowledge that the interview will be audio-taped and that withdrawal of consent may be exercised at any time.

Name of Participant

Signature of Participant Date

Signature of Researcher Date

Please complete and return this consent form within one week in the self-addressed, stamped envelope which is included for your convenience. Again, your participation and timely response are greatly appreciated.

A signed copy of this consent will be given to you for your records.

Seton Hall University institutional Review Board

OCY 27 2011
Approval Date
Study of the Influence of Implementation of Response to Intervention (RTI) Structure in Grades 5-9

Volunteers are needed to participate in a study designed to evaluate the influence of the RTI pyramid of intervention on the achievement and classification rate into special education of diverse students in Grades 5 - 9.

Please accept this invitation to Teachers of Grades 5 - 9 to attend an information session concerning the study being conducted.

All of the information will be confidential and coded to protect all volunteers and students.

The researcher, Reina Martinez is conducting this research to fulfill the requirement for the Ed.D. in Educational Leadership from Seton Hall University and has received approval to conduct this study in the district.

The purpose of this research will be to examine how the implementation of the pyramid and its components have influenced the achievement and classification rate of male students placed in special education specifically in grades 5 - 9.

The meeting will be held in __________________ at __________________ school at __________________

Thank you for your time and consideration to this request.

Seton Hall University
Institutional Review Board

OCT 27 2019

Approval Date
Response to intervention is a structure created as a function of academic intervention to address students who are experiencing academic and or behavioral challenges. Response to Intervention (RtI), a term first coined by Frank Gresham (2003) is a problem solving structure used in schools to provide intervention to students who begin to show academic failure.

The methods of data collection to be used in this study will consist of data on students in grades 5 – 9 who had any form of RtI. The data collected will be used to analyze whether or not the interventions implemented had any influence on the achievement and or classification rate of diverse students placed into special education.

Quantitative data will be gathered from the New York State Basic Educational Data Survey (NYWEDS), the NYSED School Report Card and the District data bank for the 2009 – 2010 school year. The qualitative data will consist of interviews conducted and recorded with classroom teachers and building administrators to determine their involvement in the implementation of the district – designed pyramid. In addition, it will provide other information on the classification rate of RCELD into special education settings.

**Benefits of the Study**

The benefit of participating in this study is to provide teachers and administrators information gathered regarding the influence of the RtI structure on the classification rate of RCELD students. This study should also bring attention to an issue of educational importance; the underachievement, representation in special education, alternative settings and discipline referrals of RCELD students. Schooling and school personnel are pivotal in educating these students.

**Voluntary Participation**

Participation in this study is voluntary. The decision whether to participate or not, will have no effect on employment within the school district. Individuals are free to withdraw their consent and discontinue participation at any time. Participants have the right to refuse to answer any question posed for any reason.

**Anonymity**

The school district will not be advised as to the identity of participants. The individual interviews will be coded and the identity of the participants will be known only to the researcher. Information given to the district will be in aggregate form.

**Audio Recording**

Information provided by the volunteers will be audio recorded and transcribed by the researcher. If an individual is uncomfortable with that format then participation should not be considered. The instrument to be used to record interviews was an Olympus Voice Recorder 7600PC.

**Confidentiality**

Interviews will be conducted by the researcher in a private location agreed upon by participant and interviewer. The interviews will be recorded but will be coded to maintain the confidentiality of the participant. Each session will be listed by a number with no identifiable
connection to the participant. The researcher will transcribe all of the digital recordings. Records will be kept on a USB memory device key in a locked file in the researcher’s residence and will only be used by the researcher. Privacy will be maintained in any presentations resulting from this study. Reports will be written in such a way that individual differences will not be individually identifiable.

Contact Information

If there are any questions concerning the research or the design please contact:

Researcher:
Reina Martinez
North Rockland High School
106 Hammond Rd
Thiells, NY 10964
Office phone: 845-942-3137
Cell number: 845-222-8395
Home number: 845-429-6504

Email: martieca@norhs.mchsd.org
ReinaMartinez@Gmail.com

Researcher’s faculty advisor and contact information
Dr. Barbara Strobert
Seton Hall University
Department of Education, Leadership, Management and Policy
Office phone: 973-275-2324

Email: StrobertB@shu.edu

If there are any questions concerning research subject’s rights, the IRB contact may be reached at:

IRB Contact:
Dr Mary F. Ruzicka
Office of the IRB
Presidents Hall
Seton Hall University
South Orange, NJ 07079
Office phone: 973-313-6314

Email: IRB@SHU.edu
Appendix F

District Approval to Conduct Study
Ms. Reina Martinez
17 Pierce Drive
Stony Point, NY 10980

Dear Ms. Martinez:

Your request to access Haverstraw-Stony Point Central School District data pursuant to your doctoral dissertation is hereby approved.

Best wishes for a successful project. I look forward to reading your finished product.

Sincerely,

Ileana Eckert
Superintendent of Schools

November 3, 2009
Appendix G

Letter Requesting & Granting Permission to use Mahabir’ Study
June 30, 2010

Dear Dr. Mahabir,

I am a doctoral candidate at Seton Hall University working on the dissertation portion of my degree program. The topic of my study is the representation of RCELD students in Special Education. This study involves an analysis and examination of how teachers and administrators are using the district-designed intervention pyramid model, what the influence of the intervention pyramid model has been on the rate of classification on the representation of RCELD students into special education placement and to what extent do discipline referrals influence placement of these students into special education placement. I respectfully request your written permission to use your teacher interview schedule with some modifications.

The representation of Hispanic Males in Special Education is an area in which I am personally and professionally interested in due to my ethnic background and as an educator in the North Rockland Central School district for the past 22 years. I would like to use your teacher and administrator interview schedules for my research which consists of a cross-sectional, descriptive, non-experimental design that would employ both qualitative and quantitative data.

If there is additional information you request regarding this matter, please do not hesitate to contact me or my advisor, Dr. Barbara Strobert at the Department of Education at Seton Hall University. Her telephone number is 973-275-2324.

I have enclosed a self-addressed, stamped envelope for your convenience in mailing me approval to use your interview schedules.

Again, thank you for your help in granting me permission to use the interviews schedules in my research.

Sincerely,

Reina Martinez
To: Ms. Reina Martinez  
Cc: Dr. Barbara Strobert  
From: Dr. Joseph Mahabir  
Re: Permission  
Date: September 7, 2010  

Dear Ms. Martinez,

As per our conversation I am granting you permission to use any part of my dissertation that may be of interest to you.

Best of luck in the pursuit of your doctoral degree.

Sincerely,

[Signature]

Dr. Joseph Mahabir
Appendix H
Cover Letter to Panel of Experts and Interview Protocol Assessment Form
Cover Letter to Panel of Experts

September, 2010

Dear [Name],

I am a doctoral candidate at Seton Hall University working on the dissertation portion of my degree program. The topic of my study is the representation of RCELD (racial, cultural, ethnic, linguistically, diverse) students in Special Education. I am conducting a study involving an analysis of how teachers are using the district-designed intervention pyramid model in a school district in the Hudson Valley in New York.

The nature of this portion of my study will consist of both quantitative and qualitative research. The methods of data collection will include individual open-ended interviews with staff members (classroom teachers and building administrators). The information gathered from interviews will be recorded and transcribed. All interviews will be conducted in English.

I am asking for your participation in the assessment of the content of the interview questions for teachers prior to my use of these instruments. The interview schedule is designed to answer the following questions.

1. How has achievement of RCELD students been influenced following the use of a district-designed pyramid of intervention, as defined by scores attained on the NYS English Language Arts (ELA) and NYS Math assessments in grades 5 – 9 during the 2009 – 2010 school year?
2. How has the classification rate of RCELD students into special education been influenced following the use of the implementation of a district – designed intervention model in grades 5 – 9 during the 2009 - 2010 school year?
3. How has the building administrator been involved in the implementation of the district – designed intervention (RtI) model?
4. How have the teachers in their respective buildings used the district – designed intervention (RtI) model?

In reviewing the instrument, I am asking that you consider the following:

1. Are the questions on the instrument relevant to the questions guiding this study?
2. Are terms and questions easy to understand?
3. Are directions clear?
4. Is the instrument culturally sensitive?
5. Please provide suggestions you may have regarding the order, the content, the wording of the instrument (interview questions)?

Attached is an assessment form which can be used to indicate whether or not you accept or reject any item outlined on the interview schedule. Also, on the spaces...
provided, include any changes you would like made to any of the items on the instrument. Please complete the Assessment Form and return it in the pre-addressed, stamped envelope enclosed for your convenience. Your participation, input and timely response are sincerely appreciated. If you have any questions or concerns, or if there is additional information you request regarding this matter, please contact me at 845-429-6504 (H), 845-222-8395 (C) or 845 942-3337 (W) or my advisor, Dr. Barbara Strobert at the Department of Education, Leadership, Management and Policy at Seton Hall University. Her telephone number is 973-275-2324.

Again, thank you for your support and cooperation in granting me the opportunity to conduct this research in our district.

Sincerely,

Reina Martinez
17 Pierce Drive
Stony Point, NY 10980
Interview Schedule Assessment Form

(This is the form sent to the panel of experts to determine the validity and reliability of the instrument, the interview schedule to be used with the classroom teachers and administrators). Directions: Please indicate: (1) whether or not you accept or reject the item, (2) indicate what research question the item refers or applies to and (3) include any comments or suggestions you may have regarding the structure, wording or changes that would improve the question.

Name: __________________________ Signature: __________________________ Date: __________________________

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Appendix I

Permission From G. Sugai to Use Pyramid of Intervention
Appendix I

Permission From G. Sugai to Use Pyramid of Intervention
Dear Dr. Sugai,

I am a doctoral candidate at Seton Hall University working on the dissertation portion of my degree program. The topic of my study is the representation of Hispanic males in Special Education. This study involves an analysis and examination of how teachers and administrators are using the district designed intervention pyramid model, what the influence of the intervention pyramid model has been on the representation of Hispanic Males into special education placement and to what extent do discipline referrals influence placement of these students into special education. I respectfully request your permission to use two figures which were designed by you, the Integration of Academic and Social Behavior Three Tiered Continuum of Behavior Support and the Comparison of RTI in Literacy and Social Behavior.

The nature of my study will consist of a cross-sectional, descriptive, non-experimental design employing mixed methods; quantitative and qualitative. Both qualitative and quantitative methods will be used to answer the research questions in reference to RCELD student representation in special education, disciplinary referrals, the influence the district designed Intervention model has had on the representation of these students in special education placement, and the level of involvement by the building administrators and classroom teachers in the implementation of the district-designed pyramid. Qualitative data collection will include individual open-ended interviews with staff members (teachers and administrators) and the quantitative method will include information gathered from examining district data. The following questions are guiding this study:

Reina Martinez
17 Pierce Drive
Stony Point, NY 10980
E-mail: rmarti59@aol.com
845-629-6304 (H)
845-942-3337

Dr. George Sugai
Educational Psychology Department
Neag School of Education
249 Glenbrook Road, Unit 2064
Storrs, CT 06269-2064

September, 2009
1. How has the classification rate of RCELD students been influenced following the use of the implementation of a district designed intervention model?

2. How has the building administrator been involved in the implementation of the district designed intervention model?

3. How have the teachers in their respective buildings used the district designed intervention model?

Your permission to use these figures would enhance my dissertation to illustrate and compare your figures with the ones currently used in our district. I have enclosed a self-addressed, stamped envelope for your convenience in mailing me approval to use your figures.

If there is additional information you request regarding this matter, please do not hesitate to contact me or my advisor, Dr. Barbara Strobert at the Department of Education at Seton Hall University. Her telephone number is 973-275-2324.

Again, thank you for your support and cooperation in granting me permission to use the figures in my research.

Sincerely,

[Signature]

Reina Martinez

cc: Dr. Barbara Strobert, Advisor – Seton Hall University
Appendix J
Teacher Interview Transcriptions
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Interview With Teacher “A”

Ms. Reina Martinez: Again, thank you for your participation in the interview. Again, for the purpose of the transcriptions, you are going to be “Teacher A”. Okay, the first question is,

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

Yes, completely. I think the placement of students into special education benefits the student because, I think, we do a good... we really look into it deeply to see if this student can benefit from the procedures that we put in place to help him. And if he gets into special education, he has some modifications that can help him learn better. I think it helps. I think by me informally diagnosing the certain student that we’re talking about helps with the referral and helps determine if the student should be in special education, if he’s eligible for the help that we’re hoping to get him or her.

2. What process do you follow to recommend a student into special education?

Usually, some of the students stand out from the other kids, just by an overview of what’s going on in the classroom. They might not be prepared for, maybe, some homework, they don’t have a pencil, or they’re just shuffling around... not that they just don’t have a pencil... they don’t, ah... it’s a tough question... how do we refer them? Usually within one or two weeks of school they consistently come in with zeros or they’re stuck on things, they come up and said they don’t understand certain things, and then we would also pull the student aside and do some kind of intervention, as far as to see what level they are in math, you know, basic operations. I teach a fifth grade, so our first unit is big numbers, I would give them some questions as far as can they read certain numbers, what place value is the number in, what’s the value of the number, and that usually helps out with math, as far as that they might need some services. As far as ELA, we do a pre-assessment in reading, and then we kind of determine what grade level they are on, and that’s a good start, if you know they’re two grade levels below. If they’re one grade level below, it’s a little easier to get them into... you know, just to catch up.

We do the... there is an IST team that we put some paperwork through to, and then we fill out some of the questions that they ask as far as “what modifications have we been doing?” or, “How can you rate his behavior, his academics?” and then we put the paperwork through and an administrator, is the chairperson of the team and then we will have, we will set up a meeting and we’ll think of what type of help we could give the student and then we’ll work that through. We’ll implement that stuff and then what we will do is we will meet again at a later time and then there’s more paperwork to fill out as far as the IST team goes.
3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?

No, there isn’t, however I think special education settings provide students with a smaller group in which to work. Special Education teachers use strategies that are specific to the needs of the students in their classes. They set up plans for the students and they monitor them more frequently because they have smaller groups and they are expected to.

4. What type of data do you collect on your students?

My grade, basically, is based on homework, class work, tests, projects and quizzes. So, I don’t think that we should just have tests...actually, it’s a funny story...my daughter has just tests, she’s in a private, parochial school, kind of, that’s like, it seems like all she has is tests, and I think that there should be some alternative assessment. I wasn’t a good “test taker” myself, so I don’t think we should rely on tests, I think there’s different ways to do it. We implement rubrics in our classroom. As far as project also, and participation helps, as far as how well they do their homeworks, I do, in math, I do grade just about all the homework assignments. But, there are also other ways, as far as in class projects that they do have the assistance of teachers that are in the building or in the classroom that can help them. So, that’s as far as how I assess my students.

5. How does the information you collect inform your instructional practices?

Well, every two weeks the students go home with assigned folder work with everything that I’ve graded over the two week span. So, I do have that data on each of the students. Also, we do, in reading, we do some...a little bit of “running records” in the middle schools, as far as how well they are reading. Also, we jot down notes, and you know, as far as a behavior book that has like a log of phone numbers for my students, so I jot down different things, as far as how well they are doing in class work, participation, also behavior goes in there too...as far as how well they are fitting into the classroom. I think it has impacted it greatly, because this year I have a very talkative group and I had to adjust, as far as even how I teach, because they’re not used to just sit as a whole class, where I could just speak as I usually do in math class. So, I have even more of the groups that I have, that I usually...I usually do group work, but, I even have to do more group work to break the kids up into smaller groups. So, you know, understanding how my students learn best is how, you know, will impact my practices, as far as how I will instruct the class.

6. How familiar are you with the district design pyramid model for intervention?
7. What do you know about the pyramid used in your building?

Not a lot. I've been involved in meetings and I've filled out forms, so I've been involved somewhat.

8. How is the model being implemented in your classes?

I don't, I mean, is the RTI model... is that... Response to Intervention... OK, OK, I think, is it being modeled in the class... I guess it is then. If I have it right, then, I mean, I'm passing the information along the IST team, OK, alright, sorry about that. So... it is being used, as a matter of fact we're going through it with one of the students right now. We just actually, it worked out for, hopefully, in the favor of the student, that he's being placed where he needs to be placed. So, through the IST team the teacher is given information to the IST team, the IST team doing their job, I think the student is now placed in the appropriate learning environment.

9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavior management practices?

I'm very comfortable with it. I think it's really beneficial for the kids and as a, you know, as a teacher... that's what we're here for, just to make sure that all the kids are placed in the right environment, as far as learning, and what's best for them.

Ms. Reina Martinez: Thank you so much
Interview with Teacher “B”

Ms. Reina Martinez: Again, thank you for your participation in the interview. Again, for the purpose of the transcriptions you are going to be “Teacher B”. Okay, the first question is,

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

Yes, small environment, I even think for all students smaller groups the better of they are this way they can get more one on one actually for they have an aide in the classroom so I definitely, believe it helps them, in a regular classroom they get lost switching of classrooms what teachers, special ed is much more organized class of six or eight.

2. What process do you follow to recommend a student into special education?

Usually meet with guidance, special education teachers, the principal we usually first try to come up with some sort of plan to see if they can make it in the regular classroom and if that does not work we look at past records and we take it from there. Usually, it’s a long process.

3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?

No, I don’t. Students are still required to pass state assessments as required by the state. But, as I said before, I even think that in smaller groups students can get more one on one actually. So, I definitely, believe it helps to be placed in special education instead of a regular education classroom. Special Education teachers are trained to have many different abilities and yet cover the material that needs to be covered with all students.

4. What type of data do you collect on your students?

Assessments, classwork, homework, tests and quizzes. I always do small groups, I always work with small groups, literature circles one on one whole class all of the above.

5. How does the information you collect inform your instructional practices?

I keep a folder for each of the students and I also have packets for each of the students for each unit so at the end of the unit I collect all the packets which includes all of the notes, classwork, homework assignments and type of writing
assignments and at the end of each unit I not only have a packet, but rather a folder with all their work.

6. How familiar are you with the district design pyramid model for intervention?

Not that familiar. Oh

7. What do you know about the pyramid used in your building?

We always meet on individuals. We, again like I said, we collect data on the students and we all meet together. We review everything to see where they should be placed.

8. How is the model being implemented in your classes?

I monitor students' work and assessments, when I see that someone is not progressing, I contact other teachers on the team and we have a meeting on that child. If necessary, we will also gather information from the special teachers.

9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?

Every year I get a little more comfortable with it so does my team usually every couple of weeks we review it and review where students need to be and we take it from there.

Ms. Reina Martinez: Thank you so much
Interview With Teacher “C”

Ms. Reina Martinez: Again, thank you for your participation in the interview. Again, for the purpose of the transcriptions you are going to be “Teacher C”. Okay, the first question is,

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

   My experience has been those students are monitored more closely by the special education teachers and by the regular education teachers we meet together and meet regularly to see that their needs are being met.

2. What process do you follow to recommend a student into special education?

   Well, we have IST committee, the meetings and IST process we go through that and I would say usually through the IST process would be the most direct way.

3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?

   No, I don’t think so. I don’t think that it is.

4. What type of data do you collect on your students?

   Well in the beginning of the year we do collect information about the students’ interests, how they perceive themselves and it’s usually the first week of school their interests what type of learners they feel they are and and I keep a little file of that and then I also ask them what they see as their goals and how they see themselves as being and just as the year goes on through conversations I get to know them better not that I keep a log or anything, and then of course through testing and the lab and all that type of stuff.

5. How does the information you collect inform your instructional practices?

   Well that students have strengths in certain areas that they see themselves as having those strengths and I know that if I can implement that somehow I will ask for assistance from that student, let’s say a student has artistic strength and likes to draw and I need someone to draw something, I will ask that student for assistance.

6. How familiar are you with the district design pyramid model for intervention?

   I am familiar with it. I don’t claim to know it very well and conversations that we have had about it and that there are three tiers and I am not sure a little fuzzy about how the tiers melt into the next one, but I am familiar with it.

7. What do you know about the pyramid used in your building?

   I know that some of the interventions that are used at different levels of the pyramid the interventions that are used in but I do know what interventions.

8. How is the model being implemented in your classes?

   In my classes, I have if my understanding is correct I have some support, some special education, ESL teacher support for those long term L’s and we have meetings with those teachers as to how better meet the students’ needs.
9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?

I guess it has just made me more aware of the students who might need special attention, and things I know that there are more things available. I know that there are teachers and I can go to those teachers.

Ms. Reina Martinez: Thank you so much.
Ms. Reina Martinez Interview With Teacher "D"

Ms. Reina Martinez: Again, thank you for your participation in the Interview. Again, for the purpose of the transcriptions you are going to be “Teacher D”. Okay, the first question is,

Teacher D

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

Well, in my experience, not that I teach special ed., but I think it’s beneficial obviously. The main reason, I think, is because of class size. At least with a smaller class size they’ll have more contact with the teacher. I remember years ago, the maximum class size was 12, now it’s increased to 18, and, which I think it hinders the kids now. Of course, now, with them being put into inclusion classes, some kids can handle it, not all. But putting them into special ed classes, it’s, it’s better for them.

2. What process do you follow to recommend a student into special education?

Basically, obviously, to see how they’re doing in class. If I see that they’re completely lost, meaning that they have no understanding whatsoever, if their grades are lacking in respect to the rest of the class. You know, if the rest of the class or most of the class is getting 60’s, whatever, or 70’s, 80’s and this kid’s like in the 30’s or 40’s, there’s something wrong. I think it’s more that, obviously, more of a special needs then that it is, I think, that they just don’t understand. And then I would probably, in the process, you know, take a look at their past scores, reading scores, elementary scores, middle school scores and then speak to their guidance counselor. And, then from there, obviously, the recommendation, I guess, for the CSE or CST.

3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?

You know what, that’s . . . because I teach a Regents class, you can’t really change the curriculum, because, in the end, obviously, all these kids will be taking the Regents Exam. In a non-Regents class, I can see changing, you know, altering or modifying the curriculum. More so, in that, maybe, to deliver at a slower pace, probably not include more, like for instance, with me with the regular class, sometimes, not that I go off on a tangent, but I may bring in other information that the kids might not necessarily, need for the Regents Exam, but just for general knowledge. Whereas, maybe, with a special ed class, you really can’t do that, because you have to adhere, especially with a Regents, as I said, you really have to adhere to the curriculum. You really can’t diverge that far off, because, obviously, the kid is going to suffer for that.

4. What type of data do you collect on your students?

Within that class, I don’t know, if you’re talking about determining grades, or whatever, obviously, their homework, their class assignments, the assessments, quizzes and tests. Also, not too much that it’s like a social grade, but to see how they react, not only with me, but with their peers, and not so much the behavioral issue, but as if, you know, if they’re understanding what’s going on, if they feel like they’re
I like to compare how they're doing in my class to other classes as well. I, we, have access to look at their report cards and I will, if a kid is doing poorly in my class, I want to see if it's just my class, or is it across the board. And, more often than not, I would say that if they are doing poorly in my class, they're probably, they are doing poorly, interesting enough, in math as well. And, so I like to compare and see what they're doing and if it's really, the grade is really bad, I like to take a look at their 8th grade scores, the assessment and compare it to what they do in my class presently.

5. How does the information you collect on your students inform your instructional practices?

I, we, have access to look at their report cards and I will, if a kid is doing poorly in my class, I want to see if it's just my class, or is it across the board. And, more often than not, I would say that if they are doing poorly in my class, they're probably, they are doing poorly, interesting enough, in math as well. And, so I like to compare and see what they're doing and if it's really, the grade is really bad, I like to take a look at their 8th grade scores, the assessment and compare it to what they do in my class presently.

6. How familiar are you with the district-designed pyramid model for intervention?

I would say that I'm pretty much "Old School". And, what I've been doing over the years has worked and I've been pretty successful in my results, I think, I don't think that I would change much.

7. What do you know about the pyramid used in your building? Again, not familiar what-so-ever.

8. How is the model being implemented in your classes? Again, because I'm unfamiliar with the entire method, I believe, in a classroom, it could be any classroom, I think, behavior is the main issue.

9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices? Obviously, with the special ed kids, again, it depends upon the degree, that they are so-called, "special ed". Because, I believe that all kids know the difference between right and wrong. Because, otherwise, they, they don't belong here. If that comes to the point where they just don't understand that. So, I'm a firm believer in discipline first and then academia would follow. So, you know, the management issue that I have in class is pretty much null and void, in that I don't have a problem. That, but, I think, that is very important.
Interview With Teacher “E”

Ms. Reina Martinez: Again, thank you for your participation in the interview. Again, for the purpose of the transcriptions you are going to be “Teacher E”. Okay, the first question is, Teacher E.

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

   That’s a very good question. After several different assessments, adjustment in the curriculum, delivery? Curriculum, different interventions in regards to how we reach the children, diversifying curriculum. Then we look at if these processes have failed, and now we need to see if there is a gap, or a missing piece from achievement and ability.

2. What process do you follow to recommend a student into special education?

   The special education process is usually by consent of the psychologist and the school counselor. That is how it initially starts. When the parent gives consent, then we can proceed forward to testing. But we try to do things prior to that obviously.

3. Do you believe there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.? Can you describe the process you follow to recommend a student to Special Education?

   Yes, there is an outlined process. It is multi-faceted. The first thing we have to do is refer a student to RTI. That committee goes over with a specific teacher what things have been put in place for a student to achieve greater success in the classroom without having to go up for special education. At that meeting there is a pool of teachers, with a pool of ideas, with a pool of solutions that have worked for other students in the past, and you pull from there. From that point, you implement from those things, and if you see the response is moving forward, then we wouldn’t go forward with classification. We would see that these interventions have worked. In the event those interventions have failed through time, then we know there is probably some type of gap and we need testing to be done.

4. What type of data do you collect on your students?

   Yes, if properly done. The goal for special education is not to stay classified; the goal is to become unclassified down the road. The true goal is to learn how to achieve and become successful with the disabilities you have. You make those accommodations and modifications in your learning, but at the time, it’s hard to compensate. Anyone that has a disability would still want to be successful, so what you do to compensate for that disability and the goals for special education develop strategies for students with disabilities to eventually be successful down the road.
5. How does the information you collect inform your instructional practices?

In response to intervention, for that tests, quizzes, work samples, homework samples, writing samples. All of those things are cumulative, and if there is a pattern, we can see where the student is able to do homework—let's say—and they still do poorly on tests, is it a study issue? Is it something where they need to develop skills in transferring what is being taught into independent practice and retention? Or we look at the test scores. Are the tests too large? Are we not testing what is being taught? All those things go into place, so when we look at the information with a committee of people versus the one teacher maybe stuck in that one format you try to develop a different strategy and see where you can optimize the student's potential.

6. How familiar are you with the district design pyramid model for intervention?

When a student goes up for RTI it impacts it greatly, it's a lot more work for the teacher individually because now you're looking at trying to diversify the curriculum and the information differently so that another student in the class can adapt and learn it, as well. But does it work? I believe, yes, if it's done appropriately then the outcome is beneficial. If the student is involved in this better than what we have done in the past and the student says yes, then that's what you should go with. Because the idea is just to get the student in the easiest, most conducive way possible that doesn't deter them or discourage them.

7. What do you know about the pyramid used in your building?

I am not as familiar as I should be, but from having people that I know personally and my coworkers work on the committee itself, and my co-teacher helped develop the program, I'm pretty well versed I believe.

I know that there are different components to the pyramid of intervention. The first is the gathering of information—the process where all the teachers meet and put a student up, and then you come back after a certain amount of time to see if the interventions you have chosen as a committee work. And then you go from there. If they do work—do you implement it, if not—what do we re-do and where do we go from there. There is a process that builds up to student performance.

8. How is the model being implemented in your classes?

By changing the curriculum, by changing the assessment forms, looking at different modalities of teaching in general, diversifying the information, giving students different and multiple opportunities to come up with the same solutions—but maybe present it differently. So that their method of presentation for assessment will be more
conducive to ensure they have learned something. The different ways you assess, the different ways you teach, how you diversify and differentiate, and instruction is what allows students to show their individual performance.

9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?

As a special education teacher, I think the model is good- and it has the right idea. I think that the model is appropriate. They are looking at helping students perform optimally without having to go to classification, which is a stigma in the past- if a student is not achieving, then lets classify them. So we want to remove that, because we don’t want to misplace students, or classify them unnecessarily. But in the same breath, I would hate to see it turn into something that prevented classification because of a “numbers thing” in our society where- “are we being judged at how many classified children we have,” so we prolong classification because we are using these things to stop that. I think there needs to be a more definitive line off when do we classify? And when do we not? So- with that being said, that’s generally how I feel about it.

Thank you.
Interview With Teacher “F”

Again, thank you for your participation in the interview. Again, for the purpose of the transcriptions you are going to be “Teacher F”. Okay, the first question is,

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?
   I think based on that there are test scores and academic scores we look at the overall student and try to place them appropriately based on this year math and ELA language arts skills.

2. What process do you follow to recommend a student into special education?
   We start out by going out through the IST process so we fill out the paper work for that we meet with the guidance counselors and the principal and we follow the protocol from there.

3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?
   I teach general ed., I don’t teach special ed., but from my understanding from what I know the curriculum is the same. It is just adapted to their ability level.

4. What type of data do you collect on your students?
   I do visual, auditory and just transcriptions of observations that I make. We have quizzes, tests in the classroom that I make.

5. How does the information you collect inform your instructional practices?
   Based on all the different methods, I can pin point who needs extra help see who needs extra help, we offer extra help before school, lunch time and in small groups during class. I think again, we look at all of the data that we collected and try to target those students and try to group them together and provide any special

6. How familiar are you with the district design pyramid model for intervention?
   We have covered it several times during faculty meetings and staff development days. I think most of us are at the IST levels I don’t think that any of us are at the higher levels I think most of us are involved at the IST levels not the higher levels.

7. What do you know about the pyramid used in your building?
Again, we start with the IST process from there they are evaluated for any special programs.

8. How is the model being implemented in your classes?

I think as a team we meet together, we discuss students who need special interventions and we go forward on the IST process.

9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?

A lot of it is working with the intervention teachers, getting feedback from them on whether the interventions are working and on how we can work together to make our students successful.

Ms. Reina Martinez: Thank you so much.
1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

I'm sorry could you repeat that question one more time?

Okay, I don't have much contact with special education students, and I'm not sure what programs they're involved in, so I'm not sure if you want to pick someone else to interview. No? Okay. Because I don't actually have anyone mainstreamed into my classes this year. Before, we had different students come in for subject areas, but for special ed., they're in different classes this year. So it may be different for the specials, because then they do go to special classes, like the encore or Specials. But in terms of ELA and for Social Studies this year I don't really see any of that. So I could really answer that question.

2. What process do you follow to recommend a student into special education?

Okay, we usually have a team meeting; we also have an IST Team here, in which the first step is to refer a student. Then we meet as a building level so we usually have teachers, principals, assistant principals, and guidance counselors, anyone we can get them involved. We usually meet and come up with ways that we can help this student and things that we are noticing. Then the next step would be to contact parents, and do a diagnostic test, and take it further.

3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?

No I don't think so, I think it should be the same, I think it's the way it's gone over and taught. I think in terms of modifications and differentiations that must be made in order to meet their needs.

4. What type of data do you collect on your students?

A variety of different data. Whether it's formal assessments, informal assessments, conferences, a variety of different data.

5. How does the information you collect inform your instructional practices?

Actually, it's invaluable, I think in terms of collecting the data, because it tells you the strengths and weaknesses of a student. This year we are having monthly assessments for ELA and for Math in the district. I find that what they're giving us is not enough. Especially for ELA, it's a short reading passage and four questions. Which I find, four questions is not enough. I don't need a three hour exam or assessment, but I would like something with a little more meat, to get
some more information because that really helps you in terms of your teaching. 
Also working in small groups, and working one-on-one with a student. 
Another example, in terms of writing, we are working on descriptive writing pieces right now, so as I conference with the students and I actually sit with them and see what they are working on, I can see that some of them need to work on their beginnings, or some in terms of grammar, so we can do small focus and mini lessons on different areas that they need to improve upon.

6. How familiar are you with the district design pyramid model for intervention?
Not that familiar. But to be honest, this is my fourth year after a three year child care leave, so in terms of special education I feel like I had more of a background at West Haverstraw because they had a blended class, so I sort of feel a little bit out of the loop.

7. What do you know about the pyramid used in your building?
When you refer to the pyramid- pyramid is the...?
Ms. Reina Martinez: ... response to intervention.
I have been involved in meetings, I have been asked to fill out data collection sheets on students. So I have been involved in that process, and seen students who have actually gone through that and get the help that they need.

8. How is the model being implemented in your classes?
In our classes right now we have students who are receiving academic help in terms of after-school programs. In terms of referrals right now we don't really have much on my team this year, but if the need was there I would know how to get the process started.

9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?
I think after working with a variety of students it changes from year to year. I also think that working with special education teachers- there are a couple here that have pushed in- it opens your view and makes you more aware of the different learning styles, and to be more in-tune to the different needs of the students. And not just teach to the middle but you have to teach to the whole group. Whether it's re-teaching in a different way, or using such technologies as the smart board, and going to the computer lab and things like that. I use many different tools to teach.

Ms. Reina Martinez: Thank you so much.
Ms. Reina Martinez Interview With Teacher “H”

Ms. Reina Martinez: Again, thank you for your participation in the interview. Again, for the purpose of the transcriptions, you are going to be “Teacher H”. Okay, the first question is,

1. How does the placement of a student into a special education program result in beneficial outcomes for those students?

Certain students really do benefit from it because they get more one on one help, and they get more interventions with an extra teacher in the classroom. They also will get special settings for their educational needs and they tend to do better because they do have the background and they have that extra support system and that’s what they need. Most of the kids that are in special education classes need the extra support, whether its for organization, whether its for reading, whether its checking for understanding; having the extra support in the classroom benefits them and brings their achievement levels up.

2. What process do you follow to recommend a student into special education?

The first thing we do is discuss it amongst our team because in middle school we have team and we decide what the needs are for the student. On our team level we instigate some of the interventions such as double checking for homework and making sure the parents is informed on the issues that the student is having. If the student is not doing homework for some reason, for an intervention we might take their agenda and make sure they are putting their homework in their agendas everyday and having their parents sign it to see that they do have homework. If the interventions that we do on a team level don’t work then we will go to the IST. Most of the time the IST’s are used rarely now I’m seeing because its been taken care of prior to meeting seventh grade.

3. Do you believe that there is a difference between the curriculum for students placed in special education and the curriculum for students that are in general ed.?

In my classroom there is no difference, and as far as I know there is no difference in the classes on my team. The children are treated the same, except they get their interventions- if they need extra time they get their extra time, if they need their directions read they get their directions read- but they are not treated different as far as the curriculum goes at all.

4. What type of data do you collect on your students?

Of course we have all of the data on the state assessments that we look at as a team. Working as team in middle school is just great because we can meet the needs of all the students. We look at the data from the state assessments, and in my classroom I look at quiz grades, I do an item analysis on my quizzes and test so I know where my students
stand. I go by the IEPs, I look at the levels of the tests that they had when they were placed into a special education program. Any data I can get my hands on, I take a look at it.

5. How does the information you collect inform your instructional practices?

I have been noticing that there are some students in the general education population that there are some students having trouble with reading and comprehension, and if I look at the ELA results I can see where they are falling in certain categories and I can adjust my teaching and my assignments according to that. I try to do more reading in my classroom and I try to institute more lessons that have comprehension problems and inferences, because kids are having a hard time with inferences. I try to institute that more than I used to. I try to adjust as I go, and I try to be very flexible with what I do. One year I may not have to do something like that, but next year I might. The data helps me understand where my kids are at and what I really need to concentrate on.

6. How familiar are you with the district design pyramid model for intervention?

I'm not very familiar with it. I know what my requirements are and what I need to do starting with my classroom and my team, and going to the IST and after that. ISTs-I don't know if they are really doing the job they are supposed to be doing, because many times you recommend a child for an IST and you come up with strategies, but the strategies are already things we decided to do on our team level. After that, I really don't know much about the response to intervention part. I don't know where that comes in, and I don't know if it's meeting the needs of all the students in the district.

7. What do you know about the pyramid used in your building?

In my building I don't think it's really being used to its greatest ability. I think people are disgusted, or dis-enlightened by the IST process. I don't think it's being used as much as it used to be. I don't know whether it's because the students are being identified before they reach a certain level, or if they are using more of the ELA and Math Assessments to look at the kids and see where they are at. I don't know where things are happening at because we haven't done an IST. We did one last year, and prior to that for a couple of years we were doing two, three, or four, and sometimes more on students. Now we are also getting information as to what students have already been through the IST process and where they are at. That helps also because we are not duplicating work. I don't know if it's really being used to its greatest ability.

8. How is the model being implemented in your classes?

Personally, I take a look at the students and I see where they are at, and see what I need to do to adjust my curriculum and my classroom. I try to institute more differentiation, but that's probably about it. I also have the content support teacher in my classroom (inclusion), so she sees more of the interventions and is in charge of more of the interventions than I would.
9. What impact do you believe has the implementation of the pyramid model for intervention had on your instructional and behavioral management practices?

I think I look at the students differently than I used to. I try to find out more about where they were last year, what their issues were last year. Then I try to adjust for their needs. As I said, the students are changing on an annual basis and I can’t do the same old thing anymore, I need to make adjustments. That’s really where it came in, was my adjustments to my curriculum and my method of teaching. I think that is where most of it has occurred with myself personally, and not so much with the students, with how I’m doing it now and what I’m accepting from them, and what their needs are.

Ms. Reina Martinez: Thank you so much.
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I would like to thank you for volunteering for this interview about the RTI pyramid used in your building. For the purposes of transcription, you will be Principal Number 1.

1. What determined the implementation of the RtI pyramid used in your building?

Well, it was initially started the year before I got here with the principal prior to myself and we continued to work MY FIRST YEAR with the other middle school principals and our boss, who was the assistant superintendent for curriculum and instruction who was K-7, and we worked from that point to develop our pyramid.

2. How was the determination made?

The determination was made based on initially some of the programs that we have in the three schools that uh the group felt were programs that were working, and the group felt were working and where they fit into the pyramid but as time has moved on we have tried to evolve our pyramid to be more student specific to have the programs created or put in place to be more student specific rather than the other way around.

3. Who participated in the design of the pyramid for your building?

Well, district wide as I said, it was the three middle schools principals, and the assistant superintendent, building level as we got a little bit more detail and building specific, it was myself and as well as the SIPT team, as well as input from the assistant principal.

4. What is the process for a student needing intervention?

Well, initially we will look at information that we've compiled on the student based on their previous year's the previous year on their academic year; school grades, teacher recommendations, test score data and any other formal assessments we have given throughout the year. We take a look at that and identify students in need for placement purposes we put them into the appropriate intervention that we may have it is also something that we look at throughout the year, as we find our students come into our school or student with deficiencies up here we then adjust their placement into the appropriate program throughout the year.
5. How are your teachers involved with the RtI process?

The teachers are involved by providing interventions at the Tier 1 level basically for everyone in their classroom and by differentiating their instruction for all students also involved in providing any other intervention programs such as the Read 180 and the AIS programs that we offer and also involved in the process of identifying students through classroom assessments and formative assessments they give in their classroom assessments and formative assessments and when they notice deficiencies and recommendations that they provide to us.

6. Describe the process used in your building to recommend interventions for your students.

Well again, we talked about initially, before the year starts there are things we look at but as the year goes on we identify students whether it is to the IST process where teachers will identify students to their IST team or pre-IST team we also have team meetings where we discuss students who have academic or behavioral concerns for and how we can meet the needs of those students through proper placement or program.

7. What type of data do you collect on your students?

We do we create data base, for all of our students that includes test score data, intervention programs that they are in formative assessment data as well we also take a look at academic performance, teacher recommendation data as well as for our program we do progress monitoring in our Read 180 we do and SEU test beginning middle and end of the program pre and post more informal observations for our test after school and AIS programs before d we take a look at academic performance both pre and post.

8. How are the data analyzed?

We take a look at the data to make a determination of whether or not there in an appropriate intervention for this student they are progressing or are they not should we continue with this intervention or do they need a different intervention or have they tested out and have they caught up to grade level and its time to move on out a specific intervention.

9. How did you decide on what interventions to include in your building's structure?

Well initially, you know it was based on what we had in place, we have evolved, we have taken a look at the data to look at the data to determine what programs seem to work for our students and which ones don't, and the ones
that do work we continue to work with or grow or try to improve and the ones that don't we look to replace or get rid of.

10. How are students monitored in your building?

Again, we progress monitor those students throughout the various programs during the year, pre and post to determine if they are properly placed.
I would like to thank you for volunteering for this interview about the RTI pyramid used in your building. For the purposes of transcription, you will be Principal Number 2.

1. What determined the implementation of the RTI pyramid used in your building?

We needed a systematic way to address students that were not working up to the ability of the curriculum and that were not having success in the classroom and using the RTI system we were able to systematically look at ways to, ah, address some of the students' weaknesses.

2. How was the determination made?

District-wide, there was a decision that we needed to have a system for Response to Intervention in each of the buildings.

3. Who participated in the design of the pyramid for your building?

The district central office, the principals in the district, in general, but for Haverstraw Middle School, it was the administration and also we had a core team of people, which included psychologists, guidance counselors, regular ed teachers, special ed teachers and an administrator that received the RTI training and put together the RTI Pyramid. And it's the RTI team that continues to this day and we just finished our official RTI manual last week.

4. What is the process for a student needing intervention?

We, again, put together a manual of that process so that it is something common for us in the building and I will be happy to give you a copy of that. It's very involved, but, basically, the very, very, very limited answer is that we have conversations with the child, the parent, the team, the larger team in the process. Then we look to go to the actual IST team to actually be involved in that process. Then we move to the Tier 1, Tier 2 and Tier 3 interventions.

5. How are your teachers involved with the RTI process?

They have gone through training to be members of the RTI or IST team that actually looks at the case by case situation as brought forth. They've been trained to be members and have also been trained to deliver some of those interventions. The interventions are delivered by faculty members in the building, so they were trained on "both sides of the table," so to speak.
6. Describe the process used in your building to recommend interventions for your students.

Again, we have a whole manual. We looked at two types of interventions. We looked at academic and we looked at behavioral interventions. And, we have specific pathways that the staff follows for both of those instances. And, I'll be happy again to share the manual with you, it's quite involved and it's constantly, constantly monitored and documented.

7. What type of data do you collect on your students?

Prior to intervention we have a universal reading screening for the academic portion of RTI. Then, after we look at that screening... then we place them, I mean "we", the teams, the teachers, look at where they go in terms of the Tiers. We look at state assessments, we look at DRA 2's or standardized tests, we also look at writing folders from the elementary schools that are brought to us. We look at formal assessment data, parent information. We look at RSI's, which is Reading Style Inventory. We look at their classical files, which basically has a list of students'... their aspirations, their learning styles, or things that they feel they're good at, so it's kind of a student inventory that they take and we take all that information and bring it all to the table in terms of where to place students. Also, for the SPI's, with some interventions that they've taken in their... before they've come to us, or while they're here, SRI's or some of the interventions... lexia, lexia, lexiles that we use... so we look at all that. We look at multiple measures to try to see where to place the student. I'm sure that I'm leaving some out too.

8. How is the data analyzed?

Every month we have a, we give a formative assessment. We meet as a grade level and then the grade teachers in the team meet with me and we go over that data. We look for trends and then the classroom teachers and monitors not on those trends. We look at all those measures that I previously mentioned. We come together as a group in the spring and start looking at data to start placing for the next year. So, we look at all the monitoring that happened during the year and then... we call it the War Room, we've got special ed teachers there, we have reading specialists, we have speech, we have ESL, we have classroom teachers, administrators... so we kind of go through each kid and look at that information. That helps us with staffing, etc. for what we need for next school year.

9. How did you decide on what interventions to include in your building's structure?

We looked at need, we looked at resources, we looked at availability in terms of what the District was supporting. So we have to use all of those structures to try to figure out what we can use. For example, one of the reading interventions is also a
multi-sensory reading intervention and is District-wide so we have to use what is provided to us.

10. How are students monitored in your building?

We have follow-up meetings. If a student is brought to an IST and those could be from, depending on what the research says, they could be four weeks, it could be six weeks, but it’s typically it’s six weeks that we monitor. We bring back data, the team evaluates it, then we can choose to . . . or the data will dictate whether or not we need to continue the intervention or if we need to try another Tier or another strategy. Also, it’s being monitored regularly by the classroom teacher cause then that has to be brought back to the team. And the teams are made up of virtually every staff person. We’re looking to maybe refine that to a core team, but we do have people from different grade levels, if your issue is an ESL issue maybe, we will have an ESL person there. If it’s a behavior issue, we will have a psychologist or a social worker there. So, depending on what the situation is, those are the people that will be sitting around, the core group, of IST members. And there’s always an administrator at every IST meeting.
Thank you again for your participation in this Interview. For the purposes of this transcription, you are going to be Principal 3.

1. What determined the implementation of the RTI Pyramid used in your building?

We work within the framework of special education services that are provided in the district that have an influence on what any particular school does in a school building. School buildings, principals, and teams of people in school don't work in isolation. So that is one aspect you take into consideration. A second aspect would be the research and the knowledge about what interventions and what would be appropriate interventions. The initial use of "student distress." Thirdly I will say what we have found that could offer and could work in our building. What works within our school, what has the research said about RTI, and what is the district doing in terms of special education services.

2. How is the determination made?

It's made on the needs of the students, and what is right at the age group and educational development that we work with, it's not the same to work with fourth graders as it is to work with eighth and ninth graders. When we begin to discuss implementation of an RTI Model and the evolution of the next steps for a specific students or groups of students we have to take into consideration who we work with, which is eighth and ninth graders. That age group is comprised of students with very specific and very concrete characteristics that have to deal with early adolescence, with the development of those students, and with the intellectual and emotional makeup of those kids. I would say that another aspect that we took into consideration is who we are, what we know how to do. You might want to do X, Y, and Z in your school building, but if you don't have the resources to do X, Y, and Z, you may have to do P and Q.

3. Who participated in the design of the pyramid for your building?

The compilation of the pyramid itself became an administrative task. The designs of the different interventions are of different levels of approaches to students deficiencies. I would say that was the process that evolved over the course of time. It was not something that we came up with in one semester. Things that were already in place slowly became part of the pyramid of interventions and perhaps another couple of things. When I came the train was already in motion, so I kind of jumped on a train that was already moving. So to speak. I could not talk to you about the pre and the post.
4. What is the process for a student needing intervention?

It depends if we are talking about literacy interventions; for example, the process will be assessing what is happening with the student in terms of performance, ask for report cards, progress reports, teacher evaluations of aspects of a student’s performance, not necessarily numerical aspects. I would say that the process can be driven by a teacher; it can be driven by a counselor. What we really like is when teachers drive the process. We feel that it is much closer to the trenches when a teacher takes ownership of that process it is more valuable. It is not an imposition on the teacher, teachers don’t like to receive impositions, and that has to be taken into consideration. Therefore, we actually recommend that teachers are the ones who propose students to an IST process. The IST, interventions can be put in place for a child. It can also be with regards to literacy issues, and reading and writing issues, it could be a request for an evaluation in terms of READ 180. The English teacher could be the one making contact. All of these conversation have dynamic. They are not in lock???. They are dynamic. The teacher expresses concerns, talks to counselor, talks to assistant principal, talks to other colleagues, speaks to a reading teacher, ??????? Who may agree to do a read 180 evaluation or even the possibility of the child needing lower level of services in terms of reading ability than READ 180. Perhaps Systems 44 which we are beginning to implement in the building. So the process at this point is driven by teachers are the ones who know how the students are doing, and are the ones who bring the students forward to ISTs, to discussion with a counselor, and assistant principal, and from there sometimes after an IST, after interventions have been in place for a number of months, and perhaps more severe decisions may be taken and it may be determined to requests for evaluations. However, those are later stages. We have nothing in the days when the immediate response was ‘let’s evaluate the child to special education.’

5. I know part of this you have already said, but I have to ask you again, “How are your teachers involved in the RTI process?”

We want them to be involved in proportion to students for discussion, and in being part of the solution, because some of the recommendations have been in the classroom. Naturally so- that is where the railroad meets the road. That’s where instruction takes place. So we promote and encourage them to be dynamic in terms of the conversations they have with the other staff members and being part of the decision making process to provide for higher level of layers and services for a child. Whether it is in the form of in class school ‘modifications.’ Or perhaps a child that was not identified in the past for a 504 maybe in the process of a student study- IST- perhaps a 504 can be put in place if deemed necessary. It often that case that when students begin to face higher levels of academic demands with their entry into eighth and ninth grade they may experience stresses and distress that they were not experiencing in the past.
6. Describe the process used in your building to recommend interventions for your students.

The IST process is at the heart of it. Without doing ISTs, counselors, assistant principals for guidance, they dynamically discuss cases with teachers in order to discuss potential interventions. I would say there is not one venue of adding additional interventions or non-special education services for students. With regards to more specific details about that part of the process I would recommend that you speak to administrator Y, and you ask her perhaps one or two of those questions. You don’t necessarily have to do the whole interview, but I recommend you asking her some of the questions to support or enhance the content of this interview.

7. What types of data do you collect on your students?

We constantly look at data. Prior to, during, and after what exactly, what are you referring to?

We use everything that we can put our hands on. From student files, with all of the numerical points regarding? IST? performance in the previous grades, current years performance, teacher reports, data collections forms that request teachers to provide information on the performance of the child. We try and make decisions based on data if we can. However, I feel the more we work with data, the more you have to take into consideration that not everything is about data. Data works very well when you are looking at groups of students because you couldn’t evaluate a class of 600 kids based on what you think of them. When you are evaluating the performance of one particular child, there are many different aspects that have to do with what happens between that child and the academic content, between that child and the text, between that child and their peers in their classroom, and between that child and their teachers- with how the child interacts with the outside world. All of those dynamics between the child and everything else is part of the discussion. It’s not just data. Those would be considered data-only its self data.

8. How are your data analyzed and used?

Well, I am going to be honest with you, and it’s something that I should do, and see through one or two cases every year. I have not sat through an IST process from beginning to end. I do know what they set out to accomplish, but I think it will help me if I actually walk through the process. So how do they analyze the data? I know that when they meet they discuss every aspect of the child- From the numerical performance to the more self aspects of it. I don’t exactly know how to answer ‘how.’ They collect as much data as they can and they to the best of their skills, knowledge, and ability they evaluate everything.
9. How did you decide on what specific interventions to include in your building structure?

Age group, academic needs of the students, expertise within the teaching body, prior successes of those interventions in other places, and prior experiences with those interventions by ourselves, our own experiences that we have heard or learned through our prior interventions. I would say that those are some things that come to mind right away.

10. How are the students monitored in your building?

Once a student becomes part of an IST process, the student becomes part of a case study, and we do have a scripted IST process that is determined within the guidance office. Students progress from the referral point to similar meeting points during the school year, all through the end of the school year. Those students who are part of an IST process are monitored carefully, but all other students are monitored carefully, as well. Counselors and I have access to relatively clean tools that allow them to look at all of their students in their caseload which has the elements that will be very helpful in allowing them to follow up on our students. We take into consideration behavioral data points, suspensions, time outs, detentions, attendance, of course grades, and number of classes failed. We use that very basic data to monitor our students and try not to lose anybody through the cracks. We try to do it religiously every quarter. We make an emphasis on the monitoring of the review of our students, and at the interim points counselors are expected to monitor those kids who at one point were determined to be relatively at risk. That could be not necessarily kids who have failed classes, but those other that have passed everything and could either way. That could happen to a child that has passed all classes, but their GPA is not very high.

Thank you.
I would like to thank you for volunteering for this interview about the RTI pyramid used in your building. For the purposes of transcription, you will be Principal Number 4.

1. What determined the implementation of the RTI pyramid used in your building? There were several determinations we first looked at our students to see what their needs were which are unique to each building depending on where they come from. There's a lot of variables there, so that was our primary determinant. Was the population we were serving. We also looked at the capacity in our building, what our teachers, related staff and support staff knew about, were conversant in, in terms of interventions, and where also, we needed to provide some training so that we could provide interventions that we didn't have at the onset outside the pyramid application of the Building.

2. How was the determination made? It was a committee decision mostly of the administrators but also a group of teachers that has morphed through several committees we are now calling this committee the E Team here in the building. But, originally it was some special ed teachers, some regular ed teachers, the administration of the building and that actually predated my being stationed here as the principal, but that was what was ongoing when I came.

3. Who participated in the design of the pyramid for your building? Well, as I mentioned, it was administrators, special ed teachers, regular ed teachers, guidance counselors were involve, we had a number of teachers both from special Ed and regular Ed that had been involve in success academies and programs like that. That were in use for students and all those people were involved in one level or other.

4. What is the process for a student needing intervention? Pretty simple. Actually, we try and streamline this. If a student is having problems in class whether it is academic or behavioral they are sent to an IST team, that team reviews what is going on and provides some possible interventions right there back to the team of teachers. Since we are a middle school we are team based, so those interventions go back to the team. We set a timeline as those goals are smart goals, so we have a timeline to see whether they are going to be effective. Then there is an automatic review of those IST interventions at a pre-determined amount of time and that varies depending on the interventions we're using and it depends on the individual student. And then from there we start working up the pyramid after that second meeting if things aren't improving, for whatever reason, again whether it is academic or behavioral. Then we start moving up the pyramid looking at interventions that go either beyond the classroom or at least beyond the general application of classroom interventions.

5. How are the teachers involved with the RTI process? Well, every teacher, of course, is involved in IST, depending on students that they send to that, also going the
other way, administration. We identify students based on state assessments that may need interventions and we go to the teams, so every teacher is involved at that level. We would call that Tier 1, obviously. Students who are referred to IST are those teams of teachers and independent teachers are part of that committee, as well as, again, special ed., guidance counselor, in some cases psychologists, etc. So, there's a number of people that are involved at different levels.

6. Describe the process used in your building to recommend interventions you're your students. Well, as I said before, it either comes from the team of teachers or it may come from a review of academic success or challenge by administration or guidance counselor, that can happen too, so we try and make it a two way street, try and make it both ways, because we are really focused on the success of each individual student. We have gotten to the point where the staff is pretty facile with that process

7. What type of data do you collect on your students? Prior, during and after? Well, let me take the most severe or most intense interventions, if you will, we always do, with any intervention that takes a student beyond the regular classroom, we're always going to do a pre-assessment, of some kind if it's academic. We'll always do a post, if they matriculate out of that particular intervention if we feel they're ready. Obviously, we're not going to take them out till we have some kind of data that says the student has made improvements and can either move back to the general large group setting or not. If we're collecting data that's more in the behavioral mode, there's a multitude of ways that we get that behavioral data, anywhere from anecdotal information from monitors and teaching assistants, if they happen to be in the room, to the nurse, potentially, or school psychologists, all stakeholders have some element of reporting to do whenever a kid is touched by them, their role in the building. So, we take that anecdotal data. Also, in the classroom, teachers are asked to provide, in the IST model that I mentioned before, they're asked to provide us a whole wealth of data. And, of course, from our end, administrative end, we look at the data that comes, again, from state assessments, or local formative assessments, that we do building wide and district wide. So, there's a lot of information comes to play on one student.

8. How are the data analyzed? Basically, in some cases, the IST team that the student has been sent through; obviously the IST has all that data at their disposal and they try to synthesize that into a working plan or a review of that working plan. In some cases that information is reviewed by building administration, myself, my assistant principal. In some cases that information is also synthesized through our guidance and counseling center and people like the school psychologist and the nurse, perhaps, depending on the issue.

9. How did you decide on what interventions to include in your building's structure? Well, I would say, first of all, that that is a very organic process. It changes every year, sometimes during the year, what we include in that pyramid
changes. What we try to do is look at, again, our students that we were serving... what the overall needs were, what the most intensive needs were for Tier 3, and if they fall into a group, which they sort of did. You know you’re looking at literacy and numeracy, at least at some level and then in Tier 2, the same thing. But then their behavioral issues create a real fluid response to intervention, I think, which is good, because not every kid is the same. So, what we bring to the table may be different, and the pyramid could be very broad or it could be very narrow, depending on the student.

10. How are students monitored in your building? Through the IST process, through the teachers that may be providing a direct service, intervention is in a small group setting or a one to one setting, in some cases. They are certainly reviewed by building administration on a regular basis. Anyone who has reached Tier 3, I’m looking at personally, very closely on a regular basis. My A/P or assistant principal, the same thing. So, again, depending on the intervention, who is looking after that, that will give them point. It may be a teacher in the intervention, or it may be a report out of that intervention to building administration or to a counselor, or to, and/or to, someone like a school psychologist. We all, here in this building, we are really standing on the principle that we want the best eyes on each kid, so those best eyes may not be mine, they may be someone else in the building, and I rely on their expertise. Highly reliable organizations rely on expertise, and we try to do that here.