AN EVALUATION OF A PROGRAM TO DECREASE DISPROPORTIONATE REPRESENTATION OF RACIAL AND ETHNIC MINORITY STUDENTS IN

SPECIAL EDUCATION

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE GRADUATE SCHOOL OF APPLIED AND PROFESSIONAL PSYCHOLOGY

OF

RUTGERS,

THE STATE UNIVERSITY OF NEW JERSEY

BY

JOHANNA FAIN MORROW

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

NEW BRUNSWICK, NEW JERSEY

MAY 2009

APPROVED:

Susan G. Forman, Ph.D.

Lewis Gantwerk, Psy.D.

DEAN:

Stanley Messer, Ph.D.

Copyright 2009 by Johanna Fain Morrow

ABSTRACT

In recent years, the overrepresentation of students from racial and ethnic minority groups in special education programs, also referred to as disproportionality, has been identified as a problem at federal, state, and local levels. Spurred by federal requirements, state departments of education have required school districts to examine disproportionality in their schools and propose solutions. A program evaluation was conducted in a suburban New Jersey school district to evaluate a district program to reduce disproportionality. This district utilized intensive data collection and district-wide professional development in varying formats to impact disproportionality. The formation of a group of district stakeholders known as the District Core Team, who learned about disproportionality and proposed solutions for the district, was also an important aspect of the intervention the district employed. To evaluate the district's efforts, a survey was administered to the members of the District Core Team. The survey focused on changes in staff awareness and thinking about disproportionality and change activities that were most influential on their professional practices. Responses from staff showed that as a group they felt their awareness about disproportionality had increased at least somewhat and their thinking about their professional practices had changed somewhat after the first year of changefocused activities. District professional development activities were rated as helpful in changing staff awareness and thinking, especially a presentation about the district's own disproportionality data. Staff also indicated that the district change activities were likely to continue to have a positive impact on disproportionality and their own professional practices. Rates of disproportionality did not show significant change after the first year

ii

of district activities, although such change was not expected given the relatively short time frame for this study. Based on this district's program to change disproportionality, recommendations for other districts faced with the problem of disproportionality are provided.

ACKNOWLEDGEMENTS

I would like to first thank my committee, Dr. Susan Forman and Dr. Lew Gantwerk for helping to plan this dissertation and providing much needed encouragement throughout its completion. I greatly appreciated Susan's speedy editing and willingness to meet with me, at times on short notice. Beyond the dissertation, both Susan and Lew provided invaluable learning experiences for me at GSAPP, through coursework, supervision, and professional guidance. I am very appreciative to the entire GSAPP community for the opportunities I have had in graduate school.

I would like to thank the staff at GSAPP, especially Kathy McLean and Sylvia Krieger who have always had answers to my questions over the years. It was wonderful to have a friendly face to chat with while dealing with the bureaucratic aspects of graduate school.

I would also like to thank my supervisor, Dr. Agnes Golding, who provided the experiential opportunities that made this dissertation possible. Agnes works incredibly long hours and always has much more on her plate than the average individual, yet she was never too busy to guide me as a student, or chat with me as a friend. I am very grateful to have had the opportunity to work with such a talented school psychologist, and my career will be forever influenced by her style of leadership.

When I moved to New Jersey, begrudgingly, I said to myself, 'I'm just going to get my degree and move back to Virginia. I don't need any new friends. Please just let graduate school pass by quickly.' Instead, I have found a home. I would like to thank Gina Marie Restivo and Matt Strobel, for convincing me that there *are* wonderful people

iv

from New Jersey. Gina and Matt have provided endless support and breaks from schoolwork that have kept me grounded throughout the difficult process of graduate school. Gina has been not only a peer supervisor, but has provided supervision that rivals that of someone who has been working in the field for decades. Thank you to Matt for keeping me fed and the house clean when life got busy, and of course for the morning walks to class - may we fondly remember the "Buell Days."

Finally, thank you to my family. My family has taught me to value education and their high expectations have propelled me forward. I am lucky to have a family that understands the process of writing a dissertation and they have known exactly how to support me along the way. Thank you for the encouragement.

TABLE OF CONTENTS

ABSTRACT	.ii
ACKNOWLEDGEMENTS	.iv
LIST OF TABLES	.vii

CHAPTER

	I.	LITERATURE REVIEW1	
	II.	METHOD24	1
	III.	RESULTS	5
	IV.	DISCUSSION)
	IV.	CONCLUSION)
REFE		CES69 ES	•
	A.	DISPROPORTIONALITY SURVEY	3
	B.	LETTER TO PARTICIPANTS	7
	C.	FULL-TEXT OF SURVEY RESPONSES ITEMS 4,6,979)
	D.	APPLE SCHOOL DISTRICT DISPROPORTIONALITY DATA89)
	E.	SURVEY RESULTS	5

LIST OF TABLES

TABLE	PAGE
1. Example of Composition Index	5
D1. Apple School District's Risk Ratios by Racial/Ethnic Group Based on October 2007 Data	90
D2. Apple School District's Classification Rate by Race/Ethnicity Based on October 2006 Data	90
D3. Apple School District's Classification Rate by Race/Ethnicity Based on October 2007 Data	91
D4. Apple School District's Classification Rate by Sex and Race/Ethnicity Based on October 2007 Data	92
D5. Classification Patterns for Hispanic Students Based on Grade at Referral and Reason for Referral	93
D6. Classification Patterns for Black Students Based on Grade at Referral and Reason for Referral	94
E1. Job Titles of Respondents	96
E2. Change in Awareness of Disproportionality	96
E3. Change in Thinking about Professional Practice	96
E4. Mean Influence of District Change Activities	97
E5. T-Test Comparisons of Mean Differences Between District Change Activities	98
E6. Staff Perceptions of Future Effectiveness of Change Activities in Reducing Disproportionality	99
E7. Staff Perceptions of Future Effectiveness of Change Activities in Changing Professional Practices	100

CHAPTER I

Literature Review

Disproportionality: Definitions

"Disproportionality" is a current challenge in the field of special education. In this context, disproportionality refers to "the over-representation of specific groups in special education programs in relation to their representation in the overall enrollment, and/or the under-representation of specific groups in accessing intervention services, resources, programs, rigorous curriculum and instruction" (Metropolitan Center for Urban Education, 2007, slide 16). The term "disproportionality" describes a situation in which many students of specific racial and ethnic groups are identified with disabilities and placed in special education programs. Statistically, the term disproportionality indicates a proportion of students in special education that is inconsistent with the proportionate representation that a specific racial or ethnic group holds in the overall population. Practically, disproportionality defines a disturbing situation in which many students of racial and ethnic minority backgrounds are identified as having disabilities and placed in special education programs, disproportionally represented in these programs compared to their White peers.

Though disproportionality is a current concern in special education, it is not a new one. Disproportionate representation of racial and ethnic minorities in special education programs has been a concern for nearly four decades (Gamm, 2007; Hosp & Reschly, 2004). Recently, disproportionality has entered conversations at federal, state, and local levels, and educators and those involved in and concerned about education have begun to call for examination and change of this problem.

To clarify this issue further, specific groups are overrepresented. African American, Hispanic, and American Indian students are overrepresented in certain disability categories. In national data, African Americans and American Indians are the most clearly overrepresented. Data have been inconsistent for Hispanic students (Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz & Chung, 2005) though individually some districts have difficulty with overrepresentation of Hispanic students as well (Gamm, 2007; Metropolitan Center for Urban Education, 2007). It is also important to note that Asian/ Pacific Islander students are underrepresented in almost every classification category, which is also considered an issue of disproportionality (Gamm, 2007).

Disproportionality most commonly occurs in specific disability categories. In the special education system, a student is found eligible for services under one or more categories in a group of federally determined disability classification categories. There are 13 federal eligibility categories:

- Autism
- Deaf-Blindness
- Deafness
- Emotional Disturbance
- Hearing Impairment

- Mental Retardation
 - o Mild Mental Retardation
 - o Moderate Mental Retardation
 - o Severe Mental Retardation
- Multiple Disabilities
- Orthopedic Impairment
- Other Health Impairment
- Specific Learning Disability
- Speech or Language Impairment
- Traumatic Brain Injury
- Visual Impairment

Some of these categories are fairly straightforward in terms of eligibility requirements. For example, the categories of hearing impairments, visual impairments, and traumatic brain injury are categories with specific medical requirements and a medical professional is involved when students are classified in these categories (Gamm, 2007). Eligibility for other categories is determined in a more subjective manner. For example, the categories of mild mental retardation, emotional disturbance, and specific learning disability all require judgments on the part of school professionals in order to classify students in these eligibility categories. These categories "capture subtle disabilities for which there is usually no known organic cause and for which diagnosis rests on the 'art' of professional judgment" (O'Connor & Fernandez, 2006, p. 6). While students who are classified in more objective categories usually come to school with a clear disability determination (O'Connor & Fernandez, 2006), those classified in the more subjective categories are typically identified by school personnel after they have begun to fail (Carter, 2004; O'Connor & Fernandez, 2006). Disproportionality is not a concern for categories that require less professional judgment or judgments from medical professionals, such as orthopedic impairments, hearing impairments, and severe mental retardation, but instead is problematic in the more subjective categories that require the judgment of school

professionals, including mild mental retardation, learning disability, and emotional disturbance (Carter, 2004; O'Connor & Fernandez, 2006; Harry & Anderson, 1994).

Measurement of Disproportionality

There are three measures of increasing utility used to assess disproportionality in special education. The first two measures, a composition index, and a risk index, help to develop a risk ratio, the third and the most important indicator of disproportionality.

Composition Index

The composition index, calculates the racial/ethnic composition index of all students with disabilities or students receiving services in a specific disability category, and answers the question, "What percentage of students receiving special education and related services are from a specific racial/ethnic group?" (Bollmer, Bethel, Garrison-Mogren & Brauen, 2007; Gamm, 2007). A composition index can be computed using the following formula:

<u>Students with disabilities in racial/ethnic subgroup</u> = Composition Index All students with disabilities

A composition index can be created to show the composition of all students in special education, separated by racial and ethnic groups. This index can then be compared to total district enrollment, and the composition of the district as a whole separated by racial and ethnic groups. A composition index can be preliminarily helpful to see patterns of disproportionality, and indicates if the population of racial/ethnic groups in special education is different from the demographics of the district as a whole.

For example:

Table 1 Example of Composition Index								
Composition Index	Black	Hispanic	White	Asian				
District Composition Index	8.7	9.0	69.2	13.1				
Students w/ Disabilities Composition Index	19.6	17.6	58.9	3.8				

Table 1 can be interpreted as follows:

- Black students make up 8.7% of the district population and 19.6% of the district's population of students with disabilities.
- Hispanic students make up 9% of the district population and 17.6 % of the district's population of students with disabilities.
- White students make up 69.2% of the district population and 58.9% of the district's population of students with disabilities.
- Asian students make up 13.2% of the district population and 3.8% of the district's population of students with disabilities.

Risk Index

The second measure, the risk index is a measure of risk. A risk index compares students with disabilities from a racial/ethnic subgroup to all students in the racial/ethnic subgroup, to determine what percentage of a specific racial/ethnic group receive special education and related services, overall or for a particular disability category (Bollmer et al., 2007; Gamm, 2007).

<u>Students with disabilities in racial/ethnic subgroup</u> = Risk Index Total student enrollment for racial/ethnic subgroup Third, the ultimate measure of risk, the risk ratio compares one group's risk of receiving special education services to another group's risk (Bollmer et al., 2007). Using the risk index for each group, risk ratio analyses answer this question: "What is a specific racial/ethnic group's risk of being found eligible for special education and related services in a particular disability classification category as compared to the risk for all other students?" (Bollmer et al., 2007). This measure allows one to answer the question, "How much more likely is it that a student from a specific racial/ethnic group will receive special education services?" A risk ratio can be calculated as follows:

<u>Risk index for racial/ethnic group</u> = Risk Ratio Risk index for comparison group

A risk ratio of 1.00 indicates no difference between an identified group and the comparison group, meaning this identified group is no more likely to be found eligible and to receive special education services than the comparison group (Bollmer et al., 2007). A risk ratio of 2.0 would indicate that a student from a specific group is two times more likely to receive special education services, and a risk ratio of .50 would indicate that a student from that group was half as likely to receive special education services. Scholars conducting research in the area of disproportionality have debated whether the comparison group for risk ratio should be all other students, or just White students (Bollmer et al., 2007). Some argue it should be White students because Whites are the majority racial/ ethnic group in the country and discriminatory behavior is based on comparison to Whites (Coutinho & Oswald, 2000), though the statistics can be seen presented both ways.

National and State Data

National data can be examined for each disability category. National data from 2002 show elevated risk ratios for African American students in the categories of mental retardation and emotional disturbance (Gamm, 2007). In the category of mental retardation (MR), the risk ratio for African Americans is 3.09, meaning African American children are over three times more likely to be classified as mentally retarded than other students (Gamm, 2007). For emotional disturbance (ED) the risk ratio for African Americans is 2.25 (Gamm, 2007).

The National Center for Culturally Responsive Educational Systems (NCCRESt) is an organization that conducts research on disproportionality in the U.S. and provides information about this problem. NCCRESt has available on their website the disproportionality statistics for most states, including New Jersey, for the 2005-2006 school year, using census estimates. In the category of mental retardation, out of 48 states reporting, New Jersey has the highest risk ratio for African Americans compared to Whites of any of the states reported -4.54 (NCCRESt, 2008). When using all other students as the comparison group, the risk ratio for African Americans in the category of mental retardation is 3.32 (NCCRESt, 2008). For emotional disturbance the risk ratio is 2.90, and for specific learning disability it is 1.42 (NCCRESt, 2008). For Hispanic children, New Jersey is second to only Massachusetts with a risk ratio of 2.81 for the category of mental retardation, using White students as the comparison group (NCCRESt, 2008). The risk ratio is 1.67 for Hispanic children in the category of mental retardation when using all students as the comparison group (NCCRESt, 2008). The risk ratio for Hispanic students in New Jersey for specific learning disability is 1.13 and for

emotional disturbance is .87 (NCCRESt, 2008). New Jersey's statistics, especially for African American students, and in the category of mental retardation for Hispanic students as well, are striking and indicate that this truly is a salient issue for the state.

Implications of Disproportionality

The system of special education was created to provide help to students with disabilities and in theory should provide individualized accommodations and modifications so that identified students can be successful in their educational settings (National Alliance of Black School Educators [NABSE] & ILIAD Project, 2002). If this goal were achieved for all or most students in special education then this overrepresentation of racial and ethnic minority groups might not be as serious a concern. Unfortunately, special education does not always result in better outcomes for students, making the overrepresentation of minorities in special education even more troubling. Harry and Anderson (1994) state "special education programs do not prepare African American males to take their places as productive and responsible members of American society" (p.614). African American students are more likely to be placed in segregated special education placements with limited access to the general education classroom (Blanchett, 2006). This means that they may have substandard, or "watered-down" curricula and lowered-expectations (Blanchett, 2006; Carter, 2004, Harry & Anderson, 1994). Special education programs may also be stigmatizing along with being ineffective, causing difficulties socially and emotionally for students in special education (Harry & Anderson, 1994).

Special education was originally intended to be a service-delivery system, not a place or location for students to go (Blanchett, 2006; Metropolitan Center for Urban

Education, 2007). Instead, special education has been used, at least at times, as a way to segregate students by disability classification, by classroom, and by curriculum (Blanchett, 2006; Ferri & Connor, 2005). Through special education placement, students may be placed into separate classrooms where they receive a different curriculum and fewer opportunities for interaction with general education peers. In the original conception of special education, once a student's educational concerns were remediated she/he was supposed to leave the service delivery umbrella of special education and rejoin her or his peers in the general education population. Most students who are found eligible for services are not declassified, however, and so instead they remain in special education throughout their school years (Harry & Anderson, 1994).

In the early 1990's, the U.S. Department of Education, Office of Special Education Programs began a new way of collecting information on students exiting special education, of which one way is defined as return to general education, or declassification (Harry & Anderson, 1994). When this data was first collected, for the 1993-1994 school year, the rate of return to general education was only between 4-6% (Harry & Anderson, 1994). More recent estimates were included in the Special Education Elementary Longitudinal Study conducted by a research institute and funded by the U.S. Office of Special Education Programs (SRI International, 2005). This study included 11,000 students between the ages of 6-12 who were receiving special education services on September 1, 1999. This study tracked the students until 2002 and showed an overall declassification rate of 17%, of which the largest group declassified was students receiving speech/language services (SRI International, 2005). Looking at the categories of classification implicated in disproportionality, the declassification rates were lower (SRI International, 2005):

- Emotional Disturbance 10%
- Mental Retardation 2%
- Learning Disabilities 9%

When combining the problem of disproportionality and the trend to declassify few students, one may begin to see why some argue that for African American and poor students, special education has become "a new legalized form of structural segregation and racism" (Losen & Orfield, 2002, as cited in Blanchett, 2006).

Confinement in special education can lead minority students to a life of failure. Dropout rates for students in special education are higher than for those in the general education population. For Hispanic, African American, or Native American children who are disproportionately placed in low-track and special education placements, the dropout rates may exceed 50% and in some urban areas may rise as high as 75% (Blanchett, Brantlinger & Shealey, 2005). Those African American students with disabilities who do not dropout may end up with certificates of attendance rather than diplomas (Blanchett, 2006). Beyond graduation there are long-term differences for African American students with disabilities. African American students with disabilities have received little preparation for the workforce and have difficulty gaining access to post-secondary education (Blanchett, 2006). Two years after graduating, 75% of African American students with disabilities, were found to be unemployed compared to 47% of White students with disabilities (Carter, 2004). Possibly more frightening than unemployment, though certainly related, are the incarceration rates for African Americans and Hispanics with disabilities. Returning to our risk ratio, Hispanic students

with disabilities are 1.88 times more likely to be placed in a correctional institution compared to White students with disabilities (Metropolitan Center for Urban Education, 2007). With a risk ratio of 4.33, African Americans with disabilities are over four times more likely to be placed in correctional institutions compared to Whites with disabilities (Metropolitan Center for Urban Education, 2007). All of these statistics indicating poor outcomes not only mean that the disproportionate placement of minority students in special education may be truly inappropriate, but that special education is failing many students of color.

Causes of Disproportionality

As the federal government and state governments have begun to take notice of the issues surrounding disproportionality they have called for school districts and those involved in education to begin to examine disproportionality and develop plans to remediate the problem. Though disproportionality has been defined and measured, determining the causes of disproportionality is a more difficult challenge. The causes of disproportionality likely vary across states, districts and even schools making these trends and causes difficult to pin down and identify. Though research into causes of disproportionality is limited, it is likely that there is not one cause, but several at the root of this complicated problem.

Poverty

Scholars have begun to look for factors related to disproportionality that could help to explain this problem. Skiba et al. (2005) state, "although the fact of ethnic disproportionality in special education service has been extensively documented, the variables that cause and maintain these racial disparities have only recently begun to be explored" (p. 130). Many ideas have been discussed. Some have explored whether poverty can explain disproportionality (Skiba et al., 2005) or if culturally biased psychoeducational assessments are leading to an overrepresentation of minority students in special education (Skiba et al, 2006). Others have offered white privilege and racism as important contributing factors to this problem (Blanchett, 2006). Lowered teacher expectations for minority students have also been suggested as an important factor (Tenenbaum & Ruck, 2007).

When considering possible causes for racial disproportionality in special education, many first postulate that poverty must be the key (Skiba et al, 2005). Scholars have noted, "One of the predominate explanations of special education disproportionality is the interaction of race and poverty" (Skiba et al., 2005, p.130). Because poverty and race tend to be linked in our society, people have drawn the conclusion that the struggles of poor students of color in the educational system are created by socioeconomic disadvantage (O'Connor & Fernandez, 2006; Skiba et al., 2005). A report from the National Research Council released in 2002 emphasized the impact of poverty on disproportionality (O'Connor & Fernandez, 2006). The claim that socioeconomic status can be substituted for race in discussions of disproportionality has been critiqued recently in a number of publications (O'Connor and Fernandez 2006; Skiba et al., 2005) and researchers have tackled the questions of how strongly poverty may be related to disproportionality, and if poverty can explain disproportionality (Hosp & Reschly, 2004; Oswald et al., 1999). Researchers and scholars have concluded that poverty can only explain in part - and some argue only in small part (Skiba et al., 2005) - the

12

overrepresentation of students of racial and ethnic minority groups in special education (Hosp & Reschly, 2004; Oswald et al., 1999).

An alternate hypothesis to explain disproportionality is that the long history of school segregation in the United States is related to racial disproportionality and those that subscribe to this hypothesis argue that poverty alone is in no way sufficient to describe this problem (Skiba et al., 2005). Skiba et al. (2005) investigated this question using regression analyses for all school districts in a Midwestern state. They found that the relationships among poverty, race, achievement, and special education eligibility are "complex and often counterintuitive" (Skiba et al., 2005, p.141). In their multivariate analyses, poverty did not fully explain disproportionality and was found to be a weak and inconsistent predictor of disproportionality (Skiba et al., 2005). For disproportionality in the category of mild mental retardation, poverty did positively predict disproportionality (i.e. increased poverty predicted increased disproportionality). However, for the categories of emotional disturbance and moderate mental retardation, poverty, statistically, did not predict disproportionality. In the categories of learning disabilities and speech and language disabilities the authors found that not only did poverty not predict disproportionality, but, in wealthier districts, there was actually a higher rate of disproportionality in learning disabilities and speech and language classifications (Skiba et al., 2005). Furthermore, in additional statistical analysis Skiba and colleagues (2005) found that when poverty and race are considered together, race is a more important predictor of special education identification than poverty status. The authors offer this conclusion: "Perhaps the most accurate summary of these data might be that in those

cases where poverty makes any contribution to explaining disproportionality, its effect is primarily to magnify already existing racial disparities" (Skiba et al., 2005, p.141).

O'Connor and Fernandez (2006) argue that poverty cannot explain disproportionality and that such theories oversimplify the issue. These authors point out that to some extent schools socially construct disabilities (O'Connor and Fernandez 2006). Disproportionality is most commonly seen in disability categories requiring subjective judgment on the part of school personnel, and O'Connor and Fernandez (2006) point out "in contrast to the proportionate representation of nonjudgmental categories across racial groups, researchers have consistently documented the overrepresentation of minority students in judgmental categories of special education" (p.6). If poverty were impacting the placement of students of racial and ethnic minority backgrounds in special education as directly as some assume, one would expect to see disproportionality across all categories of special education eligibility, not just in those requiring more judgment on the part of school professionals. Instead O'Connor and Fernandez (2006) argue that schools structure inequalities through curricula and practices that foster the skills White students bring to school. For example, in schools, the comparative norms against which all students are measured for classification in subjective categories are those of White culture (O'Connor & Fernandez, 2006). Using these standards, poor and minority students are destined to exhibit more academic and behavioral problems, increasing the likelihood of referral to special education because the developmental track that is nurtured in the mainstream U.S. education system is one developed for White, middleclass students (O'Connor & Fernandez, 2006).

For example, O'Connor and Fernandez (2006), hypothetically consider what might be different if the dominant discourse in American schools was African American Vernacular English (AAVE), instead of Standard English. These authors argue that if this became the standard against which students' language skills were assessed, speakers of AAVE, who are generally Black students from lower socio-economic status groups, would be seen as the academically competent ones, relative to White middle class students who did not show proficiency in AAVE (O'Connor & Fernandez, 2006). While O'Connor and Fernandez's example is hypothetical, scholars who point out biases in the educational system note that when students are consistently defined by what they are not, or what they cannot do (for example, communicate proficiently in Standard English) educators fail to build on students' strengths and capacities when they enter school (O'Connor & Fernandez, 2006). This failure then leads to overrepresentation in systems like special education. The authors argue, "there is nothing about poverty in and of itself that places poor children at academic risk; it is a matter of how structures of opportunity and constraint come to bear on the educational chances of the poor to either expand or constrain their likelihood of achieving competitive educational outcomes" (O'Connor and Fernandez, 2006, p.10).

Scholars searching for causes of disproportionality have had to search beyond poverty as a sole predictor of disproportionality because even in studies that have shown some impact of poverty, after statistically controlling for socioeconomic class, race/ethnicity is still shown to have a significant influence on disproportionality (Hosp & Reschly, 2004; Oswald et al. 1999). In this search for other causes, Hosp and Reschly (2004) have suggested academic achievement as an important predictor of disproportionality. Because academic achievement is an alterable predictor, it is perhaps useful to consider when beginning to think about possible starting points for change. Academic achievement, they argue, is the beginning point of many referrals and so to impact disproportionality schools should also address discrepancies in academic achievement among racial and ethnic groups that occur before referral to special education (Hosp & Reschly, 2004).

In conclusion, in studies that have shown some impact of poverty, after statistically controlling for socioeconomic class, race/ethnicity still had a significant influence on disproportionality (Hosp & Reschly, 2004; Oswald et al.1999). Together these scholars caution us to focus less on poverty as a predictor of racial/ ethnic disproportionality because it can obscure looking for other factors and focus attention away from structural inequalities in the educational system (Skiba et al., 2005). They suggest that focusing on poverty can guide professionals in the wrong direction when looking for factors which place students at risk for special education placement (O'Connor & Fernandez, 2006, p. 6). Poverty should at best be considered as only one part of the disproportionality picture, and "perhaps not a very central part" of the factors influencing disproportionality (Skiba et al., 2005).

White Privilege

Some have argued that the controversy of disproportionality must be placed in context of White privilege and racism (Blanchett, 2006). White privilege is a system of unearned privileges, opportunities, and advantages that are afforded to Whites in U.S. culture (McIntosh, 1990). This system of privileges is often unacknowledged or unconscious to Whites, and includes Whites viewing their lives as neutral, normative, and average (McIntosh, 1990). White privilege includes basic privileges such as being surrounded by people who are of the same race most of the time if one wishes to be, and seeing people who are like oneself widely represented in the media (McIntosh, 1990). For children entering school, White children can expect to see teachers and school staff who look like them, and also to see White characters represented in literature and books in protagonist roles. In the educational system, White privilege can be individual (e.g., teacher bias towards White students), structural (e.g., curricular practices based on White norms), political (e.g., biased educational policies), economic (e.g., disparate school funding), or social (e.g., socially constructed disability categories) (Blanchett, 2006). Blanchett (2006) writes that White privilege and racism have contributed to and maintained disproportionality by insufficiently funding schools that African American students attend, using culturally inappropriate curricula, and inadequately preparing teachers to effectively teach African American students.

Biases

Additional factors might be related to disproportionality. For example, the use of culturally biased or inappropriate assessment measures could lead to an overrepresentation of a specific group in special education (Coutinho & Oswald, 2000). There has been research about teacher stereotypes and biases as well. Tenenbaum and Ruck (2007) found small, but significant differences in a meta-analysis on differences in teacher expectations for African American and Latino/a students compared to European American students. The authors write, "Teachers' expectations may lead to differential academic performance for children and are likely to contribute to an unfair classroom climate and limited educational opportunities for African American and Latino/a

students" (Tenenbaum & Ruck, 2007, p. 271). Chang and Demyan (2007), though they found fairly balanced positive and negative stereotypes held by teachers across White and Black students, suggest that stereotypes can add to achievement discrepancies if they change the way these stereotyped individuals are treated by others, or how individuals perceive themselves. These authors suggest that school psychologists consider stereotypic beliefs and how these may be influencing teachers' referral practices (Chang & Demyan, 2007). Though factors related to teacher bias are certainly not the only area of concern, researchers have pointed out that if school personnel are harboring biases or have never explored their own assumptions about race and stereotypes, it is not likely that these same personnel will see the need for or support extensive change efforts in the area of disproportionality (Skiba et al., 2006).

Obviously, the factors contributing to and involved in disproportionality are complex. Researchers and American educators need to identify not only individual, but systemic factors which contribute to educational inequities (Skiba et al., 2005,) as well as further document how White privilege and racism are a part of creating and maintaining disproportionality (Blanchett, 2006). This problem must be examined in a larger social context (Blanchett, 2006). It is not necessary to view this problem from a binary perspective, as a result of either individual or structural factors, but rather as the intersection of multiple factors.

Solutions to Disproportionality

As the field of education has begun to understand more about disproportionality and factors influencing it, practitioners, researchers, and academics have started to propose solutions or at least actions to improve the current state of this problem. Proposed

solutions range from drastically changing the special education system to remove classification systems all together (Harry & Anderson, 1994), to offering more interventions and inclusive options through general rather than special education (Coutinho & Oswald, 2000; Metropolitan Center for Urban Education, 2007; Skiba et al., 2006). Utilizing a Response to Intervention (RTI) model for identification of students appropriate for special education has been proposed (Metropolitan Center for Urban Education, 2007), as well as beginning first with further analysis and discussion (Skiba et al., 2006). Perhaps most importantly, because disproportionality is a complex problem, that likely needs complex and thoughtful solutions, Skiba and colleagues (2006) caution us to avoid simplistic and linear solutions, and to engage a process of reflection and action.

In 1994, Harry and Anderson proposed what might have then been seen as radical solutions. They proposed that the disability classification system be "disbanded" and replaced with a system that provides intensive instructional support to all students who need it (Harry & Anderson, 1994). While this recommendation may not be economically viable, many have proposed making services available without classification (Coutinho & Oswald, 2000; Metropolitan Center for Urban Education, 2007; Skiba et al., 2006). This reform would be consistent with current discussions of Response to Intervention (RTI). Response to Intervention initiatives attempt to assess, intervene, and monitor activities without special education referral or placement, whereas previously teachers may have viewed referral to special education as the only option to obtain assistance and resources for struggling students (Skiba et al., 2006). The new reauthorization of the federal legislation governing special education, called the Individuals with Disabilities

Improvement Act (IDEIA), now recommends this model of special education in which more services are accessible without special education labeling or referral (Harry & Klingner, 2007).

Harry and Anderson (1994) also proposed the creation of a unified educational system, in which special education is supportive rather than alternative. The current inclusion movement is striving to do this by teaming special education and general education teachers in coteaching models. "Coteaching arrangements like these are one promising option for meeting the learning needs of the many students who once spent a large part of the school day with special educators in separate classrooms" (p.48-9, Friend, 2007). Coteaching models show potential because they can focus on prevention, another recommendation made by Harry and Anderson (1994). While coteaching models are promising, these models must be supported in urban schools and schools struggling with overrepresentation to see if they in fact they can be helpful in remedying disproportionality.

At a district or school level, Coutinho and Oswald (2000) recommend schools "generate accurate, meaningful statistics to describe the extent of overrepresentation and then *study* the referral, assessment, and placement decision making process to guide reforms or changes in practices" (p.146, italics in original). These careful analyses will guide the specific solutions within each school or district, allowing for more complex, customized approaches to address this complicated issue.

In addition to analysis, however, educators need to openly discuss the issue. Skiba and his colleagues (2006) recently conducted a qualitative study interviewing 64 professionals including teachers, administrators, and school psychologists. When they asked questions about race, even straightforward ones like "Describe the ethnic breakdown of your class" the researchers found that respondents had a difficult time answering these questions, often remarking that they "don't notice race," or "had never thought about it" (Skiba et al., 2006). If school professionals struggle to answer straightforward questions about race, it is likely to be even more challenging to tackle questions about stereotypes and inequalities. For discussion of the district-wide analyses that Coutinho and Oswald (2000) recommend or to begin identifying the stereotypes about which Chang and Demyan (2007) write, school personnel will have to be able to talk about race more openly and to create solutions to this problem.

Statement of the Problem

To summarize, disproportionality is a problem affecting the education system at a district, state, and federal level. Disproportionality is the term used to describe the overrepresentation of specific minority groups of students in special education programs. Scholars have created statistical measures of disproportionality, specifically indexes of risk and risk ratios, to quantify a student's chances of being placed in a special education program. Nationally, trends of overrepresentation of African American and American Indian students in special education programs have been documented. In New Jersey, overrepresentation of African American and Hispanic students in special education is present. Specific classification categories, such as mild mental retardation and emotional disturbance seem most susceptible to disproportionality. In certain districts, specific learning disability is another category in which disproportionality is found. Scholars theorize that these categories are more subjective and, hence, influenced by school personnel making decisions about referral and classification.

It is clear that disproportionality is a complex problem, which will have long-lasting consequences if it is not addressed. Historically, and in many cases currently, the U.S. education system is segregated, oppressive, and unequal for minority students. However, the future of American education does not have to be so grim. As the collective educational system learns more about this problem, solutions can be created. Proposed solutions thus far have included more inclusive educational options, more accessible prereferral services, and more open discussions in school districts about disproportionality and race. New federal regulations are requiring state departments of education to monitor and analyze disproportionality and in turn to help schools or districts begin to address this problem. Though it is likely that states, districts, and schools will need a wide variety of tools and strategies to address their own individual challenges with disproportionality, awareness and thoughtfulness will certainly be needed to make the first steps towards change. As districts begin to tackle the problem of disproportionality, documentation and evaluation of these efforts will hopefully lead to a greater understanding of strategies and resources needed to impact this national educational concern.

Case Example

Examining one specific district's struggle to address disproportionality may help to clarify this problem further. The Apple School District, located in a suburban area in New Jersey, has begun to take efforts to address their own problem of disproportionality.

During the 2007-2008 school year Apple Schools began a series of intensive discussions and brainstorming sessions with a team of staff, referred to as the District Core Team. The District Core Team was comprised of 39 individuals representing various groups of educational staff throughout the district, including General Education Teachers, Support Staff, and administrators. They also initiated extensive data collection efforts and analyzed this data to look for trends and possible causes of disproportionality, especially those that may be individual to the Apple Schools. Through these efforts the district hoped that they would begin to see some change in their classification and referral rates for students of racial and ethnic minority groups.

Though Apple School District has begun efforts to impact this problem is it not yet clear if their efforts will help to impact the problem. Researchers and scholars have agreed that disproportionality is a complex problem in need of complex analyses and likely complex solutions. However, the research is limited in terms of what specifically districts have done to affect this problem, and there is little information about specific change efforts and their impacts available through the literature. Though some scholars suggest interventions like coteaching, discussions among staff, and data analysis, little has been written about specific activities districts have engaged in to change this problem.

A program evaluation of Apple School District's recent efforts to deal with disproportionality was conducted to provide detailed information about the structure of their approach as well as to examine some of the early indicators of the effectiveness of their efforts. In order to show lasting change, long-term data collected over several school years will be necessary. Though this program evaluation cannot show longitudinal data, it shows data of disproportionality patterns across two school years, and provides qualitative and descriptive information about preliminary changes and initial steps one individual district used to begin to affect this problem.

CHAPTER II

Method

Setting

Apple School District is a suburban school district in New Jersey that has struggled with disproportionality. The district is a part of a community of approximately 30,000 residents and serves 3,000 students, spanning from pre-kindergarten through 12th grade. Apple School District has struggled specifically with an overrepresentation of Black and Hispanic students in special education programs, and during the 2007-2008 school year was identified by the New Jersey Department of Special Education as a district in need of improvement in this area.

Risk ratios, a measurement which compares one group's risk of receiving special education services to another group's risk, can be used depict the district's level of disproportionality (see Table D1). White students in the district had a risk ratio of .64, while the risk ratio for Black students was 2.57, and for Hispanic students was 2.16.

White students were about half as likely as all other racial groups in the district to be classified, whereas Black and Hispanic students were over two times more likely than all other racial groups in the district to be classified. Asian students were underrepresented in special education and were found to be much less likely to be classified than White students. Apple School District was almost four times more likely to classify a Black

student than a White student and three times more likely to classify a Hispanic student than a White student.

Comparing the district's data from the 2006-2007 school year with data from the 2007-2008 school year a consistent pattern of overrepresentation of Black and Hispanic students in special education programs in Apple School District was found across both school years (see Table D2 & D3). These data show that almost one in three Black students in the Apple Schools during these two school years received special education programming, and about one in three Hispanic students were classified.

Classification rate, or the percentage of the entire population that receives special education services for a specific group, is also helpful to describe disproportionality. Using classification rate in conjunction with gender, and racial/ethnic group, striking trends emerged in the district (see Table D4). For example, the Apple Schools were found to have a very high percentage of Black male students classified. In general classification rates for males were higher than for females, though percentages for Black females and Hispanic females were both higher than for White males and White females.

These data give an indication as to the degree of disproportionality the Apple School District was facing. In sum, the data show that Apple had very high rates of classification of Black and Hispanic students during the 2006-2007 and 2007-2008 school years. This problem did not likely begin to develop during these school years, but instead was one that grew and persisted over many school years. Concerns about these data and pressure from the State of New Jersey Department of Education, Office of Special Education Programs (OSEP) led the district to begin a process to lessen the district's disproportionality.

Chronology of Events

Self-assessment

In May of 2007, the Apple Schools were contacted by OSEP, which notified the district that they would be required to undergo state monitoring in the spring of 2008. The district was informed that they would have to complete a variety of activities in preparation for this monitoring, including an in-depth self-assessment of their own programs and services. OSEP provided the district with a self-assessment document to guide the district through the preparations for the monitoring visit. The overarching goal of the self-assessment was to have the district self-identify areas of compliance and areas in need of improvement. For areas in need of improvement the district was instructed to suggest a corrective action plan and timeline for the implementation of that plan.

The self-assessment required the district to discuss and examine nine areas related to special education in the district, one of which was disproportionate representation of racial and ethnic groups in special education, also referred to as disproportionality. This was an important area of focus for the district and one for which they were required to propose a corrective action plan. As the self-assessment progressed, many activities were defined that would become part of the corrective action plan to address disproportionality for the district. The major activities included disproportionality data collection and analysis, formation of a district core leadership team, work with a university-based consulting group who provided a range of professional development activities for district staff, and expansion of a Positive Behavior Support Program.

Disproportionality Data Collection

During the self-assessment process, questions around disproportionality in the district arose and the Director of Student Services sought out further data collection as one of the first activities related to the self-assessment. The OSEP self-assessment plan required the district to collect some data on their disproportionality practices, however the Director of Student Services felt more in-depth data collection was needed to fully examine the problem.

In September 2007, a process of data collection began, which involved collecting information on each Black or Hispanic child who was classified and receiving special education services in the district. The information collected included current school placement, school placement at time of referral, party by whom primary referral was made by (teacher, parent, etc.), grade at time of initial referral, and reason for initial referral. The purpose of this data collection was to identify referral and classification trends for minority students in the district and to begin to see if any of those trends related to the difficulties with disproportionality in the district. This data was collected by examining each classified student's individual special education file, because no central database existed that included this information.

Data for 69 Hispanic students, classified from preschool through eighth grade, were collected (see Table D5). No Hispanic students were classified after eighth grade. It was found that 42% of Hispanic students who receive special education services in the district were referred at the preschool level. Of those children referred in preschool, 76% of them were referred for concerns with speech and language development. Many of the children who were classified in preschool, were still currently in elementary school,

showing that this pattern had been occurring in the past few years in the district. This was important for the district because it meant that the practice of classifying a large number of Hispanic students at the preschool level was a current one, rather than a practice that happened many years ago.

Data were also collected for 77 Black students in the district, grades preschool through tenth (see Table D6). No Black students were classified after the tenth grade. For Black students, the trends were not as striking though still noteworthy. Most Black students were classified for academic reasons, followed by behavioral concerns as the second most common reason. There was a high classification rate during preschool; specifically 18% of Black students, who were classified, were classified in preschool. Additionally, 18% of Black students who were classified were classified in 3rd grade. Black students classified in preschool and kindergarten were more likely to be classified for behavioral concerns than academic concerns. More Black students were referred for behavioral concerns as the primary referral reason (22%) than Hispanic students (4%), just as many more Hispanic students were referred for speech and language concerns (39%) than Black students (12%).

University-based Consulting Group

Another district activity that occurred during the 2007-2008 school year, which was related to the self-assessment, was on-going consultation with a university-based consulting group that specializes in helping districts tackle disproportionality and achievement gap issues. This consulting group is also an Equity Assistance Center funded by the U.S. Department of Education. Across the country there are 10 equity assistance centers that provide help to public school districts to promote equal

educational opportunities in the areas of race, gender, and national origin. These centers are funded under Title IV of the 1964 Civil Rights Act. The collaboration with the university-based consulting group began in the fall of 2007 and continued throughout the remainder of the 2007-2008 school year. The consulting group assisted in professional development for the district including planning district-wide professional development that was held in February 2008 and May 2008.

District Core Team

One of the main activities of the university-based consulting group involved leading a team of Apple School District staff members in discussions, workshops, and presentations on disproportionality. This group, referred to as the District Core Team, was the group of staff in the district at the forefront of change efforts related to disproportionality. The Director of Special Services and the Assistant Superintendent of Curriculum selected the members of the team. The team consisted of 39 staff members, including Central Office Administrators, Building Administrators, specifically Principals and Vice Principals, General Education Teachers, and a group of support staff including Basic Skills Instructors, Early Intervention Teachers, Speech/ Language Specialists, Child Study Team members, and English as a Second Language Teachers. Sessions with the District Core Team were held approximately every month beginning in November 2007.

The District Core Team was assigned the task of exploring disproportionality in the district and became a very important part of the change efforts of the Apple School District. The district's goal for the District Core Team over the first year, as described by the Director of Student Services and the lead consultant from the consulting group, was

to change awareness and thinking about disproportionality. Specifically, the district hoped that by presenting the team with national and local data, and leading multiple discussions about possible causes and factors related to disproportionality, this group of staff members would begin to understand the issue of disproportionality and take ownership of the problem. By making staff more aware of this problem and by helping them to think about how district practices and individual practices might relate to disproportionality, the district hoped that the process for long-term change would begin. No one in the district expected that these preliminary conversations would immediately change the district's disproportionality statistics, which were created over many years; however, it was hoped that by changing the awareness and thinking of a small group of staff a new way of thinking about special education, referral to special education, and race in general might eventually spread to more staff in the district. In essence, it was hoped that this would help to get the change process started.

Evaluation of District Efforts to Reduce Disproportionality Purpose

A Disproportionality Survey was developed to evaluate what staff on the District Core Team thought about the first year of district efforts to change disproportionality. The goal for this first year of efforts was to change awareness and thinking about disproportionality among staff members, specifically those who participated on the District Core Team. The Disproportionality Survey was administered for the purpose of finding out if members of the District Core Team felt their awareness and thinking had changed over the first year of district intervention for disproportionality.

Participants

The survey was sent to 39 staff members, specifically those staff members on the District Core Team. Twenty-six survey responded to the survey, making the response rate for this survey approximately 67% (including partially complete responses).

Procedure

The survey was conducted during August and September 2008, at the culmination of the district's first year of change efforts. The survey was administered online, and two emails were sent by the Director of Student Services, one to invite staff to complete the survey and a reminder about two weeks later (see Appendix B for full-text of email). The survey was posted online through the online tool Survey Monkey and was available by a web link distributed in the email from the Director of Student Services to the members of the District Core Team. Staff members had to click on the web link to gain access to the survey and were able to exit the survey at any time. Survey responses were collected anonymously and Survey Monkey was set not to record IP addresses for the computers used to enter the responses. Staff members were asked to indicate their job title in one of five possible categories, though a response to this question was not required in order to continue with the remainder of the survey if staff members felt uncomfortable answering this item. An "other" option was available for individuals that wished to describe their job title more specifically. Participation in the survey was optional.

Survey

The Disproportionality Survey was created with input from the Director of Student Services and the consultants from the university-based consulting group who were both involved in organizing the District Core Team meetings. The survey consisted of 9 items, some forced choice rating items and some free response items (see Appendix A for complete survey).

The first item (1) focused on the respondents job role in Apple School District and asked the staff member to indicate the job title that best describes his/her role in Apple Schools, with the options: General Education Teacher, Special Education Teacher, Support Staff (e.g., Basic Skills, Early Intervention Teacher, Speech/Language Specialist, Child Study Team), Building Administrator, Central Office Administrator, or Other with an area to specify.

The next two items (2 and 3) addressed awareness and thinking about disproportionality. Item 2 asked staff to rate how much their awareness about disproportionality had increased over the past academic year using a 5-point scale. This question was intended to determine the degree to which staff felt the district activities as a whole during the 2007-2008 school year increased their own awareness about disproportionality. Item 3 asked about the degree to which district activities helped the respondent think differently about his or her own practices related to disproportionality. This item also used a 5-point scale.

Item 4 asked respondents to specify how their thinking about their own practices changed using an open-response format. Item 4 was one of the open-response items on the survey, which was included to allow staff the opportunity to express qualitative views about the district's process.

Items 5 and 6 gathered information on staff opinions about whether the district activities helped to change awareness or thinking. Item 5 presented a matrix of specific district activities which staff members were asked to rate on a 5-point scale in terms of how much each one had influenced his/her awareness or thinking about disproportionality. Specific presentations by consultants, as well as district staff were included in the list of activities, as were overall participation on the District Core Team, homework assigned at the District Core Team meetings, and small-group professional development workshops that were provided by the district. Item 6 was an open-ended follow-up to Item 5, which gave the respondent an opportunity to indicate any activities not in the list that he or she may have found influential in changing awareness or thinking about disproportionality.

Item 7 asked staff to rate the degree to which they thought certain activities in the first year of the district's efforts would help the district reduce disproportionality. Item 8 asked staff to rate how much each of five categories of change-focused activities would help them change their own practices related to disproportionality in the future. The five categories of activities were, (a) future professional development for all district staff; (b) on-going work by District Core Team; (c) expanding Positive Behavior Supports Program; (d) continued analysis of problem by district administrators; and (e) continued consultation with a university-based consulting group. These categories of activities were created by grouping the activities that the district outlined in the self-assessment document.

Item 9 was the last item on the survey. This was an open-response item which gave staff members a place to reflect on how specifically the activities outlined in item 8 would change their own work related practices.

Treatment of Data

Once responses were collected they were analyzed with the following quantitative and qualitative methods:

- 1. The frequency of responses was counted for every item.
- Means and standard deviations were computed for Items 2, 3, 5, 7 and
 8.
- Means were disaggregated by job title group for Items 2 and 3 to examine patterns by job title groups.
- 4. T-tests were used to compare the means on Item 5.
- 5. Themes in qualitative responses to Items 4, 6, & 9 were coded. Item 4 responses were grouped into four themes, and Item 9 responses were grouped into nine themes. Item 6 had few responses and these responses were discussed individually.
- 6. Response patterns were examined by job-title group for Item 4.

CHAPTER III

Results

Survey Results

Item 1. Please select the job title which best describes your role in the Apple School District.

This first item asked each staff member to select a category that best described his/her job title, or indicate an "Other" response and specify a job title. There were a total of 24 responses to this item and 2 respondents who left Item 1 blank, but completed other parts of the survey. These responses were not discarded and the items to which these 2 staff members responded were counted in further analyses. They were not included in any analysis completed based on job title group.

There were 7 respondents who indicated that they were General Education Teachers, 9 indicated their job titles were best described as Support Staff, 3 indicated they were Building Administrators, 1 indicated she/he was a Central Office Administrator and 4 selected an "Other" response. Of the 4 "Other" responses, 2 were "Guidance Counselor," 1 responded "School Social Worker," and 1 filled in "Professional Staff for Central Office Administrator with responsibilities for programs and funds." These responses were regrouped so that the Guidance Counselor and School Social Worker responses were included in the Support Staff category and the "Professional Staff for Central Office Administrator" response was included in the Central Office Administrator group. The adjusted totals for Support Staff became 12 and for Central Office Administrator the total became 2 (see Table E1). The largest group responding to this survey was Support Staff and the second largest job title group was General Education Teachers. This is likely because they were most heavily represented on the District Core Team.

Item 2. Over the past academic year (2007-2008), to what extent do you feel your awareness of issues related to disproportionality has increased?

Item 2 addressed the issue of awareness of disproportionality, specifically if a staff member's awareness of this problem increased over the 2007-2008 school year. This was an important goal of the first year of the district's change initiatives. Staff members were asked to respond to this item on a 5-point scale from *1- Not at all* to *5- Greatly*. The mean and standard deviation for this item were 3.92 and 1.06 respectively (see Table E2). This shows that staff surveyed on average felt their awareness increased between *somewhat* and *greatly*. Central Office Administrators reported that they felt the most increase in their awareness of the issues related to disproportionality, followed by Support Staff. The group that felt the least increase in their awareness was Building Administrators (see Table E2).

Item 3. Over the past academic year (2007-2008), the district sponsored a number of activities related to disproportionality. To what degree do you feel the district's efforts have helped you to think differently about how your own practices may relate to disproportionality?

For this question, staff were asked to indicate how they may or may not have changed their thinking about their own practices on a 5-point scale from *1- is not different at all* to *5- has completely changed*. The mean for this item was 3.17 with a standard deviation of .83 (see Table E3).

Overall, staff indicated that their thinking about their practices changed slightly less than their overall awareness of disproportionality, the average falling closer to *somewhat* than *greatly* changed. General Education staff reported the greatest change in their thinking when compared to other job title groups, though two respondents in the General Education group chose not to answer this item. Support Staff indicated the next greatest change in thinking and Building Administrators indicated the least change in thinking among the job title groups (see Table E3).

Item 4. How specifically has your thinking about your practices changed?

The responses to this open-ended response item were grouped into thematic categories and compared for similarities across job title groups (see Appendix E for full text of responses to Item 4). Among the 19 responses to this item, some staff members indicated more that one area of change in thinking. Twelve respondents indicated only one area of change in thinking, 3 indicated two areas of change in thinking, 3 indicated three areas, and 1 indicated five areas of change in thinking. Though there were 19 total responses, several of these responses could be broken into smaller parts. Using each of these partial responses as separate ideas, 32 separate responses were coded. Among these 32 responses, there were four central themes related to a change in thinking about an area of practice: awareness, intervention, instruction, and organizational climate. Organizational climate describes the positive or negative psychological impact of the work environment on staff well-being (Hemmelgarn, et al., 2006). In a positive climate staff trust one another and can discuss work related topics openly, whereas in a negative climate staff do not talk openly or trust one another (Hemmelgarn, et al., 2006).

Awareness. The first theme among the responses was awareness. This theme focused on an indication by staff that their thinking about their practices had changed through a change or increase in awareness of disproportionality. More specifically, 3 responses indicated an increase in awareness of the statistics of disproportionality in general and 2 mentioned an increase in awareness of the district's own disproportionality statistics. Two responses indicated a new understanding of the problem of disproportionality, and the realization that this issue is truly a problem for their district. Two staff members' responses indicated that the district's efforts over the first year increased an already present awareness of disproportionality. Overall, 9 out of 32, or about 28% of coded responses reported a change in awareness that staff felt would impact their practice.

Intervention. The next theme was in the area of intervention. The theme of intervention focused on strategies staff use with students who are struggling. These responses differed from responses with the theme of instruction, because they mentioned a change in thinking about how to meet the needs of students who needed help. Three responses mentioned a change in thinking, or increased thinking about the mechanics of intervention, specifically about how to accommodate student needs. Two staff members who commented on intervention noted that their practice had been influenced because they now check to make sure that their interventions are research-based. One response raised the concern of tracking intervention more carefully to check for student success or failure. Staff responses in the area of intervention were sometimes posed as questions, indicating that the first year of change activities in the district encouraged some staff

members to raise questions about their own practices. Overall, 6 out of 32 responses, or about 19% focused on changes in thinking about intervention practices.

Instruction. The most frequently mentioned theme of change in thinking was in the area of instruction. One Building Administrator indicated that he/she now checks to determine if instructional practices are culturally-responsive. Three respondents focused on the delivery of instruction, specifically that they think more often about whether or not the delivery of instruction should occur inside or outside the general education classroom. These responses indicated a desire to keep an instructional focus on the needs of individual students as well as a desire to keep many instructional options available for educating students. Four respondents focused on a related issue of differentiated instruction, and wrote about learning about a student's style of learning and teaching to that style of learning. Another area related to the theme of instruction was creativity. Three respondents indicated an increased attempt to be or a sense of needing to be creative to find ways to address the many instructional needs of students. Finally, one response discussed thinking about instruction through the lens of funding, specifically that he/she considers the needs of general education, special education, and bilingual types of students when making decisions about how to spend funds. Overall 12 out of 32, or about 38% of responses focused on change in thinking in the area of instruction.

Organizational climate. The fourth theme was organizational climate. The responses that were grouped in this theme described a change in the psychological impact of the organization or school district. Three responses focused on a new connection with colleagues and that staff members felt they could now have discussions with each other that they could not have had in the past. One staff member described it as being able to

speak "honestly and candidly" with colleagues. Two responses also noted an increased sensitivity and respect for student needs. Overall 5 out of 32, or about 16% of responses focused on an emotional change felt by staff, individually and at an organizational level.

When the four themes were analyzed across job title groups, General Education Teachers were found to most commonly mention the theme of awareness, followed by intervention. Support Staff most commonly commented on instruction, followed by awareness and intervention and the sense of community/ emotional theme. The three Building Administrators all commented on instruction and the two Central Office Administrators spread their comments across the categories of awareness, instruction and sense of community equally. Overall Support Staff had the greatest number of responses, both in total number of staff responding to this item, and in the number of ideas coded from their responses.

Item 5. The district sponsored the following activities during the past academic year (2007-2008). Please rate how much each one has influenced your awareness or thinking about disproportionality:

This item focused on several of the district activities held during the 2007-2008 school year. The activities included presentations given at district-wide professional development events, as well District Core Team meetings. Staff members were asked to recall the activities of the first year and indicate how much each one influenced their awareness or thinking about disproportionality.

Staff listened to 3 presentations, 1 by the Director of Student Services and 2 given by consultants from the university-based consulting group during all-staff professional development days, held in February and May. The presentation by the first consultant focused on culturally-responsive practice and what it means to be culturally-responsive. This was immediately followed by a presentation by the Director of Student Services concerning the district's own disproportionality statistics. During the May professional development day, the second consultant from the university-based consulting group presented on academic achievement and issues related to closing the achievement gap between white students and students of color. District Core Team meetings involved monthly discussions and activities related to disproportionality, led by the university-based consultants. At the end of these meetings, team members were assigned homework, usually consisting of an article to read or an activity to complete with their building colleagues before the next month's meeting. Staff members were also asked to rate homework assignments as another activity that may have influenced their awareness or thinking.

Survey respondents rated each activity on a 5-point scale from "1- not at all influential" to "5- influenced greatly." For each activity the mean and standard deviation were calculated (see Table E4). The presentation by the Director of Student Services about the district's own disproportionality data had the highest mean rating, of 4.25 with a standard deviation of .85. The next highest mean was for the presentation on Academic Achievement given by a consultant during the May professional development. This presentation was rated with a mean of 3.91 with a standard deviation of .79. This was closely followed by a mean of 3.88 for the rating of participation in the District Core Team meetings, with a standard deviation of 1.15. The presentation given during the February professional development day on culturally-responsive practices received a mean rating of 3.79, with a standard deviation of 1.25. Finally, the lowest rated activity

was homework from the District Core Team meetings with a mean of 3.57, standard deviation of 1.3.

This ranking shows that district staff surveyed found the presentation of district data, presented by their own Director of Student Services the most influential in changing their awareness and thinking about disproportionality. The other activities, including both consultant presentations and participation in the District Core Team were rated similarly. Overall, staff found the homework from the District Core Team meetings the least influential of the activities, though it was still ranked in the somewhat influential range by the staff surveyed. Respondents rated all items as at least somewhat helpful.

The means for each activity were compared using T-test analyses to determine if there were statistically significant differences in how influential the activities were (see Table E5 for t-scores). The means for the various activities were not significantly different with the exception of the comparison between how influential homework from the District Core Team meetings was perceived to be compared to the presentation of data by the Director of Student Services. The presentation by the Director of Student Services was rated as more influential by staff when compared to homework from the District Core Team meetings to a statistically significant degree.

An additional part of this item asked staff to rate small-group professional development workshops and to indicate the name of the workshop they were rating. Nine responses were collected for this part of this item. The workshops the staff mentioned in their responses were listed and a frequency count was completed.

Five staff members noted that they found the workshop titled, "Reaching Out to Black and Latino Male Students" influential. This workshop focused on ways to connect

with Black and Latino students and included ideas about building relationships with students and classroom management. The presenters also helped to reframe staff thinking about the behaviors of some Black and Latino male students that may have been interpreted by staff as confusing or threatening. Each of the other workshops was only mentioned once. One staff member noted that the workshop on Total Literacy was helpful. Total Literacy is a specific approach to teaching language arts and reading. One staff member commented on meetings that were held about basic skills instruction, which referred to meetings held in the summer of 2008, at the end of the district's first year of efforts. This activity was not one of the ones included in this evaluation; however, it was an activity that occurred based on change efforts that began in the 2007-2008 school year. In addition one staff member remembered a workshop about English as a second language as helpful. An additional activity conducted on all-staff professional development days involved grouping staff by grade-level and allowing for discussions among staff from all the buildings in the district. Teachers and staff were able to share best practices with all district staff members of the same grade-level. One staff member mentioned that these meetings were influential in his/her open-ended response to this item.

Overall the response to this part of the item was low. Some staff surveyed noted they could not remember the titles of the workshops, and some indicated a numerical rating for a workshop, but did not indicate which workshop they were referring to or vice versa. One useful piece of information gathered from this section of the survey was that several staff members found the workshop, "Reaching Out to Black and Latino Male Students" influential. *Item* 6. *If there was an activity, not mentioned in the above list, that you found influential in changing your awareness of thinking about disproportionality, please describe it here:*

Item 6 provided staff members an opportunity to indicate an activity they found influential in changing their awareness of thinking about disproportionality that was not included in the list of activities in the previous item. Only 5 staff members responded to this item (see Appendix C for full text of responses). One staff member indicated that everything was helpful and insightful, and the other 4 focused on different small-group professional development experiences they found helpful.

Item 7. To what degree do you feel the following activities will help the district reduce disproportionality?

Item 7 assessed which future activities the staff thought would help the district reduce disproportionality. These activities were selected from the district's improvement plan, the product of the state mandated self-assessment.

For Item 7, staff rated the activities that they felt would help the *district* change on a 5-point scale from "1- not at all" to "5- to a great extent." The activity with the highest mean was continued consultation with the university-based consulting group with a mean of 3.79 and a standard deviation of 1.10. Next, staff members indicated that they thought on-going work by the District Core Team would be helpful with a mean of 3.75 and a standard deviation of 1.07. Very similarly rated were future professional development with a mean of 3.71 and standard deviation of .95, and continued analysis of the problem by District Administrators with a mean of 3.70 and standard deviation of 1.02. The lowest rated activity was expanding the positive behavior supports program in the district, which received a mean of 3.55 and standard deviation of 1.22 (see Table E6).

Thus all of the activities were rated as at least somewhat helpful in future district efforts to reduce disproportionality.

Item 8. To what degree do you feel the following activities will lead to change in your own work-related practices?

For item 8, staff rated the activities that they thought would lead to change in their own individual work-related practices (see Table E7). These activities were selected from the district's improvement plan, the product of the state mandated self-assessment. Staff rated the activities that they felt would help them change their own individual workrelated practices on a 5-point scale from "1- not at all" to "5- to a great extent." The activity respondents found most likely to change their practices was future professional development for all staff. Professional development was rated by 22 people and had a mean of 3.95 and standard deviation of 1.00. The next most helpful activity was found to be continued consultation with the university-based consulting group with a mean of 3.91, standard deviation of 1.15. Next ranked was continued on-going work by the District Core Team, with a mean of 3.82 and standard deviation of 1.01. Continued analysis of disproportionality by District Administrators was rated with a mean of 3.71 and a standard deviation of .96. Finally, the lowest rated activity in terms of being rated by staff as having a direct impact on a change in their individual practices was expanding the positive behavior supports program in the district with a mean of 3.55 and a standard deviation of 1.10. All of the activities were rated as at least somewhat helpful in supporting additional change in their professional practices.

Item 9. As a result of the activities listed in question #8, how specifically do you think your work-related practices will change?

Item 9 provided an opportunity for staff to provide open-ended responses about how they specifically thought their practices would change as a result of the district initiatives. These responses were grouped into thematic categories and compared for similarities across job title groups (see Appendix C for full text of responses to Item 9). Overall, 16 staff members responded to this item. Within these 16 staff responses, 22 partial responses were coded, meaning some staff responses contained multiple components. Overall, nine themes were found. There were more themes represented than in the open-ended responses to Item 4 (9 themes vs. 4 themes in item 4), indicating that staff responses to this item were more varied. Themes for changes in work-related practices are described below, ordered by their frequency:

1. Change in conversations between staff (6 responses). Similar to the theme noted in Item 4 about change in organizational climate, 6 staff members noted on this item that a change to their practices would include a shift in conversations between staff. One staff member noted that he/she felt others would be more understanding of concerns related to disproportionality and be more likely to accept changes in the district. One staff member commented on having a common language and that this was very important, implying that this common language can now be used to facilitate conversations between and among staff members. One Building Administrator wrote that he/she hoped these district initiatives would change the way he or she talked to staff.

2. *Improved mindfulness about own work (4 responses)*. Four staff members commented on a new outlook for their work, specifically an improved reflective nature or mindfulness about what they do. This theme included responses that mentioned a new sensitivity to this issue, or a new perspective about work in general. One Support Staff

member wrote about trying to keep his/her colleagues mindful about their practices with students.

3. Still figuring out how it will change practices (3 responses). Three staff members noted ambivalence about change or a hesitancy to comment yet on what the change to their practices might be.

4. Learning or implementing new strategies (2 responses). Some staff referred to learning or implementing new strategies as the change they expected to see in their own practices based on the district's disproportionality interventions. Two staff members mentioned that they anticipated using new strategies and that as they used these strategies their practices would change.

5. Improving current efforts (2 responses). Rather than citing a change based on new strategies, some staff saw the district's interventions as improving their current practices. Two staff members indicated that their current work practices would be improved. One of these staff members commented that the district's efforts refreshed his/her work by keeping it goal-centered.

6. Direct change in interactions with students (2 responses). Two staff members commented that the initiatives in the district would have a direct impact on students. One respondent noted that as a General Education Teacher he/she would try to learn new strategies to keep students in the classroom more often, reducing pullout interventions. This response contained both a theme of incorporation of new strategies into practice, but also described a change in a staff member's practice that would have a direct impact on students. The other staff member wrote about giving students second chances and more time to work on tests, again a change in work related practices that would have a direct impact on students.

7. Engaging in continued research (1 response). One staff member wrote that one of the changes in his/her practices would be a commitment to continue finding out about advances in the field of disproportionality and also to continue to get feedback from students about their thoughts on these issues. This response showed a planned commitment to both research in the field of disproportionality and to further inquiry at a district level with the students in the district.

8. *Change to programs (1 response).* One staff member mentioned that a change in his/her practices would be to use different criteria in the development of programs, though he/she did not indicate how specifically this criteria would change.

9. Change in hiring/ evaluating staff (1 response). One Central Office Administrator commented that the practice change she expected to see was in her own hiring practices and evaluation of staff performance. This staff member also commented that these changes would impact how she evaluated and implemented personnel procedures and practices.

There were no trends in responses based on job title. Staff members commented specifically on changes related to their own job roles, for example Administrators wrote about how their supervision of staff and programs would change, and Support Staff wrote about how their practices or interactions supporting staff and students would change. This item had fewer responses than the other open-ended response item on the survey. This item may have been difficult for some staff to answer because it required a prediction about a future change in their work-related practices and also may have had fewer responses because it was the last item on the survey.

CHAPTER IV

Discussion

This evaluation showed the impact of several important components of Apple School District's change efforts in relation to disproportionality. Data collection and analysis, professional development for district staff, district discussions and the construction of a sense of community among staff are all important components of this change effort as evidenced by the results of the Disproportionality Survey. Additionally, there appear to be relevant organizational characteristics important to this process. All of these factors have been considered in terms of their impact on this district's first year of change initiatives and are discussed below.

Components of the Change Process

The process the Apple Public School District began during the 2007-2008 school year was complex and multi-faceted. The activities the district used to address disproportionality during this year involved data collection and analysis, regular discussions by groups of district stakeholders, professional development for all district staff, and an attempt to change the organizational climate of the school district in relation to disproportionality. The district's approach to the problem of disproportionality was neither a simplistic one, nor was it an unplanned effort. As the literature on disproportionality indicates districts must avoid linear or simplistic solutions (Skiba et al., 2007). Though compliance monitoring and the assignment of the self-assessment by the State of New Jersey Department of Education, Office of Special Education Programs (OSEP) may have been the impetus for some of these efforts, the activities of the district were expanded beyond what was required by the state monitoring process. The expansion of the district's efforts beyond state monitoring helped the district avoid simplistic or linear solutions for the problem of disproportionality.

Data Collection & Analysis

One of the important components of the district's efforts was data collection and analysis. Coutinho and Oswald (2000) recommend schools produce meaningful statistics to describe the severity of overrepresentation and then study practices in relation to the placement decision-making process as a way to guide reform efforts. In the Apple School District, data was collected and analyzed to generate relevant information about the referral practices of the district. Though data collection was partially completed to fulfill state requirements for special education monitoring, the district expanded this process to collect data beyond what was required in order to make meaning of the data in an attempt to help guide their change efforts.

The data collected during the 2007-2008 school year led to helpful information regarding referral and classifications trends in the district. For example, an important finding for the district involved the classification trends for Hispanic children. Through data analysis the district discovered that a large portion of Hispanic students classified with a disability, were referred by local, private preschools and classified at the preschool

level. This data was used to guide reforms. For example, during the 2007-2008 school year the district offered no full-day general education preschool programs, only half-day general education preschool programs. Full-day preschool programs were available, but only to children classified as eligible for special education services, or who were chosen through a lottery to be included as a part of an integrated preschool class, made up of both general education and special education students. As the Director of Student Services and other staff considered this data, they realized that the repertoire of half-day programs available were virtually inaccessible for families with two working parents, a common characteristic of many of the Hispanic families in the community. It was hypothesized that working-parent families from higher socioeconomic backgrounds, often White families, were able to afford and access high-quality private preschool settings for full-day care. Alternatively, if these families chose to use the half-day preschool programs in the district they could afford private caregivers for the other half of the day. Hispanic working-parent families, more often from lower socioeconomic backgrounds, were unable to utilize the district's half-day programs and were also less likely to be able to afford high-quality private childcare options. The data collected by the district allowed the generation of these hypotheses, which had direct implications for change. Specifically, with this data analysis in hand, district administrators were armed with the necessary information to restructure preschool programs to serve children most at-risk for special education classification. In the summer of 2008, groups of professionals in the district met and planned full-day general education preschool programs and recruiting practices to draw in the most at-risk students.

An additional helpful piece of information gathered through this data analysis was that many Hispanic students, referred at the preschool level were classified with communication impairments. With this data, the district was able to plan for further training and professional development for their evaluation teams about the differences between language disabilities and the developmental acquisition of English as a second language.

Only time will show if these changes will affect the disproportionality rates for Hispanic students in Apple School District. However, without these careful data analyses preschool programs might have not been altered, or altered in a different fashion, and professional development for evaluation teams might have focused on other topics. Either way, without careful analysis of referral practices change efforts in the district could have headed in a different, less informed direction. Both of these changes are examples of how the district used data collection, and analysis to directly impact program reform and the restructuring of practices for the district.

Discussions

Another solution for disproportionality proposed by scholars includes engaging staff in further analysis and discussion of disproportionality and related issues (Skiba et al., 2006). The assembly of teams of district stakeholders such as the District Core Team allowed professionals in Apple School District to engage in regular discussions about disproportionality in the district. These discussions opened the door for consideration of sensitive topics such as race and what became to be seen, at least by some, as institutionally unequal practices in the district. As some scholars in the field of disproportionality have noted, many educators are not even comfortable to identify racial group memberships of their students, let alone discuss how practices may be applied differently among racial groups (Skiba et al., 2006). By gathering together a group of professionals for monthly discussions, the organizational climate among staff was altered and the sensitive nature of the topic of disproportionality may have been lessened, allowing for more open dialogue.

A goal of this first year of discussion was to raise awareness and to encourage thinking by staff members about disproportionality. As the results of the survey showed, most staff felt their awareness of disproportionality increased over the year, and most also saw at least some change in their thinking about the problem of disproportionality. Scholars have suggested this process of on-going discussion as a first step to address disproportionality (Coutinho and Oswald, 2000; Skiba et al., 2006) and these recommendations are consistent with the efforts of Apple School District during the 2007-2008 school year.

Professional Development for All Staff

During the 2007-2008 school year the district devoted two professional development days for all district staff to the topic of disproportionality and related issues, as well as many smaller group professional development sessions held at different times. The staff members who responded to the Disproportionality Survey found the presentation by the Director of Student Services to be the most beneficial of the district activities in terms of changing their awareness or thinking about this issue. This presentation focused on making the data, which was so important to the district's efforts, accessible to all district staff. Additionally, staff surveyed rated the presentations by the university-based consultants on culturally-responsive practices and academic achievement as somewhat influential. The on-going District Core Team, which served many purposes, one of which was certainly on-going professional development, was found to be somewhat influential by the group surveyed as well. These professional development efforts seemed to be vital in guiding the change in awareness and thinking that the District Core Team staff reported during this year of initial change efforts.

Changing the Organizational Climate

A final aspect, important to the process of Apple School District's efforts appears to be the change in the organizational climate of the district around the topic of disproportionality. In the open-ended responses on the Disproportionality Survey, staff had the option to indicate specific ways that their thinking had changed over the year, as well as specific ways that they felt their practices might change in the future. One important theme regarding the ways that staff said their thinking about disproportionality had changed involved a new or renewed sense of trust and connection to colleagues. For example, some staff found a connection to their colleagues which enabled them to have discussions they could not have had before. Others noted an increased sensitivity to the topic of disproportionality and a renewed respect for student needs. In terms of changes in their individual practices that staff wrote about expecting to see in the future, some staff noted an improved mindfulness about their own work and a hope for continued change in conversations among staff. These examples do not relate to tangible change process initiatives, such as data collection or professional development workshops, but rather a change in the climate of an organization. This type of change is difficult to quantify or rate; however the qualitative responses of some staff members indicate the importance of a new organizational climate around this topic for the district.

Organizational Factors

Though Apple School District is a small, suburban school district similar to many others across the country, there are several specific organizational factors that seem to be related to and important for the change efforts of the district. First, the district has struggled with the issue of disproportionality and academic achievement gap issues for many years. Previous reform initiatives have occurred and yet the district continues to struggle with disproportionality. For this reason, the district stakeholders may have been more willing to undertake the long-term change process they began during this year and invest the significant amount of time and money into this issue that they did. District stakeholders were aware, probably through a combination of past experience and expertise, that a "quick-fix" solution to this problem does not exist. They expected when beginning this process that the overall disproportionality statistics for the district would not change quickly. Also, because of presentations by the Director of Student Services about the disproportionality data for the district, administrators seemed able to conceptualize the seriousness of this problem. This district was one of only a handful of districts across the state struggling with this level of disproportionality and knowledge of this fact may have motivated administrators to embark on a different course of intervention. Professional development was valued by administrators and viewed as an investment for long-term change and growth. Because the district was not expecting a rapid change in statistics, they were able to focus their energy on what will become, hopefully, more lasting change activities.

Another aspect of this district, important to the change process, is the motivation and expertise of the Director of Student Services. The training of the director is that of a doctoral-level school psychologist, who has many years of experience as a child study team member. Her experience as a child study team member gave her extensive experience in evaluation and classification decisions. Faced with the problem of disproportionality, she knew that a necessary first step was to understand the problem further. This emphasis on problem analysis as a part of data-based decision making is vital to the role of school psychologists, and was an important part of her professional training. The district obviously benefits from the expertise and training of their Director, and the process of first-year change initiatives for disproportionality was also greatly impacted by her work. As the staff indicated in the survey, the Director's presentation on disproportionality data for the district was vital in changing their awareness and thinking about the problem. This presentation received the strongest average rating from staff members among the activities surveyed, and was significantly more influential in changing staff thinking and awareness when compared to the lowest rated activity, homework assignments given to the District Core Team. This impact is a credit to the Director of Student Service's work and likely also related to her own value of data and data-based decision making, skills essential to her background as a school psychologist.

Another important organizational factor recognized by the Director of Student Services and understood by other administrators when constructing the change initiatives for this problem, was that disproportionality is not solely a special education issue. Though disproportionality was included in the OSEP's state monitoring process for special education, the administrators in Apple School District viewed disproportionality as a symptom of a problem originating in the arena of general education. Though the outcomes of disproportionality can be seen in disproportionate special education referral and classification rates, this is only the end-result of a problem which begins in general education when something is amiss with the programs and services available to students. What Apple Schools was willing to do was to conceptualize this problem as a problem for the entire district, not exclusively as a problem for special education. Unless the cause of disproportionality rests solely in inappropriate child study team assessment procedures, which seems unlikely in this case, reform efforts for disproportionality that are centered in special education departments do not address the root of the problem. All students who are referred to special education, with a few exceptions, begin their educational careers in general education and it is at this point, in general education, before referral and classification have occurred that the path to special education can be altered.

As scholars have noted one first step to addressing disproportionality involves offering more interventions and inclusive options through general education (Coutinho & Oswald, 2000; Metropolitan Center for Urban Education, 2007; Skiba et al., 2006). The Apple School District understood this, evidenced by the fact that the District Core Team was comprised of primarily general education staff, specifically General Education Teachers and Support Staff individuals. Special Education Teachers were not included on this committee because it was felt the focus of these initiatives needed to be on staff involved in general education service delivery. The composition of this committee sent a strong message that this problem was a general education problem that would only be solved by further examination and change efforts focused in the general education community. The choice to deliver professional development to all district staff, rather than only Special Education or Child Study Team personnel is another indicator of the district's general education focus for this effort. This focus may or may not be similar to the change efforts of other districts, as little has been written about specific programs for reducing disproportionality, however, it is a noteworthy organizational characteristic that Apple School District was willing to focus their efforts in this way.

Summary

Only time will tell if the efforts of this district will be successful in altering the course of disproportionality in the district. However, programmatic evaluation of first-year efforts is promising in terms of the preliminary impact on a group of district staff's awareness and thinking about the problem. Additionally, the activities of this district's change efforts appear to be consistent with the academic community's suggestions about solutions or activities to address disproportionality. Moreover, specific organizational characteristics of this district seem to have aided these efforts and will expectedly continue to do so.

CHAPTER V

Conclusion

Directions for Continued Evaluation

The district's preliminary goal of changing staff awareness and thinking about disproportionality has been evaluated, however the district's long-term goal is to change the disproportionality statistics for the district. This means translating new staff thinking and awareness into practices that reduce the number of referrals and placements for students of color in special education programs. This is a much more ambitious goal with multiple layers of change. For change to be reflected in the district's statistics, the number of referrals and ultimately special education classifications must be reduced. This means that there must be ways to meet students' needs in general education programs. In other words, there must be multiple opportunities for students to receive additional assistance without being labeled with a disability to access that help. Though a shift in staff attitudes and thinking is a first step towards this goal, it is only a first step and future efforts should be documented and evaluated to track progress towards the district's ultimate goal of a change in disproportionality statistics.

Apple Schools must continue to use the data collected over the first year to guide changes in their programs. One of these changes, the adjustment of preschool services has already begun. The next area of change includes investigation and adjustment of Basic Skills Instruction, the intervention offered to students struggling in general education before referral to special education.

Longitudinal data would help to determine if the change the district would like to see (and the change the district is being pressured by the State of New Jersey Department of Education, Office of Special Education Programs [OSEP] to show) begins to happen. This program evaluation showed that staff are beginning to see or are expecting a change in their practices, however long-term data collection should be conducted to evaluate if staff practices do truly change over time.

Within this long-term goal, it would be helpful for the district to set short-term goals that could be evaluated as the change process unfolds in the district. Though the district appears to be on-track based on this first program evaluation, continued documentation of district efforts, and continued evaluation of these efforts, would help to show if they continue on the path to long-term change. Continued evaluation would not only inform the district's own process, but would contribute to the base of literature so desperately needed in the area of disproportionality.

Future Study

There is still much work to do in the area of disproportionality. The literature is limited and somewhat vague regarding what districts have done or should do to impact this problem. Revisions to the reauthorized version of the Individuals with Disabilities Education Act (IDEA), which became effective in July 2005, issued new regulatory requirements for data collection and examination of disproportionality on the part of states (OSERS, 2007). Because of these regulations, many states are requiring local districts to address disproportionality. Guidance in these endeavors from the academic community, education reformers and especially those that have had success impacting disproportionality is desperately needed. Though advice to districts exists about how to measure and identify disproportionality, the literature has less to offer when it comes to strategies and suggestions for reform. What is clear is that each district's problem of disproportionality must be analyzed and a process of data collection must occur before intervention, training, or change efforts are attempted. Additional information about what individual districts are doing to improve this concern will be useful in identifying different strategies. Through individual case studies, districts can consider what may or may not work in their own situations and customize their own solutions from a base of documented solutions.

Need for Cross-Disciplinary Research

The problem of disproportionality crosses many domains of education, including curriculum, referral and assessment practices, instruction, professional development for staff and more. Cross-disciplinary perspectives are needed to consider this problem in a comprehensive manner. The school psychology and special education literature can be helpful in terms of culturally responsive assessment practices, while input from the general education community is essential in areas such as curriculum and teacher professional development. By combining the efforts of many in the academic community, a comprehensive view of disproportionality can be achieved. With a broader scope of study of disproportionality, multi-layered interventions, similar to those implemented in Apple School District, can be generated, implemented and evaluated for effectiveness. Involvement from both the general education and special education communities will be necessary to impact the complex problem of disproportionality.

Implications for Training of School Psychologists

This program evaluation has implications for the training of current and future school psychologists. Though disproportionality raises many areas of concern, four areas relevant to the work of school psychologists are: (a) having a basic working knowledge of disproportionality and its measurement, (b) culturally-responsive assessment practices, (c) Response to Intervention models of service delivery, and (d) systems-level intervention.

Disproportionality and its Measurement

In terms of future training of school psychologists, disproportionality is a current, yet persistent problem that new school psychologists should understand and be made aware of in their training programs. Because the federal government is requiring states to investigate this issue, and states in turn are requiring school districts to examine disproportionality, it is very likely that new school psychologists will at some point in their careers find themselves in a district that must consider their disproportionality patterns. If school psychology students understand what disproportionality is, and the issues surrounding disproportionality, they will be better equipped to serve as leaders in their school districts when it comes to measuring and designing interventions for this issue.

Culturally-Responsive Assessment Practice

Culturally-responsive assessment practice is an important part of training for today's school psychologist. As the American public schools become more ethnically,

linguistically, and culturally diverse, the field of school psychology and assessment must adapt to meet the changing needs of schools and students (Ortiz, 2007). Assessment can no longer use a one size fits all model; instead practitioners must work to reduce bias in testing as much as possible, and begin to use more nondiscriminatory assessment procedures (Ortiz, 2007). Ortiz (2007) suggests using multiple methods of assessment, including observation, standardized testing, interviews, and review of records, as well as generating and testing hypotheses about a student's behavioral or academic difficulties. Instead of looking for problems within a child, generating and testing hypotheses about specific difficulties a child may exhibit creates a problem-focused approach, which links assessment information directly to intervention (Ortiz, 2007). In terms of standardized testing specifically, school psychologists should be trained to select appropriately normed instruments and to think critically about instruments' use with specific populations.

Culturally-responsive assessment is not only an important part of training for new school psychologists, but should also be an area of continuing professional development for current school psychologists. Apple School District recognized this need and hired a consultant to train district Child Study Team members in culturally fair or nondiscriminatory assessment practices. Just as new school psychologists should learn to use updated and appropriate assessment practices and tools, current school psychologists should continue to be exposed to new advances in assessment as well.

Response to Intervention (RTI)

The limited literature containing suggestions for change in disproportionality suggests that the utilization of a Response to Intervention (RTI) service delivery model may be helpful to reduce referrals to special education. RTI, a process authorized in the Individuals with Disabilities Education Act (2004), describes a multi-tiered approach to providing educational programs and interventions to struggling learners at increasing levels of intensity (NASP, 2006). Similar to nondiscriminatory assessment, RTI avoids a "within-child" focus for deficits and is instead problem-focused, clearly delineating goals for students with specific interventions to meet those goals. Rather than a traditional model, which offers special education as the only option for additional educational assistance, RTI makes evidence-based interventions available to students within the general education framework. RTI requires close collaboration among school personnel and a systemic commitment to providing resources in the general education curriculum (NASP, 2006). With this framework in place, problems can often be identified sooner, avoiding the long timelines built into the process of accessing special education programs. Current and new school psychologists must become familiar with the RTI process and how to implement this process in schools. Equipped with knowledge and skills related to RTI, school psychologists can become leaders in developing appropriate interventions for students and consulting with other school personnel to help interventions to be successful.

Systems-Level Intervention

As a school psychologist's role shifts from individual service-delivery to more complex RTI models, school psychologists must know more about working with systems and how systems change. Though school psychologists have traditionally followed an individual model of intervention, they are uniquely positioned to consider the many points of view necessary to fully understand systemic concerns such as disproportionality. For example, school psychologists have experience with both general education and special education programs. School psychologists are typically trained in consultation methods and work with students, teachers, and administrators on a regular basis. In assessment of student difficulties, school psychologists often see the multiple layers of a student's environment that contribute to difficulties at school. This perspective makes school psychologists uniquely positioned to consider systemic interventions, such as those needed for disproportionality.

If these capabilities to view many aspects of the school system are unified through a systems-level change framework, the school psychologist can become one of the best agents in a school to participate in the planning and implementation of systemic innovations, such as those needed for disproportionality. School psychology training programs must expand students' perspectives of schools as systems, and discuss topics such as systems-level change and innovation implementation to adequately prepare future school psychologists for the current state of education (Forman & Selman, in press).

Directions for Continuing the Change Process

What Apple School District has modeled is a slow, calculated, data-based decision making approach to address disproportionality. Though their approach has been costly in terms of time and money and has required focus on the part of district administrators, it likely has more promise of change because of these factors. Through the work of the District Core Team, administrators have focused on building buy-in among staff members, and have actively involved staff in the change process. When staff feel a part of change in an organization they are more likely to follow through with recommendations connected to that change (Nastasi et al., 2000). Schools are notorious for change efforts that vary frequently, and programs that come and go. Apple Schools has attempted to create a more lasting change, not driven by purchasing a new curriculum or adopting a new textbook, but by raising staff awareness and changing thinking around a difficult issue.

Apple School District's efforts can inform state departments of education by showing that sometimes district's need data beyond what the state requires them to report. For example, through the self-assessment process, the New Jersey State Department of Education, Office of Special Education Programs (OSEP) required Apple Schools to collect information on the number of students classified, the types of programs these students participated in, and to conduct compliance review of student files. If Apple Schools had only completed the data analysis required by OSEP they would not have collected further information on reasons for referral and age at time of initial referral. If this had been the case, Apple Schools might not have identified the trend to classify Hispanic students in preschool, nor have targeted change to preschool programs.

Though the process of data collection that Apple completed would not be possible in every district, the U.S. Department of Education and the various state departments of education should consider what data they ask districts for and tailor it to be the most helpful for disproportionality analysis in district's where disproportionality is a significant problem. State departments of education must monitor compliance in many areas, and often district's can be bogged down with the amount of data and compliance review they are required to complete. If instead state departments of education focused their efforts on more meaningful data collection in fewer areas, there might actually be more lasting effects for districts. What meaningful data collection should consist of will vary by state and district and it will take effort on the part of state education officials to consider, or help districts consider, what data would help most to guide intervention in the future. This may require prioritization on the part of the U.S. Department of Education and state departments of education as to which issues they would like district's to tackle first. If disproportionality proves to be a priority issue, federal and state officials should consider requiring the types of data outlined in the disproportionality literature including risk ratios, in conjunction with data found most helpful by Apple School District, specifically information about reason for and timing of referrals.

Summary

In summary, what other districts can learn from Apple Schools' process is that disproportionality cannot be fixed in a year, probably not even two or three. Instead what can be accomplished in a year's time is to set a new course for the district. This course can include intensive data analysis and a better understanding through this data of areas in need of improvement for the district. It can include an assessment of staff awareness and thinking and a process to build buy-in among district stakeholders. These elements can help to begin a new path toward data-based decisions and eventual change in disproportionality.

REFERENCES

- Blanchett, W. (2006). Disproportionate representation of African American students in special education: Acknowledging the role of white privilege and racism. *Educational Researcher*, 35, 24-28.
- Bollmer, J., Bethel, J., Garrison-Mogren, R., & Brauen, M. (2007). Using the risk ratio to assess racial/ethnic disproportionality in special education at the school-district level. *The Journal of Special Education*, 41(3), 186-198.
- Carter, G. (2004). Excluded from success: The overrepresentation of minority students in special education. *Educational Leadership*, *January*, 6-8.
- Chang, D., & Demyan, A. (2007). Teachers' stereotypes of Asian, Black, and White students. School Psychology Quarterly, 22, 91-114.
- Coutinho, M., & Oswald, D. (2000). Disproportionate representation in special education: A synthesis and recommendations. *Journal of Child and Family Studies*, 9, 135-156.
- Drakeford, W. (2006). *NCCRESt Practitioner Briefs*. Retrieved December 4, 2007, from http://www.nccrest.org/publications/briefs.html.
- Ferri, B., & Connor, D. (2005). In the shadow of *Brown*: Special education and overrepresentation of students of color. *Remedial and Special Education*, 26, 93-100.

Friend, M. (2007). The coteaching partnership. *Educational Leadership*, 64, 48-52.

Forman, S., & Selman, J. (in press). Systems-based service delivery in school psychology. In Bray, M.A. and Kehle, T. J. (Eds.) Oxford Handbook of School Psychology.

- Gamm, S. (2007). Disproportionality in special education: Where and why overidentification of minority students occurs. Horsham, Pennsylvania: LRP Publications.
- Harry, B., & Anderson, M. (1994). The disproportionate placement of African-American males in special education programs: A critique of the process. *The Journal of Negro Education*, 63, 602-619.
- Harry, B., & Klingner, J. (2007). Discarding the deficit model. *Educational Leadership*, 64, 16-21.
- Hemmelgarn, A.L., Glisson, C., & James, L.R. (2006). Organizational culture and climate: Implications for service and interventions research. *Clinical Psychology: Science and Practice*, 13, 73-89.
- Hosp, J., & Reschly, D. (2004). Disproportionate representation of minority students in special education: Academic, demographic, and economic predictors. *Exceptional Children*, 70, 185-199.
- McIntosh, P. (1990). White privilege: Unpacking the invisible knapsack. *Independent School, Winter*, 32-36.
- Metropolitan Center for Urban Education (2007). NYU project overview: Addressing racial/ethnic disproportionality in special education. Slideshow presented: November 30, 2007, Princeton Regional Schools.
- Nastasi, B.K., Vargas, K, Schensul, S.L., Silva, K.T., Schensul, J.J. & Ratnayake, P. (2000). The participatory intervention model: A framework for conceptualizing and promoting intervention acceptability. *School Psychology Quarterly*, 15, 207-232.

- National Alliance of Black School Educators (NABSE), & ILIAD Project (2002).
 Addressing Over-representation of African American students in special education: The preferral intervention process An administrators' guide.
 Arlington, VA: Council for Exceptional Children, and Washington, DC: National Alliance of Black School Educators.
- NCCRESt (2008). National Center for Culturally Responsive Education Systems Data Manager - Maps. Retrieved November 23, 2008, from http://nccrest.eddata.net/maps/index.php.
- O'Connor, C., & Fernandez, S. (2006). Race, class, and disproportionality: Reevaluating the relationship between poverty and special education placement. *Educational Researcher*, *35*, 6-11.
- Ortiz, S.O. (2007). Best practices in nondiscriminatory assessment. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology-V. Bethesda, MD: National Association of School Psychologists.
- Office of Special Education and Rehabilitative Services (OSERS) (2007). *IDEA Regulations: Disproportionality and Overidentification*. Retrieved April 7, 2009, from http://www.ideapartnership.org/oseppage.cfm?pageid=41.
- Skiba, R., Simmons, A., Ritter, S., Kohler, K., Henderson, M., & Wu, T. (2006). The context of minority disproportionality: Practitioner perspectives on special education referral. *Teachers College Record*, 108, 1424-1459.
- Skiba, R., Poloni-Staudinger, L., Simmons, A., Feggins-Azziz, L., & Chung, C. (2005). Unproven links: Can poverty explain ethnic disproportionality in special education?. *The Journal of Special Education*, 39, 130-144.

SRI International (2005, September). Declassification – Students who leave special education: A special topic report from the Special Education Elementary Longitudinal Study. (SRI Project P10656). Menlo Park, CA: Author.

Tenenbaum, H., & Ruck, M. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of Educational Psychology*, 99, 253-273.

APPENDIX A

DISPROPORTIONALITY SURVEY

Disproportion	ality Survey				
Default Section	on				
1. Please sele School Distric	ect the job title w	hich bes	t describes your	^r role in t	the Apple
e General Educat	tion Teacher				
🗧 Special Educati	ion Teacher				
€ Support Staff ((e.g., Basic Skills, EIT, Spe	eech/Lang., C	ST)		
e Building Admin	istrator				
e Central Office	Administrator				
Other (please speci	fy)				
-	ast academic ye				-
your awaren	ess of issues rela 1 - Not at all	ated to di 2	isproportionality 3 - Somewhat	has inci 4	reased? 5 - Greatly
Awareness increased		ja	ja	ja	ja
number of ac feel the distri	bast academic yea tivities related to ict's efforts have actices may relate	o disprop helped y	oortionality. To w you to think diffe	/hat deg	ree do you
	1 - is not different at all	2	3 - has changed somewhat	4	5 - has completely changed
My thinking	ja	ja	jo	ja	ja
4. How specif	4. How specifically has your thinking about your practices changed?				

Disproportionality Survey

5. The district sponsored the following activities during the past academic year (2007-2008). Please rank how much each one has influenced your awareness or thinking about disproportionality:

	1 - Not at all	2	3 - Somewhat	4	5 - Influenced greatly
Presentation by Consultant A about culturally responsive practices given on February 15, 2008	ja	ja	ja	ja	ja
Presentation of district's data by Director of Student Services on February 15, 2008	jn	jn	jn	jn	jn
Presentation by Consultant B about academic achievement for all students given on May 23, 2008	ja	ja	ja	μ	jo
Participation in district team meetings	jn	jn	jn	jn	jn
Homework from district team meetings (e.g., articles to read, activities to complete with building staff)	ja	ja	pt	ja	ja
Small-group professional development workshops (please specify topic of workshop in box below)	jn	jn	jn	jn	jn
Small-group professional development workshops (please specify topic of workshop in box below)	ja	ja	ja	ja	jn
Small-group professional development workshops (please specify topic of workshop in box below)	jn	jn	jn	jn	jn

Please specify, in order, the topics of small-group professional development workshops you ranked above:

6. If there was an activity, not mentioned in the above list, that you found influential in changing your awareness or thinking about disproportionality, please describe it here:



7. To what degree do you feel the following activities will help the district reduce disproportionality?

	1 - Not at all	2	3 - Somewhat	4	5 - To a great extent
Future professional development for all distric staff	t j'n	ja	j to	jo	ja
On-going work by District Core Team	jn	jn	j m	jm	jn
Expanding Positive Behavior Supports program	n ja	Ja	ja	ja	ja
Continued analysis of problem by district administrators	jn	jn	jn	j'n	jn
Continued consultation with University-Based Consulting Group	jn	ja	jn	ja	ja

Disproportionality Survey

8. To what degree do you feel the following activities will lead to change in your own work-related practices?

	1 - Not at all	2	3 - Somewhat	4	5 - To a great extent
Future professional development for all district staff	ja	ja	ja	ja	ja
On-going work by District Core Team	jn	jn	jn	<u>jn</u>	jn
Expanding Positive Behavior Supports program	ja	ja	ja	Ja	ja
Continued analysis of problem by district administrators	jn	j'n	jn	jn	jn
Continued consultation with University-Based Consulting Group	ja	jn	ja	jn	ja

9. As a result of the activities listed in question #8, how specifically do you think your work-related practices will change?

<u> </u>
•

APPENDIX B

LETTER TO PARTICIPANTS

Dear Members of the Apple Schools Disproportionality Team,

With your help (and the help of the university-based consulting group), last year the district renewed efforts to address the disproportionate representation of racial and ethnic minority groups in Apple's special education programs. This process continued throughout the 2007-2008 academic year and even into the summer.

Some of you may remember that Johanna Morrow, a pre-doctoral intern from Rutgers, who worked closely with me, specifically on some of the projects related to disproportionality. One year after this work began, Johanna and I are wondering about some of the impacts the process thus far may have had on you and your work. The following survey has been created to hopefully answer some of these questions.

By clicking on the link below, you will find a Disproportionality Survey. It has a total of 9 questions, some multiple choice and some free-response. It should take about 10-15 minutes to complete. The responses will be kept anonymous and the purpose is to examine the views of the group and not those of specific individuals. Johanna and I would very much appreciate if you could find the time to complete it.

LINK TO SURVEY: http://www.surveymonkey.com/s.aspx?sm=T1jxJbAh4lm9QVfAgiFZxQ_3d_3d

If you have any questions about the survey please feel free to contact me (4206) or Johanna at: johanna.morrow@gmail.com or (571) 275-0267 (cell).

Thank you again for your sincere support of the district's efforts to ensure that each Apple child has maximum, equitable opportunities to learn and achieve. I look forward to working with you again this year!

Sincerely,

Agnes Golding & Johanna Morrow

APPENDIX C

FULL-TEXT OF SURVEY RESPONSES ITEMS 4, 6, 9

Full-Text Response to Item 4	
Job Title	4. How specifically has your thinking about your practices changed?
Support Staff	"I FEEL MORE INTERVENTION IS NEEDED AT THE HIGHSCHOOL. IWOULD LIKE THE GUIDANCE PEOPLE TO FOLLOW THEIR STUDENTS. I COULD ELABORATE ON THAT"
Support Staff	"I have examined my program to ensure that my practices are research-based, best practices"
Support Staff	"I am more aware of classification as a positive and supportive alternative to the practices in the regular education program (among other things)."
Support Staff	"Related to I&RS - thinking more about interventions - what we have to offer, trying to be more creative with what we have to offer, and tracking intervention success or failure more carefully"
Support Staff	"It has become easier to speak with each other honestly and candidly about important issues. It doesn't seem like only a few of us are working alone anymore."
Support Staff	"I've spent more time thinking about the benefits of social learning- that is, letting kids stay in the classroom and learning from their peers, rather than pulling them out for specialized, level-appropriate work. The problem I'm wrestling with is having to sacrifice one for the other. I've been involved in the inclusion training, and have hope that it will work for some students, but there are still those that are far behind who will need more"

Full Text Response to Item 4 (continued)	
Job Title	<i>How specifically has your thinking about your practices changed?</i>
Support Staff	"I was already doing my own research on the topic, prior to the workshops. They helped me to see more specifically, our district needs."
"Guidance Counselor" (counted with Support Staff)	"I have a new respect for each individual student and his real chances for success."
"School Social Worker" (counted with Support Staff)	"I have always been aware of the problem and would often think about the disparity. However, with a great deal of focus on the disproportionality in this district, one can't help but be more aware of this issue. I was aware of it, but am happy to know that others are more aware of it."
General Education Teacher	"I am more aware through the statistics what is being understood as disproportionality. It is real, not just anecdotal."
General Education Teacher	"I am more understanding of why there is disproportionality."
General Education Teacher	"I can see pieces of the problem and the need to translate the information and goals into daily instruction. I will be increasingly aware of opportunities for more small group instruction, but worry it will accomplish less in the big picture of the "whole student" and the whole class. I do not want to lose the option of small instruction with an additional teacher for any children who need that amt of time, attn and connection in order to blossom. I wonder how to provide/promote experiences, opportunities, conversations, vocabulary, materials (that we'd expect from homethat we still want to come from home) by enabling students/families. This is a fine and delicate balance."

Full Text Response to Item 4 (continued)	
Job Title	<i>How specifically has your thinking about your practices changed?</i>
General Education Teacher	"I have increased my efforts to address learning issues within my general education program whenever possible."
"Prof. staff for Central Office Administrator with responsibilities for programs & funds" (counted with Central Office Administrators)	"It has affected how I suggest funds be spent and I've made an effort to always include general ed[ucation], spec ed[ucation] and ESL/bil[ingual]staff in discussions about program and student needs."
Central Office Administrator	"I make it a part of what I say to staff at all meetings. Trying to ensure that all staff understand it is everyone's responsibility to change. Trying to make sure everyone focused and aware of problem."
Building Administrator	"As we've carried on our typical practices, we've considered if they're culturally responsive."
Building Administrator	"I remain aware that we must find ways to educate every child"
Building Administrator "(Assistant Principal)"	"The importance of understanding how students learn and differentiating instruction to facilitate improvement in instruction for underachieving students"
(No job title reported)	"I feel I am more sensitive to the needs of our Spanish speaking children."

6. If there was an activity, not mentioned in the above list, that you found influential in changing your awareness of thinking about disproportionality, please describe it here: "The Black Male Students in Basic Skills which was presented in the Spring"

"None in particular that I can think of at this time. Everyone was helpful and insightful."

"SEED groups"

"Meeting the basic skills teachers from all the elementary skills and hearing about their schedules helped me to understand why some of the middle school student continue to need special assistance."

"Especially useful for me was the small science group discussions on the questions printed to discuss. I didn't realize these issues could be so content specific."

Full Text Responses to Item 9	
Job Title	As a result of the activities listed in Item 8, how specifically do you think your work-related practices will change?
Support Staff	"Having a common language is very important."
Support Staff	
	"Hard to say. I'm on the fence right now. Looking forward to seeing some benefits from inclusion classes specifically, how minority students will come to feel more like important members, and how having more personnel will be able to address students' unique needs. This may make the difference."
Support Staff	
	"It will help give me a district specific focus. The nature of my position already prepares me to look at these issues. Perhaps, I'll feel like more staff will understand the concerns & be more on board with change."
Support Staff	"More sensitivity to issues"
"Guidance Counselor" (counted with Support Staff)	
	"My practices will change as I keep the goal centered, The goal will be refreshed through the work of my colleagues"

Full Text Responses to Item 9 (continued)	
Job Title	As a result of the activities listed in Item 8, how specifically do you think your work-related practices will change?
"Guidance Counselor" (counted with Support Staff)	"Cultural awareness and sensitivity will increase"
"School Social Worker" (counted with Support Staff)	
	"I will continue to improve upon my own efforts to make changes for students, and will try to help staff be mindful of the way they work with various students and encourage all staff to continue the work they need to do to make changes within themselves and help to make changes within the district. I personally, will continue to research and investigate what is being done in this field and try to get feedback from students on their thoughts able how they feel things are changing and how they are being treated."
Building Administrator	"I am not involved in PBS. As my staff and I learn more strategies, work related practices will change."
Building Administrator "(Assistant Principal)"	"It will help me with advising the staff concerning what the district's data indicates in terms of the disproportionality issues among students being classified and how to reduce the inequities."
Central Office Administrator	"Hopefully, it will impact how I talk to staff, how I hire, how I evaluate staff performance, procedures and practices formally implemented."

Full Text Responses to Item 9 (continued)	
Job Title	As a result of the activities listed in Item 8, how specifically do you think your work-related practices will change?
"Prof. staff for Central Office Administrator with responsibilities for programs & funds" (counted with Central Office Administrators)	"We will use different criteria for developing programs that support students' needs and lead to improvements in student behavior and achievement we'll measure what we do, collect data to gauge changes, discuss how to improve programs/instruction and make changes rather than just spend funds to do something that may or may not really improve student achievement."
General Education Teacher	"Learning about strategies I can use as a general education teacher to assist struggling students within the classroom to minimize the need for pull-outs that create segregated learning environments."
General Education Teacher	"I think I will be more willing to give students second chances to spend more time on work and tests."
General Education Teacher	"They better change and/or adapt. I will need to figure out how to effect this change."

Full Text Responses to Item 9 (continued)	
Job Title	As a result of the activities listed in Item 8, how specifically do you think your work-related practices will change?
General Education Teacher	"It's not just the NYU piece, it is a fresh new perspective that I think will change work-related practices. It's interesting and probably insulting that from becoming more multicultural, the resulting awareness of different ways, values, priorities, solutions, perspectives opens us up to having less of a double standard. I lost the rest of my response to this item. Let me finish it this way. PD is the obvious best choicebut only if it is valuable. It isn't valuable more than it is.(I know the evaluations say it isthose who bother to return them) PBS gets buy-in, but the students don't seem to internalize the rewards, so it is only somewhat effective NYU is a great resource, but they we haven't gotten to the tools we need to come up with our solutions. Testing once every 6-8 weeks is not progress for us, it is only measurable. It is not our solution. District Administration is a management system. We would be far better off getting some of our unusually talented teachers to focus on what we need to do to make work-related changes. (For example, Din Ambar would have been spectacular if he was willing to work on it. He just left to teach college level.) The core group has been very good, but we have to expand the reach. Tough question, not enough choices. Thanks for asking. Sorry I lost my original response."

Full Text Responses to Item 9 (continued)	
Job Title	As a result of the activities listed in Item 8, how specifically do you think your work-related practices will change?
(No job title reported)	"To try to encourage teachers to use interventions in the classroom rather than automatically refer ESL children for testing."

APPENDIX D

APPLE SCHOOL DISTRICT DISPROPORTIONALITY DATA

Ethnic Group	Total Enrollment	Observed Students with Disabilities	Risk Ratio
Black	304	97	2.57
Hispanic	315	87	2.16
White	2421	291	0.64
Asian	471	19	0.26
Total	3511	494	

Apple School Dis	strict's Risk Ratios I	by Racial/Ethnic (Group Based on	October 2007 Data

Table D2

Apple School District's Classification Rate by Race/Ethnicity Based on October 2006 Data

District	Black	Hispanic	White	Asian	Total
Students in Special Education	87	88	296	16	487
Total Enrollment	256	295	2298	369	3214
% Special Education	34%	30%	13%	4%	15%

Apple School District's Classification Rate by Race/Ethnicity Based on October 2007 Data

District	Black	Hispanic	White	Asian	Total
Students in Special Education	97	87	291	19	494
Total Enrollment	304	315	2421	471	3511
% Special Education	32%	28%	12%	4%	14%

	Male					Female				_	
	Total	Black	Hispanic	Asian	White	Total	Black	Hispanic	Asian	White	
Students in Special Education	314	54	49	14	197	180	43	38	5	94	
Total Enrollment	1730	132	157	233	1208	1676	152	148	229	1174	
% Special Education	18.2	40.9	31.2	6	16.3	10.7	28.3	25.7	2.2	8.2	

Apple School District's Classification Rate by Sex and Race/Ethnicity Based on October 2007 Data

		Reason for Referral					
Grade at Referral	Speech/Language	Academic	Behavioral	Other	# of students		
Preschool	22	0	2	5	29		
Kindergarten	2	3	0	0	5		
1 st	1	9	0	0	10		
2^{nd}	1	4	0	0	5		
3 rd	1	9	0	0	10		
4^{th}	0	1	0	0	1		
5 th	0	5	0	0	5		
6 th	0	1	0	0	1		
7 th	0	2	0	0	2		
8 th	0	0	1	0	1		
Total	27	34	3	5	69		

Classification Patterns for Hispanic Students Based on Grade at Referral and Reason for Referral

Classification Patterns for Black Students Based on Grade at Referral and Reason for Referral

	R				
Grade at referral	Speech/Language	Academic	Behavioral	Other	# of students
Preschool	5	1	6	2	14
Kindergarten	2	0	4	0	6
1 st	0	5	2	0	7
2 nd	1	6	1	0	8
3 rd	0	12	2	0	14
4 th	0	8	0	0	8
5 th	0	4	0	0	4
6^{th}	1	1	0	0	2
7 th	0	6	0	0	6
8 th	0	5	1	0	6
9 th	0	1	0	0	1
10 th	0	0	1	0	1
Total	9	49	17	2	77

APPENDIX E

SURVEY RESULTS

	General Education Teacher	Support Staff	Building Administrator	Central Office Administrator	Other	No response	Total
Survey Responses to Item 1	7	9	3	1	4	2	26
Adjusted Job Titles	7	12	3	2	-	2	26

Table E1Job Titles of Respondents

Table E2

Change in Awareness of Disproportionality

	Total Group (n=26)	General Education Teacher (n=7)	Support Staff (n=12)	Building Administrator (n=3)	Central Office Administrator (n=2)	No job title reported (n=2)
Mean	3.92 (SD=1.06)	3.57	4.25	3.33	4.5	3.5

Table E3

Change	in	Thinking	about	Pro	fessiona	al Practice
Change	uu	Inunung	uvvui	110		

		General				
	Total	Education	Support	Building	Central Office	No job title
	Group	Teacher	Staff	Administrator	Administrator	reported
	(n=23)	(n=5)	(n=12)	(n=3)	(n=1)	(n=2)
Mean	3.17 (SD=.83)	3.60	3.17	2.67	3.0	3.0

Table E4

Mean Influence of District Change Activities

Activity	n	Mean	Standard Deviation
Presentation on culturally-responsive practices given by consultant A	24	3.79	1.25
Presentation of district's disproportionality data given by Director of Student Services	24	4.25	.85
Presentation about academic achievement given by Consultant B	23	3.91	.79
Participation in district team meetings	24	3.88	1.15
Homework from district team meetings	23	3.57	1.30

Table E5

Activity	1	2	3	4	5
1. Presentation					
on culturally-		1 400	0.205	0.250	0.500
responsive	_	-1.492	-0.395	-0.259	0.589
practices given		df=46	df=45	df=46	df=45
by consultant A					
2. Presentation of					
district's					
disproportionality					
data given by			1.421	1.266	2.106*
Director of		—	df=45	df=46	df=45
Student Services					
3. Presentation					
about academic					
achievement				0.104	1.066
given by			—	df=45	df=44
Consultant B					
1 Dentieinetien in					
4. Participation in					0.96
district team				_	0.86
meetings				_	df=45
5. Homework					
from district team					
meetings					_

T-Test Comparisons of Mean Differences Between District Change Activities

*p<.05.

Table E6

Staff Perceptions of Future Effectiveness of Change Activities in Reducing Disproportionality

Activity	Number of responses	Mean	Standard Deviation
Future professional development for all district staff	24	3.71	.95
On-going work by District Team	24	3.75	1.07
Expanding Positive Behavior Supports Program	22	3.55	1.22
Continued analysis of problem by district administrators	23	3.70	1.02
Continued consultation with university-based consulting group	24	3.79	1.10

Table E7

Activity	Number of responses	Mean	Standard Deviation
Future professional development for all district staff	22	3.95	1.00
On-going work by District Team	22	3.82	1.01
Expanding Positive Behavior Supports Program	20	3.55	1.10
Continued analysis of problem by district administrators	21	3.71	.96
Continued consultation with university-based consulting group	22	3.91	1.15

Staff Perceptions of Future Effectiveness of District Change Activities in Changing Professional Practices

Disproportionality Survey
Default Section

1. Please sele Schools.	ct the job title whic	h best des:	scribes your role ir	n the Princ	eton Regional
e General Educatio	on Teacher				
e Special Educatio	n Teacher				
€ Support Staff (e	.g., Basic Skills, EIT, Speech/	Lang., CST)			
e Building Adminis	trator				
€ Central Office Ac	Iministrator				
Other (please specify	<i>י</i>)				
•	ist academic year (issues related to d	-	onality has increas	5	5
Awareness increased	1 - Not at all	2 [10	3 - Somewhat	4 ja	5 - Greatly
_) <	J	J~1	J	Jer
	ed to disproportion elped you to think onality? 1 - is not different at	differently	U U	own pract	
	all	2	somewhat	4	changed
My thinking	ja	ja	ja	ja	ja
4. How specifi	cally has your thinl	king about	your practices ch	anged?	

Disproportionality Survey

5. The district sponsored the following activities during the past academic year (2007-2008). Please rank how much each one has influenced your awareness or thinking about disproportionality:

	1 - Not at all	2	3 - Somewhat	4	5 - Influenced greatly
Presentation by Dr. Eddie Fergus about culturally responsive practices given on February 15, 2008	ja	ja	ja	ja	ja
Presentation of district's data by Dr. Agnes Golding on February 15, 2008	jn	jn	jn	j n	jn
Presentation by Dr. Pedro Noguera about academic achievement for all students given on May 23, 2008	ja	ja	ja	ja	ja
Participation in district team meetings	Jm	jn	<u>Jn</u>	jn	jn
Homework from district team meetings (e.g., articles to read, activities to complete with building staff)	ja	ρţ	ja	ja	ja
Small-group professional development workshops (please specify topic of workshop in box below)	j n	jn	jn	j n	jn
Small-group professional development workshops (please specify topic of workshop in box below)	ja j	ja	ja	ja	ja
Small-group professional development workshops (please specify topic of workshop in box below)	j n	jn	jn	j n	jn

Please specify, in order, the topics of small-group professional development workshops you ranked above:

۰

6. If there was an activity, not mentioned in the above list, that you found influential in changing your awareness or thinking about disproportionality, please describe it here:

7. To what degree do you feel the following activities will help the district reduce disproportionality?

	1 - Not at all	2	3 - Somewhat	4	5 - To a great extent
Future professional development for all district staff	ja	jn	jn.	ja	ja
On-going work by District Core Team	jn	jn	Jm	jn	jn
Expanding Positive Behavior Supports program	ja	j:n	ja	ja	ja
Continued analysis of problem by district administrators	jn	jn	ĴΩ	jn	jn
Continued consultation with NYU Metro Center	j n	ja	ja	ja	jn

8. To what degree do you feel the following activities will lead to change in your own work-related practices?

	1 - Not at all	2	3 - Somewhat	4	5 - To a great extent
Future professional development for all district staff	ja	ja	ja	Ja	ja
On-going work by District Core Team	jn	jn	jn	jn	jn
Expanding Positive Behavior Supports program	ja	j:n	pt	ja	ja
Continued analysis of problem by district administrators	j n	jn	jn	jn	j'n
Continued consultation with NYU Metro Center	ja	ja	ja	Ja	ja

9. As a result of the activities listed in question #8, how specifically do you think your work-related practices will change?

	-